AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

5–5–94
Vol. 59 No. 86

federal register

Thursday
May 5, 1994

United States
Government
Printing Office
SUPERINTENDENT
OF DOCUMENTS
Washington, DC 20402

OFFICIAL BUSINESS
Penalty for private use, $300

SECOND CLASS NEWSPAPER

Postage and Fees Paid
U.S. Government Printing Office
(ISSN 0097–6326)

5-5-94
Vol. 59 No. 86
Pages 23119-23610

federal register

Thursday
May 5, 1994

Briefings on How To Use the Federal Register
For information on briefings in Washington, DC and Chicago, IL, see announcement on the inside cover of this issue.

FEDERAL REGISTER Published daily, Monday through Friday, (not published on Saturdays, Sundays, or on official holidays), by the Office of the Federal Register, National Archives and Records Administration, Washington, DC 20408, under the Federal Register Act (49 Stat. 500, as amended; 44 U.S.C. Ch. 15) and the regulations of the Administrative Committee of the Federal Register (1 CFR Ch. I). Distribution is made only by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

The **Federal Register** provides a uniform system for making available to the public regulations and legal notices issued by Federal agencies. These include Presidential proclamations and Executive Orders and Federal agency documents having general applicability and legal effect, documents required to be published by act of Congress and other Federal agency documents of public interest. Documents are on file for public inspection in the Office of the Federal Register the day before they are published, unless earlier filing is requested by the issuing agency.

The seal of the National Archives and Records Administration authenticates this issue of the **Federal Register** as the official serial publication established under the Federal Register Act. 44 U.S.C. 1507 provides that the contents of the **Federal Register** shall be judicially noticed.

The **Federal Register** is published in paper and 24x microfiche format. The annual subscription price for the **Federal Register** paper edition is $444, or $490 for a combined **Federal Register**, Federal Register Index and List of CFR Sections Affected (LSA) subscription; the microfiche edition of the **Federal Register** including the Federal Register Index and LSA is $403. Six month subscriptions are available for one-half the annual rate. The charge for individual copies in paper form is $6.00 for each issue, or $6.00 for each group of pages as actually bound; or $1.50 for each issue in microfiche form. All prices include regular domestic postage and handling. International customers please add 25% for foreign handling. Remit check or money order, made payable to the Superintendent of Documents, or charge to your GPO Deposit Account, VISA or MasterCard. Mail to: New Orders, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250–7954.

There are no restrictions on the republication of material appearing in the **Federal Register**.

How To Cite This Publication: Use the volume number and the page number. Example: 59 FR 12345.

SUBSCRIPTIONS AND COPIES

PUBLIC	
Subscriptions:	
Paper or fiche	**202–783–3238**
Assistance with public subscriptions	**512–2303**
Single copies/back copies:	
Paper or fiche	**783–3238**
Assistance with public single copies	**512–2457**
FEDERAL AGENCIES	
Subscriptions:	
Paper or fiche	**523–5243**
Assistance with Federal agency subscriptions	**523–5243**

For other telephone numbers, see the Reader Aids section at the end of this issue.

THE FEDERAL REGISTER
WHAT IT IS AND HOW TO USE IT

FOR: Any person who uses the Federal Register and Code of Federal Regulations.

WHO: The Office of the Federal Register.

WHAT: Free public briefings (approximately 3 hours) to present:
1. The regulatory process, with a focus on the Federal Register system and the public's role in the development of regulations.
2. The relationship between the Federal Register and Code of Federal Regulations.
3. The important elements of typical Federal Register documents.
4. An introduction to the finding aids of the FR/CFR system.

WHY: To provide the public with access to information necessary to research Federal agency regulations which directly affect them. There will be no discussion of specific agency regulations.

WASHINGTON, DC
(two briefings)

WHEN: May 18 at 9:00 am and 1:30 pm
WHERE: Office of the Federal Register
Conference Room, 800 North Capitol Street NW, Washington, DC (3 blocks north of Union Station Metro)
RESERVATIONS: 202–523–4538

CHICAGO, IL

WHEN: June 9 at 9:00 am
WHERE: Ralph Metcalfe Federal Building
Conference Room 328
77 West Jackson Blvd.
Chicago, IL
RESERVATIONS: 1–800–366–2998

Printed on recycled paper containing 100% post consumer waste

Contents

Federal Register
Vol. 59, No. 86
Thursday, May 5, 1994

Agricultural Marketing Service
NOTICES
Meetings:
Tobacco Inspection Services National Advisory Committee, 23189

Agriculture Department
See Agricultural Marketing Service
See Farmers Home Administration
See Forest Service
NOTICES
Agency information collection activities under OMB review, 23189

Air Force Department
NOTICES
Environmental statements; availability, etc.:
Base realignment and closure—
Griffiss AFB, NY, 23196
K.I. Sawyer AFB, MI, 23196
Newark AFB, OH, 23196

Antitrust Division
NOTICES
National cooperative research notifications:
Bell Communications Research, Inc., 23233
Corporation for National Research Initiatives, 23233–23234
Frame Relay Forum, 23234
Hart Communication Foundation, 23234
National Storage Industry Consortium, 23234–23235
Petroleum Environmental Research Forum, 23235
PowerOpen Association, Inc., 23235
Switched Multi-Megabit Data Service Interest Group, 23235–23236

Army Department
NOTICES
Military traffic management:
International personal property rate program, 23197
Patent licenses; non-exclusive, exclusive, or partially exclusive:
Hyperproducing cellulase microorganism, 23197–23198

Census Bureau
NOTICES
Meetings:
Agriculture Statistics Advisory Committee, 23192

Centers for Disease Control and Prevention
NOTICES
Meetings:
Hospital Infection Control Practices Advisory Committees, 23208
Vital and Health Statistics National Committee, 23208

Coast Guard
RULES
Drawbridge operations:
Louisiana, 23158
Ports and waterways safety:
Chesapeake Bay, MD; regulated navigation area, 23158
PROPOSED RULES
St. Johns River, FL; safety zone, 23179–23180
NOTICES
Committees; establishment, renewal, termination, etc.:
Prince William Sound Regional Citizens' Advisory Council, 23251–23252

Commerce Department
See Census Bureau
See International Trade Administration
See National Oceanic and Atmospheric Administration

Community Services Office
NOTICES
Grants and cooperative agreements; availability, etc.:
Demonstration partnership program, 23208–23224

Consumer Product Safety Commission
NOTICES
Settlement agreements:
Reichenbach Fireworks, 23193–23196

Defense Department
See Air Force Department
See Army Department
RULES
Acquisition regulations:
Petroleum products, 23169

Energy Department
See Federal Energy Regulatory Commission
See Hearings and Appeals Office, Energy Department
NOTICES
Natural gas exportation and importation:
Riata Resources Ltd., 23198
StampGas (U.S.) Inc., 23198
Westcoast Gas Services (U.S.A.) Inc., 23198

Environmental Protection Agency
RULES
Air quality implementation plans; approval and promulgation; various States:
Louisiana, 23164–23167
New Mexico, 23167–23169
PROPOSED RULES
Air quality implementation plans; approval and promulgation; various States, and air quality planning purposes; designation areas:
California, 23264–23605
NOTICES
Meetings:
Reference Dose for Aroclor 1016; technical review workshop, 23202
Municipal solid waste landfill permit program; adequacy determinations:
Massachusetts, 23202–23204

Equal Employment Opportunity Commission
NOTICES
Meetings; Sunshine Act, 23261

Family Support Administration
See Community Services Office

Farmers Home Administration
PROPOSED RULES
Program regulations:
Guaranteed loan programs, 23173–23174

Federal Aviation Administration
RULES
Airworthiness directives:
Aerospatiale, 23132–23133
Airbus Industrie, 23133–23134
Allied-Signal Inc., 23135–23136
de Havilland, 23136–23137
General Electric Co., 23138–23142
Jetstream, 23142–23144
McDonnell Douglas, 23144–23146
Pratt & Whitney, 23146–23148
Teledyne Continental Motors, 23148–23152
PROPOSED RULES
Airworthiness directives:
Israel Aircraft Industries, 23174–23176

Federal Communications Commission
PROPOSED RULES
Radio stations; table of assignments:
North Carolina, 23184
Television broadcasting:
Equal employment opportunity rules and policies, 23183–23184
NOTICES
Direct telex service between United States and Cuba; authorization, 23204–23206

Federal Election Commission
NOTICES
Meetings; Sunshine Act, 23261

Federal Energy Regulatory Commission
NOTICES
Environmental statements; availability, etc.:
Central Vermont Public Service Corp., 23198
Applications, hearings, determinations, etc.:
Avoca Natural Gas Storage, 23198
Boston Edison Co., 23198–23199
Delmarva Power & Light Co., 23199
Indianapolis Power & Light Co., 23199
Koch Gateway Pipeline Co. et al., 23199
Williams Natural Gas Co., 23199–23200

Federal Highway Administration
NOTICES
Environmental statements; notice of intent:
Allegan and Ottawa Counties, MI, 23252
Marion and Ralls Counties, MO, 23252–23253

Federal Maritime Commission
PROPOSED RULES
Practice and procedure:
Financial responsibility requirements for transportation nonperformance, 23182–23183

Federal Reserve System
RULES
Securities credit transactions; OTC margin stocks list (Regulations G, T, U, and X), 23124–23131
NOTICES
Meetings; Sunshine Act, 23261
Applications, hearings, determinations, etc.:
First Fidelity Bancorporation et al., 23206
Hebron Bancorp, Inc., et al., 23206–23207
Pignatelli, Louis F., et al., 23207
South Banking Co., 23207–23208

Federal Retirement Thrift Investment Board
NOTICES
Meetings; Sunshine Act, 23261

Fish and Wildlife Service
NOTICES
Agency information collection activities under OMB review, 23228–23229
Endangered and threatened species:
Recovery plans—
Masked bobwhite quail, 23229–23230
Mexican long-nosed bat, 23230

Forest Service
NOTICES
Environmental statements; availability, etc.:
Flathead National Forest, MT, 23189–23192
Meetings:
Newberry National Volcanic Monument Advisory Council, 23192

Health and Human Services Department
See Centers for Disease Control and Prevention
See Community Services Office
See National Institutes of Health

Hearings and Appeals Office, Energy Department
NOTICES
Special refund procedures; implementation, 23200–23202

Housing and Urban Development Department
NOTICES
Grants and cooperative agreements; availability, etc.:
Housing assistance payments (Section 8)—
Community investment demonstration program, 23224–23225

Interior Department
See Fish and Wildlife Service
See Land Management Bureau
See Minerals Management Service
See Surface Mining Reclamation and Enforcement Office

Internal Revenue Service
RULES
Estate and gift taxes:
Special valuation rules; tax adjustments, 23152–23157
NOTICES
Organization, functions, and authority delegations:
Chief Counsel's delegate et al., 23260

International Trade Administration
NOTICES
Committees; establishment, renewal, termination, etc.:
Environmental Technologies Trade Advisory Committee, 23192–23193

Interstate Commerce Commission
NOTICES
Railroad operation, acquisition, construction, etc.:
Burlington Northern Railroad Co., 23232
Railroad services abandonment:
Boston & Maine Corp., 23232

Justice Department
See Antitrust Division

NOTICES
Pollution control; consent judgments:
Bank IV Kansas, N.A., et al., 23236
Hawaiian Western Steel, Inc., et al., 23232–23233
Olin Corp., 23233

Labor Department
NOTICES
Meetings:
Freedom of Information Act (FOIA)-Requester Community Conference, 23236–23237

Land Management Bureau
NOTICES
Boundary establishment, descriptions, etc.:
Principal Meridian, MT, 23225
Closure of public lands:
California, 23225
Oregon, 23225–23226
Environmental statements; availability, etc.:
Newcastle Resource Area, WY, 23226–23227
Oil and gas leases:
Colorado, 23227
Wyoming, 23227
Realty actions; sales, leases, etc.:
California, 23227
Resource management plans, etc.:
Eastern Utah Resource Area, UT; correction, 23227–23228
Pocatello Resource Area, ID, 23228
Survey plat filings:
Colorado, 23228
Idaho, 23228

Maritime Administration
NOTICES
Applications, hearings, determinations, etc.:
Gulfcoast Transit Co., 23253

Minerals Management Service
NOTICES
Environmental statements; availability, etc.:
Gulf of Mexico OCS—
Oil and gas operations, 23230–23232

National Highway Traffic Safety Administration
PROPOSED RULES
Motor vehicle safety standards:
Hydraulic brake systems—
Antilock brake failure indicator lights; lettering size reduction; petition denied, 23184–23186
Odometer disclosure requirements:
American Car Rental Association; petition denied, 23186–23188
NOTICES
Meetings:
Motorcycle helmets manufactured by Frenchy's Worldwide Helmets; failure to comply, 23253
Motor vehicle safety standards:
Nonconforming vehicles—
Importation eligibility; determinations, 23256–23260
Motor vehicle safety standards; exemption petitions, etc.:
Fisher-Price, Inc., 23253–23256

National Institutes of Health
NOTICES
Committees; establishment, renewal, termination, etc.:
Biomedical and Behavioral Research Facilities Scientific and Technical Review Board, 23224
Meetings:
National Heart, Lung, and Blood Institute, 23224

National Oceanic and Atmospheric Administration
RULES
Endangered and threatened species:
Sea turtle conservation; shrimp trawling requirements—
Fishery restrictions, 23169–23172
Fishery conservation and management:
Bering Sea and Aleutian Islands groundfish, 23172
NOTICES
Meetings:
New England Fishery Management Council, 23193

National Science Foundation
NOTICES
Agency information collection activities under OMB review, 23237
Meetings:
Biological and Critical Systems Special Emphasis Panel, 23237–23238
Cross Disciplinary Activities Special Emphasis Panel, 23238
Education and Human Resources Advisory Committee, 23238
Electrical and Communication Systems Special Emphasis Panel, 23238
Geosciences Special Emphasis Panel, 23238–23239
Mechanical and Structural Systems Special Emphasis Panel, 23239
Social, Behavioral and Economic Sciences Advisory Committee, 23239

Nuclear Regulatory Commission
RULES
Equal Access to Justice Act; implementation, 23119–23124
NOTICES
Environmental statements; availability, etc.:
Baltimore Gas & Electric Co., 23239–23240
Meetings:
CONTAIN Peer Review Committee, 23240–23241

Postal Service
RULES
Domestic Mail Manual:
Special bulk third-class eligibility restrictions, 23158–23164

Public Health Service
See Centers for Disease Control and Prevention
See National Institutes of Health

Railroad Retirement Board
NOTICES
Agency information collection activities under OMB review, 23241

Saint Lawrence Seaway Development Corporation
PROPOSED RULES
Tariff of tolls, 23180–23182

Securities and Exchange Commission
NOTICES
Meetings; Sunshine Act, 23261–23262
Self-regulatory organizations; proposed rule changes:
American Stock Exchange, Inc., 23241–23242
Chicago Board Options Exchange, Inc., 23242–23243
Cincinnati Stock Exchange, Inc., 23243–23244

National Securities Clearing Corp., 23244–23245
Philadelphia Stock Exchange, Inc., 23245–23249
Applications, hearings, determinations, etc.:
Scandinavia Fund, Inc., 23249–23250

Sentencing Commission, United States
See United States Sentencing Commission

Small Business Administration
RULES
Small business size standards:
Inflation adjusted size standard levels
Correction, 23131–23132
NOTICES
Agency information collection activities under OMB review, 23250
Disaster loan areas:
Texas, 23250
License surrenders:
San Antonio Venture Group, Inc., 23250
Meetings; district and regional advisory councils:
Minnesota, 23250–23251
Applications, hearings, determinations, etc.:
CI Capital Group, Inc., 23251
CIP Capital, L.P., 23251

Surface Mining Reclamation and Enforcement Office
PROPOSED RULES
Permanent program and abandoned mine land reclamation plan submissions:
Indiana, 23176–23177
Iowa, 23177–23179

Transportation Department
See Coast Guard
See Federal Aviation Administration
See Federal Highway Administration
See Maritime Administration
See National Highway Traffic Safety Administration
See Saint Lawrence Seaway Development Corporation

Treasury Department
See Internal Revenue Service

United States Enrichment Corporation
NOTICES
Meetings; Sunshine Act, 23262

United States Sentencing Commission
NOTICES
Sentencing guidelines and policy statements for Federal courts, 23608–23610

Separate Parts in This Issue

Part II
Environmental Protection Agency, 23264–23605

Part III
U.S. Sentencing Commission, 23608–23610

Reader Aids
Additional information, including a list of public laws, telephone numbers, and finding aids, appears in the Reader Aids section at the end of this issue.

Electronic Bulletin Board
Free **Electronic Bulletin Board** service for Public Law numbers and **Federal Register** finding aids is available on 202–275–1538 or 275–0920.

CFR PARTS AFFECTED IN THIS ISSUE

A cumulative list of the parts affected this month can be found in the Reader Aids section at the end of this issue.

7 CFR
Proposed Rules:
1980.....23173

10 CFR
12.....23119

12 CFR
207.....23124
220.....23124
221.....23124
224.....23124

13 CFR
121.....23131

14 CFR
39 (13 documents).....23132, 23133, 23135, 23136, 23138, 23139, 23142, 23143, 23144, 23146, 23148, 23150,
Proposed Rules:
39.....23174

26 CFR
25.....23152
602.....23152

30 CFR
Proposed Rules:
914.....23176
915.....23177

33 CFR
117.....23158
165.....23158
Proposed Rules:
165.....23179
402.....23180

39 CFR
111.....23158

40 CFR
52 (2 documents).....23164, 23167
Proposed Rules:
52.....23264
81.....23264

46 CFR
Proposed Rules:
540.....23182

47 CFR
Proposed Rules:
1.....23183
73 (2 documents).....23183, 23184
76.....23183

48 CFR
225.....23169

49 CFR
Proposed Rules:
571.....23184
580.....23186

50 CFR
217.....23169
227.....23169
675.....23172

Rules and Regulations

Federal Register
Vol. 59, No. 86
Thursday, May 5, 1994

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 12

RIN 3150 AE61

Equal Access to Justice Act: Implementation

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations by adding new provisions designed to implement the Equal Access to Justice Act (EAJA). The EAJA provides for the award of fees and expenses to certain individuals and businesses that prevail in agency formal adjudicatory proceedings in which the agency's position is determined not to have been substantially justified.

EFFECTIVE DATE: June 6, 1994.

FOR FURTHER INFORMATION CONTACT: Susan Fonner, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 504–1634.

SUPPLEMENTARY INFORMATION:

I. Background.
II. Responses to Comments Received.
III. Administrative Statements.

I. Background

The Equal Access to Justice Act (EAJA) became law on October 21, 1981 (5 U.S.C. 504). The EAJA authorizes agencies to award attorney fees and other expenses to parties that prevail over an agency in certain agency proceedings under specified circumstances. Generally, for an award to be made, the proceeding must be one that is "required by statute to be determined on the record." *See, Ardestani* v. *U.S. Department of Justice*, ——— U.S. ———, 112 S.Ct. 515 (1991).

On October 28, 1981 (46 FR 53189), the NRC published a proposed rule designed to implement the EAJA in the **Federal Register**. However, serious doubt developed as to the need for the regulations. A significant consideration in this regard was the impact of a statutory bar against the use of funds appropriated to the NRC "to pay the expenses of, or otherwise compensate, parties intervening in regulatory or adjudicatory proceedings." This provision first appeared in the Energy and Water Development Appropriations Act of 1981 (Pub. L. No. 966–367, Sec. 502, 94 Stat. 1344, 1345 (1980)), and has continued to appear each year in subsequent NRC appropriation acts. In addition, case law developed in the 1980's indicating that the Commission would receive judicial support if it determined that no NRC license proceeding of any kind is covered by the EAJA.

With the enactment of the Inspector General Act Amendments of 1988 (Pub. L. 100–504, 1102 Stat. 2515), which established an Office of the Inspector General in the NRC, the NRC became subject to the Program Fraud Civil Remedies Act (PFCRA), 31 U.S.C. ch. 38. Hearings under the Program Fraud Civil Remedies Act are expressly covered by the EAJA, necessitating the issuance of EAJA regulations by the NRC. However, because of the length of time that had gone by since the NRC issued the 1981 proposed EAJA rule, the Commission replaced it with a new proposed rule, published on August 2, 1993 (58 FR 41061). The new proposed rule was essentially similar to a model rule suggested by the Administrative Conference of the United States (ACUS) for agency adoption. (May 6, 1988, 51 FR 16665.)

II. Responses to Comments Received

In response to the August 2, 1993 proposed rule, the NRC received one set of comments from ACUS and one set from the Nuclear Management and Resources Council (NUMARC). The NRC's consideration of the comments follows.

A. Time Deadlines

1. Decision on the Petition for Increase of Maximum Rate for Attorney Fees

Comment. ACUS recommended that the rule provide a specific time frame for agency action on a petition for rulemaking to increase the maximum rate for attorney fees.

Response. The EAJA provides a $75 hourly ceiling on attorney fees, but allows agencies to raise the statutory ceiling by regulation. The proposed rule provides that any person may file with the Commission a petition for rulemaking to increase the $75 maximum hourly rate for attorney fees, and refers to 10 CFR 2.802 and 2.803 for the procedures to be followed with respect to such petitions. Neither the proposed rule nor 10 CFR 2.802 nor 10 CFR 2.803 provides a specific time frame for agency action on the petition for rulemaking. A sentence has been added to 10 CFR 12.107 requiring the Commission to determine what action it will take on the petition within 90 days after the petition is filed.

2. Decision on the Application for Award of Attorney Fees

Comment. ACUS recommended that the rule provide a specific time frame for the adjudicative officer to issue an initial decision on the application for award of attorney fees.

Response. 10 CFR 12.307 of the proposed rule states requirements for the adjudicative officer's initial decision on the application for award of attorney fees, but does not prescribe a time limit for the adjudicative officer to issue the decision. A sentence has been added to 10 CFR 12.307 requiring the initial decision to be issued within 90 days after completion of proceedings on the application, but permitting the adjudicative officer to extend the time limit after notice to the parties of the reason for the delay. Authority is provided for the adjudicative officer to extend the time period in order to prevent the interruption of cases presenting pressing health and safety concerns. The NRC expects that extensions will be issued sparingly.

B. Exhaustion of Administrative Remedies

Comment. ACUS stated that if the NRC believes that a request for administrative review should be a prerequisite to judicial review, it should recast 10 CFR 12.308 (Agency review) in light of the Supreme Court's decision in *Darby* v. *Cisneros*, _____ U.S. _____, 113 S.Ct. 2539 (June 21, 1993).

Response. Within the last year, the Supreme Court cast new light on the requirements for exhaustion of

administrative remedies before appealing an agency decision to the courts. In *Darby* v. *Cisneros*, the Court held that an agency cannot insist on exhaustion of intra-agency appeals prior to judicial review unless the agency promulgates rules that require intra-agency appeals and stay the effect of agency decisions during such appeals. The Commission believes that for purposes of judicial and administrative economy a request for administrative review should be a prerequisite to judicial review, particularly because the NRC frequently entertains proceedings that encompass highly technical matters.

The cross-reference in 10 CFR 12.308 to the review procedures set out in 10 CFR 2.786 should be sufficient to satisfy the commenter that the NRC has addressed the *Darby* case ruling in these regulations, because 10 CFR 2.786(b)(1) expressly provides that the filing of a petition for review is mandatory for a party to exhaust its administrative remedies. Nevertheless, it may be considered fairer notice to state the requirement in 10 CFR 12.308 itself. Therefore, the NRC has amended 10 CFR 12.308 to state unambiguously that an aggrieved party is required to seek Commission review of the adjudicative officer's initial decision.

The application of the part of the Court's opinion on staying the effect of the initial decision seems inapposite in the context of an EAJA administrative proceeding, because it makes little sense to speak of a stay of an initial decision denying the application for award of attorney fees, which is the type of decision most likely to be appealed. A successful applicant for an award is not likely to appeal unless he or she is dissatisfied with the amount of the award. This poses a very different type of situation from that in the *Darby* case, where the Court had before it an agency decision debarring petitioners from participating in Federal programs. Nevertheless, in what is perhaps an excess of caution, we have included in NRC's EAJA rule a statement on staying the effect of the initial decision during an appeal to the Commission.

C. Proceedings Subject to the EAJA

Comment. NUMARC commented that the rule should be revised to make clear that the only proceedings subject to NRC's EAJA rule are those conducted pursuant to the Program Fraud Civil Remedies Act.

Response. The EAJA applies only to an agency adversary adjudication. 50 U.S.C. 504(a). The term "adversary adjudication" is defined by 5 U.S.C. 504(b)(1)(C) to mean an appeal of a decision made pursuant to section 6 of the Contract Disputes Act of 1978 (41 U.S.C. 605) before an agency board of contract appeals, a hearing conducted under 31 U.S.C. ch. 38 (PFCRA), and an adjudication under 5 U.S.C. 554 (the Administrative Procedure Act). Section 554 of the Administrative Procedure Act expressly states that (with certain exceptions) it applies "in every case of adjudication required by statute to be determined on the record after opportunity for an agency hearing."

A proceeding for the purpose of granting or renewing a license is expressly excluded from EAJA coverage by 5 U.S.C. 504(b)(1)(C). However, there is no express exclusion of proceedings suspending, revoking, or amending a license, including that for a nuclear reactor. As indicated in the Supplementary Information for NRC's proposed EAJA rule, the question of such proceedings was at least addressed partially in 1983, when a materials license amendment proceeding was judicially held as not being required by statute to be conducted "on the record." In that case, the court declined to read section 189(a) of the Atomic Energy Act of 1954 (AEA) as requiring an on-the-record hearing, in the absence of clear Congressional intent to trigger the formal on-the-record hearing provisions of the Administrative Procedure Act. *West Chicago, Ill.* v. *U.S. Nuclear Regulatory Commission*, 701 F.2d 632 (1983). Since that time, the Commission has gone on record that it interprets section 189a of the AEA as not requiring formal hearings in reactor licensing proceedings. *En Banc* Brief for Respondents dated August 30, 1991 (filed in the U.S. Court of Appeals for the District of Columbia Circuit, No. 89–1381, *Nuclear Information and Resource Service* v. *NRC*, at pp 32–38).

In light of the above, it is not unreasonable to conclude that no NRC proceeding other than an appeal to a board of contract appeals under the Contract Disputes Act or a Program Fraud Civil Remedies Act hearing is covered by the EAJA. Nevertheless, the Commission does not wish to frame its EAJA regulations in such a way as to preclude potential applicants for attorney fee awards from raising the issue of EAJA coverage, if they can make a good faith argument that the proceeding in which they have been involved falls under the EAJA. In addition, there is always the possibility of new enactments that could make the EAJA applicable to proceedings not previously entertained by the agency. Therefore, the Commission has decided not to state that the NRC's EAJA rule applies only to a proceeding under the Program Fraud Civil Remedies Act.

Nevertheless, the Commission has decided to amend 10 CFR 12.101, 12.102, and 12.103 to clarify its intent regarding the scope of coverage of the regulations. The amendment does not make express reference to any type of proceedings other than appeals under the Contract Disputes Act and adjudications conducted pursuant to the Program Fraud Civil Remedies Act, but it contains a general provision that will encompass other types of proceedings that may fall within the parameters of the EAJA. This leaves room for case-by-case determinations on applicants' claims of coverage in areas that have not been addressed previously by statute, case law, or express Commission interpretation.

III. Administrative Statements

Environmental Impact: Categorical Exclusion

The NRC has determined that this regulation is the type of action described in categorical exclusion 10 CFR 51.22(c). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this rule.

Paperwork Reduction Act Statement

The information collection requirements contained in this rule are exempt from the Paperwork Reduction Act of 1980 (44 U.S.C. 3518(c)(1)).

Regulatory Analysis

The EAJA provides that individuals and businesses that meet certain net worth and other requirements and prevail over the NRC in an adversary adjudication in which the NRC's position is not substantially justified may be awarded fees and expenses incurred in connection with the proceeding. Recent events, most notably the NRC's publication of a final rule implementing the Program Fraud Civil Remedies Act and actions thereunder, suggest that it is necessary for the NRC to adopt procedures to govern the receipt and determination of applications for EAJA fees. The procedures adopted mirror in important respects the model rule promulgated by the ACUS. The NRC has fulfilled the statutorily mandated process of consultation between the Chairman of the ACUS and the agency with respect to EAJA implementing procedures. See 5 U.S.C. 504(c)(1). The Commission believes that the procedures adopted are preferable to other procedural requirements that might be imposed.

The foregoing discussion constitutes the regulatory analysis for this final rule.

Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that if promulgated, this rule will not have a significant economic impact on a substantial number of small entities. The rule merely will establish a procedural framework for the submission and determination of applications for fees and expenses incurred in participating in NRC adjudications and will not itself impose significant economic benefits or burdens.

Backfit Analysis

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to this rule, because these amendments do not involve any provisions which would impose backfits as defined in 10 CFR 50.109(a)(1).

List of Subjects in 10 CFR Part 12

Adversary adjudications, Award, Equal Access to Justice Act, Final disposition, Net worth, Party.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 552 and 553, the NRC is adopting a new 10 CFR part 12.

1. A new part 12 is added to 10 CFR chapter I to read as follows:

PART 12—IMPLEMENTATION OF THE EQUAL ACCESS TO JUSTICE ACT IN AGENCY PROCEEDINGS

Subpart A—General Provisions

Sec.

12.101 Purpose.
12.102 When the EAJA applies.
12.103 Proceedings covered.
12.104 Eligibility of applicants.
12.105 Standards for awards.
12.106 Allowable fees and expenses.
12.107 Rulemaking on maximum rates for attorney fees.
12.108 Awards against other agencies.
12.109 Decisionmaking authority.

Subpart B—Information Required From Applicants

12.201 Contents of application.
12.202 Net worth exhibit.
12.203 Documentation of fees and expenses.
12.204 When an application may be filed.

Subpart C—Procedures for Considering Applications

12.301 Filing and service of documents.
12.302 Answer to application.
12.303 Reply.
12.304 Comments by other parties.
12.305 Settlement.
12.306 Further proceedings.
12.307 Decision.
12.308 Agency review.
12.309 Judicial review.
12.310 Payment of award.

Authority: Sec. 203(a)(1), Pub. L. 96–481, 94 Stat. 2325 (5 U.S.C. 504(c)(1)); Pub. L. 99–80, 99 Stat. 183.

Subpart A—General Provisions

§ 12.101 Purpose.

The purpose of this Part is to state the regulatory requirements for award of attorney fees to eligible individuals and entities in certain administrative proceedings before the Nuclear Regulatory Commission, in implementation of the Equal Access to Justice Act, 5 U.S.C. 504 (EAJA), which provides for the award of attorney fees and other expenses to parties to "adversary adjudications", as defined in 5 U.S.C. 504(b)(1)(C). In general, an "adversary adjudication" is an adjudication that is required by statute to be determined on the record after opportunity for hearing before an agency of the United States and in which the position of the agency, or any component of the agency, is presented by an attorney or other representative who enters an appearance and participates in the proceeding. However, some agency adjudications are expressly excluded from coverage by 5 U.S.C. 504 (e.g., an adjudication for the purpose of granting or renewing a license) even though they fall within this general definition, and certain appeals before an agency board of contract appeals and Program Fraud Civil Remedies Act hearings conducted under 31 U.S.C. ch. 38 are expressly covered.

An eligible party may receive an award in an adversary adjudication when the party prevails over the Commission, unless the Commission's position was substantially justified or special circumstances make an award unjust. The regulations in this part describe the parties eligible for awards and the proceedings that are covered. They also explain how to apply for awards, and the procedures and standards that the Commission will use to make them.

§ 12.102 When the EAJA applies.

The EAJA applies to any covered adversary adjudication pending or commenced before the Commission on or after August 5, 1985.

§ 12.103 Proceedings covered.

(a) The EAJA applies to the following proceedings:

(1) Hearings under the Program Fraud Civil Remedies Act (31 U.S.C. 3801–12);

(2) Any appeal of a decision made pursuant to section 6 of the Contract Disputes Act of 1978 (41 U.S.C. 605) before an agency board of contract appeals as provided in section 8 of that Act (41 U.S.C. 607); and

(3) Adversary adjudications conducted by the Commission pursuant to any other statutory provision that requires a proceeding before the Nuclear Regulatory Commission to be so conducted as to fall within the meaning of "adversary adjudication" under 5 U.S.C. 504(b)(1)(C).

(b) The Commission's failure to identify a type of proceeding as an adversary adjudication shall not preclude the filing of an application by a party who believes the proceeding is covered by the EAJA. Whether the proceeding is covered will then be an issue for resolution in proceedings on the application.

(c) If a proceeding includes both matters covered by the EAJA and matters specifically excluded from coverage, any award made will include only fees and expenses related to covered issues.

§ 12.104 Eligibility of applicants.

(a) To be eligible for an award of attorney fees and other expenses under the EAJA, the applicant must be a party to the adversary adjudication for which it seeks an award. The term "party" is defined in 5 U.S.C. 551(3). The applicant must show that it meets all conditions of eligibility set out in this subpart and in subpart B.

(b) The types of eligible applicants are as follows:

(1) An individual with a net worth of not more than $2 million;

(2) The sole owner of an unincorporated business who has a net worth of not more than $7 million, including both personal and business interests, and not more than 500 employees;

(3) A charitable or other tax-exempt organization described in section 501(c)(3) of the Internal Revenue Code (26 U.S.C. 501(c)(3)) with not more than 500 employees;

(4) A cooperative association as defined in section 15(a) of the Agricultural Marketing Act (12 U.S.C. 1141j(a)) with not more than 500 employees; and

(5) Any other partnership, corporation, association, unit of local government, or organization with a net worth of not more than $7 million and not more than 500 employees.

(c) For the purpose of eligibility, the net worth and number of employees of an applicant shall be determined as of the date the proceeding was initiated.

(d) An applicant who owns an unincorporated business will be considered as an "individual" rather than a "sole owner of an unincorporated business" if the issues on which the applicant prevails are related primarily to personal interests rather than to business interests.

(e) The employees of an applicant include all persons who regularly perform services for remuneration for the applicant, under the applicant's direction and control. Part-time employees shall be included on a proportional basis.

(f) The net worth and number of employees of the applicant and all of its affiliates shall be aggregated to determine eligibility. Any individual, corporation, or other entity that directly or indirectly controls or owns a majority of the voting shares or other interests of the applicant, or any corporation or other entity of which the applicant directly or indirectly owns or controls a majority of the voting shares or other interest, will be considered an affiliate for purposes of this part, unless the adjudicative officer determines that such treatment would be unjust and contrary to the purposes of the Act in light of the actual relationship between the affiliated entities. In addition, the adjudicative officer may determine that financial relationships of the applicant other than those described in this paragraph constitute special circumstances that would make an award unjust.

(g) An applicant that participates in a proceeding primarily on behalf of one or more other persons or entities that would be ineligible is not itself eligible for an award.

§ 12.105 Standards for awards.

(a) A prevailing applicant may receive an award for fees and expenses incurred in connection with a proceeding or a significant and discrete substantive portion of the proceeding, unless the position of the Commission over which the applicant has prevailed was substantially justified. The position of the Commission includes, in addition to the position taken by the Commission in the adversary adjudication, the action or failure to act by the Commission upon which the adversary adjudication is based. The burden of proof that an award should not be made to a prevailing applicant because the Commission's position was substantially justified is on the Commission counsel.

(b) An award will be reduced or denied if the applicant has unduly or unreasonably protracted the proceeding or if special circumstances make the award sought unjust.

§ 12.106 Allowable fees and expenses.

(a) Awards will be based on rates customarily charged by persons engaged in the business of acting as attorneys, agents, and expert witnesses, even if the services were made available without charge or at reduced rate to the applicant.

(b) No award for the fee of an attorney or agent under this part may exceed $75.00 per hour. No award to compensate an expert witness may exceed the highest rate at which the Commission pays expert witnesses. However, an award may also include the reasonable expenses of the attorney, agent, or witness as a separate item, if the attorney, agent, or witness ordinarily charges clients separately for these expenses.

(c) In determining the reasonableness of the fee sought for an attorney, agent, or expert witness, the adjudicative officer shall consider the following:

(1) If the attorney, agent, or witness is in private practice, his or her customary fees for similar services, or, if an employee of the applicant, the fully allocated costs of the services;

(2) The prevailing rate for similar services in the community in which the attorney, agent, or witness ordinarily performs services;

(3) The time actually spent in the representation of the applicant;

(4) The time reasonably spent in light of the difficulty or complexity of the issues in the proceeding; and

(5) Other factors that bear on the value of the services provided.

(d) The reasonable cost of any study, analysis, engineering report, test, project, or similar matter prepared on behalf of a party may be awarded, to the extent that the charge for the services does not exceed the prevailing rate for similar services, and the study or other matter was necessary for preparation of applicant's case.

§ 12.107 Rulemaking on maximum rates for attorney fees.

(a) If warranted by an increase in the cost of living or by special circumstances (such as limited availability of attorneys qualified to handle certain types of proceedings), the Commission may adopt regulations providing that attorney fees may be awarded at a rate higher than $75 per hour in some, or all of the types of proceedings covered by this part. The Commission will conduct any rulemaking proceedings for this purpose under the informal rulemaking procedures of the Administrative Procedure Act.

(b) Any person may file with the Commission a petition for rulemaking to increase the maximum rate for attorney fees, in accordance with the requirements of 10 CFR 2.802. The petition should identify the rate the petitioner believes the Commission should establish and the types of proceedings in which the rate should be used. It should also explain fully the reasons why the higher rate is warranted. Within 90 days after the petition is filed, the Commission will determine whether it will initiate a rulemaking proceeding, deny the petition, or take other appropriate action on the petition. The Commission will act on the petition in accordance with 10 CFR 2.803.

§ 12.108 Awards against other agencies.

If an applicant is entitled to an award because it prevails over another agency of the United States that participates in a proceeding before the Commission and takes a position that is not substantially justified, the award or an appropriate portion of the award shall be made against that agency.

§ 12.109 Decisionmaking authority.

Unless otherwise ordered by the Commission in a particular proceeding, each application under this part shall be assigned for decision to the official or decisionmaking body that entered the decision in the adversary adjudication. That official or decisionmaking body is referred to in this part as the "adjudicative officer."

Subpart B—Information Required From Applicants

§ 12.201 Contents of application.

(a) An application for an award of fees and expenses under the EAJA shall identify the applicant and the proceeding for which an award is sought. The application shall show that the applicant has prevailed and identify the position of the Commission or other agency that the applicant alleges was not substantially justified. Unless the applicant is an individual, the application shall also state the number of employees of the applicant and describe briefly the type and purpose of its organization or business.

(b) The application shall also include a statement that the applicant's net worth does not exceed $2 million (if an individual) or $7 million (for all other applicants, including their affiliates). However, an applicant may omit this statement if:

(1) The applicant attaches a copy of a ruling by the Internal Revenue Service that it qualifies as an organization

described in section 501(c)(3) of the Internal Revenue Code (26 U.S.C. 501(c)(3)) or, in the case of a tax-exempt organization not required to obtain a ruling from the Internal Revenue Service on its exempt status, a statement that describes the basis for the applicant's belief that it qualifies under this section; or

(2) The applicant states that it is a cooperative association as defined in section 15(a) of the Agricultural Marketing Act (12 U.S.C. 1141j(a)).

(c) The application shall state the amount of fees and expenses for which an award is sought.

(d) The application may also include any other matters that the applicant wishes the Commission to consider in determining whether, and in what amount, an award should be made.

(e) The application shall be signed by the applicant or an authorized officer or attorney of the applicant. It shall also contain or be accompanied by a written verification under oath or under penalty of perjury that the information provided in the application is true and correct.

§ 12.202 Net worth exhibit.

(a) Each applicant, except a qualified tax-exempt organization or cooperative association must provide with its application a detailed exhibit showing the net worth of the applicant and any affiliates (as defined in § 12.104(f) of this part) when the proceeding was initiated. The exhibit may be in any form convenient to the applicant that provides full disclosure of the applicant's and its affiliates' assets and liabilities and is sufficient to determine whether the applicant qualifies under the standards in this part. The adjudicative officer may require an applicant to file additional information to determine its eligibility for an award.

(b) Ordinarily, the net worth exhibit will be included in the public record of the proceeding. However, an applicant that objects to public disclosure of information in any portion of the exhibit and believes there are legal grounds for withholding it from disclosure may submit that portion of the exhibit directly to the adjudicative officer in a sealed envelope labeled "Confidential Financial Information," accompanied by a motion to withhold the information from public disclosure. The motion shall describe the information sought to be withheld and explain, in detail, why it falls within one or more of the specific exemptions from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552(b)(1)–(9), why public disclosure of the information would adversely affect the applicant, and why disclosure is not required in the public interest. The material in question shall be served on counsel representing the agency against which the applicant seeks an award, but need not be served on any other party to the proceeding. If the adjudicative officer finds that the information should not be withheld from disclosure, it shall be placed in the public record of the proceeding. Otherwise, any request to inspect or copy the exhibit shall be disposed of in accordance with the Commission's established procedures under the Freedom of Information Act, 10 CFR part 9, subpart A.

§ 12.203 Documentation of fees and expenses.

The application shall be accompanied by full documentation of the fees and expenses, including the cost of any study, analysis, engineering report, test, project, or similar matter for which an award is sought. A separate itemized statement shall be submitted for each professional firm or individual whose services are covered by the application, showing the hours spent in connection with the proceeding by each individual, a description of the specific services performed, the rates at which each fee has been computed, any expenses for which reimbursement is sought, the total amount claimed, and the total amount paid or payable by the applicant or by any other person or entity for the services provided. The adjudicative officer may require the applicant to provide vouchers, receipts, logs, or other substantiation for any fees or expenses claimed, pursuant to § 12.306 of this part.

§ 12.204 When an application may be filed.

(a) An application may be filed whenever the applicant has prevailed in the proceeding or in a significant and discrete substantive portion of the proceeding, but in no case later than 30 days after the date on which a decision or order disposing of the merits of the proceeding or any other complete resolution of the proceeding, such as a settlement or voluntary dismissal, becomes final and unappealable, both within the NRC and to the courts.

(b) If after the filing of an application for an award, review or reconsideration is sought or taken of a decision as to which an applicant believes it has prevailed, proceedings for the award of fees shall be stayed pending final disposition of the underlying controversy. When the United States appeals the underlying merits of an adversary adjudication to a court, no decision on an application for fees and other expenses in connection with that adversary adjudication shall be made until a final and unreviewable decision is rendered by the court on the appeal or until the underlying merits of the case have been finally determined pursuant to the appeal.

Subpart C—Procedures for Considering Applications

§ 12.301 Filing and service of documents.

Any application for an award or other pleading or document related to an application shall be filed and served on all parties to the proceeding in the same manner as other pleadings in the proceeding, except as provided in § 12.202(b) for confidential financial information.

§ 12.302 Answer to application.

(a) Within 30 days after service of an application, counsel representing the NRC against which an award is sought may file an answer to the application. Unless the NRC counsel requests an extension of time for filing or files a statement of intent to negotiate under paragraph (b) of this section, failure to file an answer within the 30-day period may be treated as a consent to the award requested.

(b) If the NRC counsel and the applicant believe that the issues in the fee application can be settled, they may jointly file a statement of their intent to negotiate a settlement. The filing of this statement shall extend the time for filing an answer for an additional 30 days, and further extensions may be granted by the adjudicative officer upon request by the NRC counsel and the applicant.

(c) The answer shall explain in detail any objections to the award requested and identify the facts relied on in support of the NRC counsel's position. If the answer is based on any alleged facts not already in the record of the proceeding, the NRC counsel shall include with the answer either supporting affidavits or a request for further proceedings under § 12.306.

§ 12.303 Reply.

Within 15 days after service of an answer, the applicant may file a reply. If the reply is based on any alleged facts not already in the record of the proceeding, the applicant shall include with the reply either supporting affidavits or a request for further proceedings under § 12.306.

§ 12.304 Comments by other parties.

Any party to a proceeding other than the applicant and the NRC counsel may file comments on an application within 30 days after it is served, or on an answer within 15 days after it is served. A commenting party may not participate further in proceedings on the

application unless the adjudicative officer determines that the public interest requires participation in order to permit full exploration of matters raised in the comments.

§ 12.305 Settlement.

The applicant and the NRC counsel may agree on a proposed settlement of the award before final action on the application, either in connection with a settlement of the underlying proceeding, or after the underlying proceeding has been concluded, in accordance with the NRC's standard settlement procedure. If a prevailing party and the NRC's counsel agree on a proposed settlement of an award before an application has been filed, the application shall be filed with the proposed settlement.

§ 12.306 Further proceedings.

(a) Ordinarily, the determination of an award will be made on the basis of the written record. However, on request of either the applicant or the NRC counsel, or on the adjudicative officer's own initiative, the adjudicative officer may order further proceedings, such as an informal conference, oral argument, additional written submissions or, as to issues other than substantial justification (such as the applicant's eligibility or substantiation of fees and expenses), pertinent discovery or an evidentiary hearing. Further proceedings shall be held only when necessary for full and fair resolution of the issues arising from the application, and shall be conducted as promptly as possible. Whether or not the position of the agency was substantially justified shall be determined on the basis of the administrative record, as a whole, which is made in the adversary adjudication for which fees and other expenses are sought.

(b) A request that the adjudicative officer order further proceedings under this section shall specifically identify the information sought or the disputed issues and shall explain why the additional proceedings are necessary to resolve the issues.

§ 12.307 Decision.

(a) The adjudicative officer shall issue an initial decision on the application within 90 days after completion of proceedings on the application. If the adjudicative officer fails to issue an initial decision within 90 days, he or she shall notify the parties of the reason for the delay and shall set a new deadline.

(b) The initial decision shall include written findings and conclusions on the applicant's eligibility and status as a prevailing party, and an explanation of the reasons for any difference between the amount requested and the amount awarded. The decision shall also include, if at issue, findings on whether the NRC's position was substantially justified, whether the applicant unduly protracted the proceedings, or whether special circumstances make an award unjust. If the applicant has sought an award against more than one agency, the decision shall allocate responsibility for payment of any award made among the agencies, and shall explain the reasons for the allocation made.

§ 12.308 Agency review.

(a) Either the applicant or the NRC counsel may seek review of the initial decision on the fee application, or the Commission may decide to review the decision on its own initiative, in accordance with the Commission's review procedures set out in 10 CFR 2.786. The filing of a petition for review is mandatory for a party to exhaust its administrative remedies before seeking judicial review. If neither the applicant nor NRC counsel seeks review and the Commission does not take review on its own initiative, the initial decision on the application shall become a final decision of the NRC forty (40) days after it is issued.

(b) Notwithstanding anything to the contrary in any other part of the Commission's regulations, the initial decision shall be inoperative (i.e., the decision shall not be final and any award made shall not be paid) until the later of—

(1) The expiration of the forty-day period provided in paragraph (a) of this section; or

(2) If within the forty-day period provided in paragraph (a) of this section the Commission elects to review the decision, the Commission's issuance of a final decision on review of the initial decision.

(c) Whether to review a decision on its own motion is a matter within the discretion of the Commission. If review is taken, the Commission will issue a final decision on the application or remand the application to the adjudicative officer for further proceedings.

§ 12.309 Judicial review.

Judicial review of final agency decisions on awards may be sought as provided in 5 U.S.C. 504(c)(2).

§ 12.310 Payment of award.

An applicant seeking payment of an award shall submit to the appropriate official of the paying agency a copy of the Commission's final decision granting the award, accompanied by a certification that the applicant will not seek review of the decision in the United States courts. Where the award is granted against the Commission, the applicant shall make the submission to the Director, Division of Accounting and Finance, Office of the Controller, U.S. Nuclear Regulatory Commission, Washington, DC 20555. The NRC will pay the amount awarded to the applicant within 60 days.

Dated at Rockville, Maryland, this 29th day of April 1994.

For the Nuclear Regulatory Commission.

John C. Hoyle,

Assistant Secretary of the Commission.

[FR Doc. 94–10729 Filed 5–4–94; 8:45 am]

BILLING CODE 7590–01–P

FEDERAL RESERVE SYSTEM

12 CFR Parts 207, 220, 221 and 224

[Regulations G, T, U, and X]

Securities Credit Transactions; List of Marginable OTC Stocks; List of Foreign Margin Stocks

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final rule; determination of applicability of regulations.

SUMMARY: The List of Marginable OTC Stocks (OTC List) is composed of stocks traded over-the-counter (OTC) in the United States that have been determined by the Board of Governors of the Federal Reserve System to be subject to the margin requirements under certain Federal Reserve regulations. The List of Foreign Margin Stocks (Foreign List) is composed of foreign equity securities that have met the Board's eligibility criteria under Regulation T. The OTC List and the Foreign List are published four times a year by the Board. This document sets forth additions to and deletions from the previous OTC List and additions to the Foreign List.

EFFECTIVE DATE: May 9, 1994.

FOR FURTHER INFORMATION CONTACT: Peggy Wolffrum, Securities Regulation Analyst, Division of Banking Supervision and Regulation, (202) 452–2781, Board of Governors of the Federal Reserve System, Washington, DC 20551. For the hearing impaired only, contact Dorothea Thompson, Telecommunications Device for the Deaf (TDD) at (202) 452–3544.

SUPPLEMENTARY INFORMATION: Listed below are additions to and deletions from the OTC List. This supersedes the last OTC List which was effective February 14, 1994. Additions and deletions to the OTC List were last

published on February 1, 1994 (59 FR 4549). A copy of the complete OTC List is available from the Federal Reserve Banks.

The OTC List includes those stocks that meet the criteria in Regulations G, T and U (12 CFR parts 207, 220 and 221, respectively). This determination also affects the applicability of Regulation X (12 CFR part 224). These stocks have the degree of national investor interest, the depth and breadth of market, and the availability of information respecting the stock and its issuer to warrant regulation in the same fashion as exchange-traded securities. The OTC List also includes any OTC stock designated for trading in the national market system (NMS security) under a Securities and Exchange Commission (SEC) rule. Additional OTC stocks may be designated as NMS securities in the interim between the Board's quarterly publications. They will become automatically marginable upon the effective date of their NMS designation. The names of these stocks are available at the SEC and at the National Association of Securities Dealers, Inc. and will be incorporated into the Board's next quarterly publication of the OTC List.

Also listed below are the additions to the Board's Foreign List, which was last published on February 1, 1994 (59 FR 4549), and became effective February 14, 1994. There are no deletions from the Foreign List. The Foreign List includes those foreign securities that meet the criteria in section 220.17 of Regulation T and are eligible for margin treatment at broker-dealers on the same basis as domestic margin securities. A copy of the complete Foreign List is available from the Federal Reserve Banks.

Public Comment and Deferred Effective Date

The requirements of 5 U.S.C. 553 with respect to notice and public participation were not followed in connection with the issuance of this amendment due to the objective character of the criteria for inclusion and continued inclusion on the Lists specified in 12 CFR 207.6 (a) and (b), 220.17 (a), (b), (c), and (d), and 221.7 (a) and (b). No additional useful information would be gained by public participation. The full requirements of 5 U.S.C. 553 with respect to deferred effective date have not been followed in connection with the issuance of this amendment because the Board finds that it is in the public interest to facilitate investment and credit decisions based in whole or in part upon the composition of these Lists as soon as possible. The Board has responded to a request by the public and allowed approximately a two-week delay before the Lists are effective.

List of Subjects

12 CFR Part 207

Banks, Banking, Credit, Margin, Margin requirements, National Market System (NMS Security), Reporting and recordkeeping requirements, Securities.

12 CFR Part 220

Banks, Banking, Brokers, Credit, Margin, Margin requirements, Investments, National Market System (NMS Security), Reporting and recordkeeping requirements, Securities.

12 CFR Part 221

Banks, Banking, Credit, Margin, Margin requirements, National Market System (NMS Security), Reporting and recordkeeping requirements, Securities.

12 CFR Part 224

Banks, Banking, Borrowers, Credit, Margin, Margin requirements, Reporting and recordkeeping requirements, Securities.

Accordingly, pursuant to the authority of sections 7 and 23 of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78g and 78w), and in accordance with 12 CFR 207.2(k) and 207.6 (Regulation G), 12 CFR 220.2(u) and 220.17 (Regulation T), and 12 CFR 221.2(j) and 221.7 (Regulation U), there is set forth below a listing of deletions from and additions to the OTC List and additions to the Foreign List.

Deletions From the List of Marginable OTC Stocks

Stocks Removed for Failing Continued Listing Requirements

ADVACARE, INC.
$.01 par common
AMERICAN DENTAL TECHNOLOGIES, INC.
$.01 par common
AMERICAN FILM TECHNOLOGIES, INC.
$.002 par common
AMERICAN INTERNATIONAL PETROLEUM CORPORATION
Rights (expire 02–11–94)
AMERICAN NUCLEAR CORPORATION
$.04 par common
BANK OF SAN PEDRO
No par common
BIRD CORPORATION
$1.85 par cumulative convertible preferred
BOONTON ELECTRONICS CORPORATION
$.10 par common
CARETENDERS HEALTH CORPORATION
$.02 par common
CENTOCOR, INC.
7.25% convertible subordinated debentures
CHEMFIX TECHNOLOGIES, INC.
$.01 par common
COMMERCEBANCORP (California)
No par common
CRAFTMATIC INDUSTRIES, INC.
$.01 par common
DOVER REGIONAL FINANCIAL SHARES
No par shares of beneficial interest
EMBRACE SYSTEMS CORPORATION
$.001 par common
ENZYMATICS, INC.
$.01 par common
FIRST FAMILY BANK, FSB (Florida)
$1.00 par common
FONIC, INC.
$.01 par common
IKOS SYSTEMS, INC.
$.01 par common
INDEPENDENCE BANCORP, INC. (New Jersey)
$1.00 par common
INNOVATIVE GAMING CORPORATION OF AMERICA
Warrants (expire 05–28–96)
INSTRUMENTARIUM CORPORATION
American Depositary Receipts for non-restricted B shares
NATIONAL LOAN BANK (Texas)
$.01 par common
PACIFIC INTERNATIONAL SERVICES CORPORATION
No par common
PETTIBONE CORPORATION
$.01 par common
PUBLISHERS EQUIPMENT CORPORATION
No par common
QUME CORPORATION
$.001 par common
ROCKY MOUNTAIN HELICOPTERS, INC.
$.02 par common
SANBORN, INC.
Class A, warrants (expire 07–02–97)
SEVEN OAKS INTERNATIONAL, INC.
$.10 par common
SPROUSE-REITZ STORES, INC.
Non-voting, $10.00 par common
STAFF BUILDERS, INC.
Warrants (expire 01–31–95)
SUNLITE, INC.
$.20 par common
URANIUM RESOURCES, INC.
Warrants (expire 02–26–94)
VACU-DRY COMPANY
No par common
VIDECART, INC.
$.01 par common
WAREHOUSE CLUB, INC.
$.10 par common
WASHINGTON SCIENTIFIC INDUSTRIES, INC.
$.10 par common
WESTWOOD ONE, INC.
6.75% convertible subordinated debentures
WOLF FINANCIAL GROUP, INC.
$.01 par common

Stocks Removed for Listing on a National Securities Exchange or Being Involved in an Acquisition

AGCO CORPORATION
$.01 par common Depositary Shares
BOULEVARD BANCORP, INC.
$.04 par common
CALIFORNIA WATER SERVICE COMPANY
No par common
CARE ENTERPRISES, INC.
$.01 par common
CENTRAL HOLDING COMPANY

No par common
CHATTAHOOCHEE BANCORP, INC.
$1.00 par common
CITIZENS NATIONAL CORPORATION (Florida)
$.01 par common
COMMERCIAL BANCORPORATION OF COLORADO
Class A, $1.00 par common
CONSTELLATION BANCORP (New Jersey)
$5.00 par common
CORPORATE SOFTWARE INCORPORATED
$.01 par common
ELDEC CORPORATION
$.05 par common
ESB BANCORP, INC. (Pennsylvania)
$.01 par common
FIRST FIDELITY BANCORP, INC. (West Virginia)
$1.25 par common
FIRST SAVINGS BANK FSB, THE (South Carolina)
$1.00 par common
FIRST UNITED BANK GROUP, INC.
$5.00 par common, Series A, $1.00 par convertible preferred
FLORIDABANK, A FEDERAL SAVINGS BANK
$1.00 par common
FRONTIER ADJUSTERS OF AMERICA, INC.
$.01 par common
GREENWICH FINANCIAL CORPORATION
$.01 par common
HAMPTONS BANCSHARES INC. (New York)
$4.00 par common
HUMPHREY, INC.
No par common
INTERNATIONAL HOLDING CAPITAL CORP.
$1.00 par common
JACKSON COUNTY FEDERAL BANK, A FEDERAL SAVINGS BANK (Oregon)
$1.00 par common
McGAW, INC.
$1.00 par common
MEDCO CONTAINMENT SERVICES, INC.
6% convertible subordinated debentures
MEDICAL MARKETING GROUP INC.
$.01 par common, 7.5% convertible subordinated debentures
MOUNTAINEER BANKSHARES OF WEST VIRGINIA
$2.50 par common
NORTH AMERICAN NATIONAL CORPORATION
$.01 par common
PENN CENTRAL BANCORP, INC.
$1.25 par common
QUALITY PRODUCTS, INC.
$.00001 par common
QUANTUM RESTAURANT GROUP, INC.
$.01 par common
RED EAGLE RESOURCES CORPORATION
$.10 par common
REFAC TECHNOLOGY DEVELOPMENT CORPORATION
$.10 par common
RHODES, INC.
No par common
TERMINAL DATA CORPORATION
$1.00 par common
THOUSAND TRAILS, INC.
No par common
TITAN HOLDINGS, INC.
$.01 par common
TITAN WHEEL INTERNATIONAL, INC.
No par common
TOCOR II INC.
Units (expire 12–31–95)
UNITED FEDERAL BANCORP, INC.
$.01 par common
UNITED POSTAL BANCORP, INC.
$.01 par common
VMX INC.
$.01 par common

Additions to the List of Marginable OTC Stocks

1ST UNITED BANCORP (Florida)
$.01 par common
ADVANCED NMR SYSTEMS, INC.
$.01 par common
AES CHINA GENERATING CO., LTD.
Class A, $.01 par common
AIR EXPRESS INTERNATIONAL CORPORATION
$.01 par common
AK STEEL HOLDING CORPORATION
$.01 par common
ALANTEC CORPORATION
$.001 par common
AMBANC CORPORATION
$10.00 par common
AMERICAN INTERNATIONAL PETROLEUM CORPORATION
Class A, warrants (expire 03–01–95)
AMERICAN UNITED GLOBAL, INC.
Warrants (expire 02–17–96)
ANCHOR GAMING
$.01 par common
ANESTA CORPORATION
$.001 par common
APPLIED BIOMETRICS, INC.
$.01 par common
APPLIED DIGITAL ACCESS, INC.
No par common
ARDEN INDUSTRIAL PRODUCTS, INC.
$.01 par common
ARYT INDUSTRIES LTD.
Ordinary Shares (NIS $1.00)
BATTERY TECHNOLOGIES, INC.
No par common
BAY RIDGE BANCORP, INC. (New York)
$.10 par common
BERKLEY, W. R. CORPORATION
Depositary Shares
BIOCRYST PHARMACEUTICALS, INC.
$.01 par common
BIOSEPRA INC.
$.01 par common
BLIMPIE INTERNATIONAL, INC.
$.01 par common
BORROR CORPORATION
No par common
BROAD NATIONAL BANCORPORATION (New Jersey)
8–1/2% cumulative convertible preferred
BUGABOO CREEK STEAK HOUSE, INC.
$.01 par common
CAI WIRELESS SYSTEMS, INC.
No par common
CAMERON ASHLEY INC.
No par common
CANTEL INDUSTRIES, INC.
$.10 par common
CAREER HORIZONS, INC.
$.01 par common
CELADON GROUP, INC.
$.033 par common
CERPLEX GROUP INC., THE
$.001 par common
CHAMPPS ENTERTAINMENT, INC.
$.01 par common
CHARTER BANK, S.B. (Illinois)
$1.00 par common
CHARTER FEDERAL SAVINGS BANK (Virginia)
$.01 par common
CIBER, INC.
$.01 par common
CIDCO INCORPORATED
$.01 par common
CITI-BANCSHARES, INC. (Florida)
$.01 par common
CMG INFORMATION SERVICES, INC.
$.01 par common
CNS, INC.
$.01 par common
COMMONWEALTH FEDERAL SAVINGS BANK (Pennsylvania)
$.10 par common
CONCORD HOLDING CORPORATION
$.01 par common
CONESTOGA BANCORP, INC. (New York)
$.01 par common
CONSEP, INC.
$.01 par common
CONWEST EXPLORATION COMPANY LTD.
No par common
COPART, INC.
No par common
DAKOTAH, INCORPORATED
$.01 par common
DAKTRONICS, INC.
No par common
DEFLECTA-SHIELD CORPORATION
$.01 par common
DELRINA CORPORATION
No par common
DIALOGIC CORPORATION
No par common
DIGITAL LINK CORPORATION
No par common
DOLCO PACKAGING CORPORATION
$.01 par common
DRYPERS CORPORATION
$.001 par common
DSP GROUP INC.
$.001 par common
ECOGEN INC.
Warrants (expire 01–31–98)
EFFECTIVE MANAGEMENT SYSTEMS, INC.
$.01 par common
ELECTRIC FUEL CORPORATION
$.01 par common
ELECTRONIC FAB TECHNOLOGY CORPORATION
$.01 par common
ELTRON INTERNATIONAL, INC.
No par common
EMMIS BROADCASTING CORPORATION
Class A, $.01 par common
EMPLOYEE SOLUTIONS, INC.
No par common
ENCORE COMPUTER CORPORATION
$.01 par common
EQUITY INNS, INC.
$.01 par common
EQUITY MARKETING, INC.
$.001 par common
ESMOR CORRECTIONAL SERVICES, INC.
$.01 par common
FEDERAL INDUSTRIES LTD.
Class A convertible common
FINANCIAL BENEFIT GROUP INC.
Class A, $.01 par common
FINISHMASTER, INC.
$1.00 par common
FIRST ALERT, INC.

$.01 par common
FIRST COMMERCE BANCSHARES, INC. (Nebraska)
Class B, $.20 par common
FIRST FINANCIAL BANCORP, INC. (Illinois)
$.10 par common
FIRST INDEPENDENCE CORPORATION
$.01 par common
FIRST PATRIOT BANKSHARES CORPORATION (Virginia)
$2.50 par common
FIRST-KNOX BANC CORP. (Ohio)
$3.125 par common
FLEXTRONICS INTERNATIONAL LTD.
$.01 par common
FUEL-TECH, N.V.
$.01 par common
GAMETEK, INC.
$.01 par common
GASONICS INTERNATIONAL CORPORATION
$.001 par common
GLOBAL VILLAGE COMMUNICATION, INC.
$.001 par common
GP FINANCIAL CORPORATION
$.01 par common
GRAFF PAY-PER-VIEW INC.
$.01 par common
GREAT FINANCIAL CORPORATION
$.01 par common
GREAT LAKES AVIATION, LTD.
$.01 par common
GTS DURATEK INC.
$.01 par common
GULF SOUTH MEDICAL SUPPLY INC.
$.01 par common
HARRIS SAVINGS BANK (Pennsylvania)
$.01 par common
HARVEY UNIVERSAL, INC.
$.01 par common
HEALTH POWER, INC.
$.01 par common
HEALTHCARE IMAGING SERVICES, INC.
Class B, redeemable warrants (expire 11–12–96)
HEALTHY PLANET PRODUCTS, INC.
$.01 par common
HEMASURE INC.
$.01 par common
HILITE INDUSTRIES, INC.
$.01 par common
HIRSCH INTERNATIONAL CORPORATION
Class A, $.01 par common
HOME THEATER PRODUCTS INTERNATIONAL INC.
No par common Warrants (expire 08–14–94)
HUGOTON ENERGY CORPORATION
No par common
HUNGARIAN TELEPHONE & CABLE CORP.
$.001 par common
ID BIOMEDICAL CORPORATION
No par common
IGEN, INC.
$.001 par common
INFOSOFT INTERNATIONAL, INC.
$.01 par common
INTEGRATED MICRO PRODUCTS PLC
American Depositary Shares
INTEGRATED SILICON SYSTEMS, INC.
$.01 par common
INTERCEL, INC.
$.01 par common
INTERIM SERVICES INC.
$.01 par common
INTERNATIONAL GAMING MANAGEMENT, INC.
$.001 par common
INTERNATIONAL NESMONT INDUSTRIAL CORPORATION
No par common
INTERNATIONAL POST LIMITED
$.01 par common
JACKSON HEWITT INC.
$.02 par common
JAMESON INNS INC.
$.10 par common
JEFFERSON SAVINGS AND LOAN ASSOCIATION, F.A. (Virginia)
$3.00 par common
JUST FOR FEET, INC.
$.0001 par common
KIDDIE PRODUCTS, INC.
$.10 par common
KINROSS GOLD CORPORATION
No par common
L.A. T SPORTSWEAR INC.
No par common
LACROSSE FOOTWEAR INC.
$.01 par common
LANCIT MEDIA PRODUCTIONS LTD.
$.001 par common
LANDMARK BANCSHARES, INC. (Kansas)
$.10 par common
LASER VIDEO NETWORK, INC.
$.001 par common
LEASEWAY TRANSPORTATION CORPORATION
$.01 par common
LFS BANCORP, INC. (Kentucky)
$.01 par common
MAPINFO CORPORATION
$.002 par common
MARSHALLTOWN FINANCIAL CORPORATION
$.01 par common
MEDIA VISION TECHNOLOGY, INC.
Convertible subordinated debentures due 2003
MEGO FINANCIAL CORPORATION
No par common
MERITRUST FEDERAL SAVINGS BANK (Louisiana)
$1.00 par common
MEYERSON, M. H., & CO., INC.
$.01 par common
MFB CORPORATION
No par common
MICROFLUIDICS INTERNATIONAL CORPORATION
$.01 par common
MINNESOTA BREWING COMPANY
$.01 par common
MINNESOTA EDUCATIONAL COMPUTING CORPORATION
$.01 par common
MOTORCAR PARTS & ACCESSORIES, INC.
$.01 par common
MPTV, INC.
$.005 par common
MRV COMMUNICATIONS, INC.
$.01 par common
Warrants (expire 12–07–97)
MTI TECHNOLOGY CORPORATION
$.001 par common
NATIONAL TECHTEAM INC.
$.01 par common
NATURAL MICROSYSTEMS CORPORATION
$.01 par common
NEUROBIOLOGICAL TECHNOLOGIES, INC.
$.001 par common
NEW WORLD COMMUNICATIONS GROUP INC.
Class A, $.01 par common
NEXAGEN INC.
$.01 par common
NN BALL & ROLLER, INC.
$.01 par common
NORTHWEST AIRLINES CORPORATION
Class A, $.01 par common
NORTON McNAUGHTON, INC.
$.01 par common
OLYMPIC STEEL, INC.
No par common
OPTIMA PETROLEUM CORPORATION
No par common
ORTHOPEDIC TECHNOLOGY, INC.
$.01 par common
PARCPLACE SYSTEMS, INC.
$.001 par common
PAUL-SON GAMING CORPORATION
$.01 par common
PC SERVICE SOURCE, INC.
$.01 par common
PEOPLES BANK CORPORATION OF INDIANAPOLIS
Non-voting, no par common
PERMANENT BANCORP, INC. (Indiana)
$.01 par common
PERPETUAL MIDWEST FINANCIAL, INC.
$.01 par common
PERSONNEL MANAGEMENT INC.
No par common
PET FOOD WAREHOUSE, INC.
$.01 par common
PETCO ANIMAL SUPPLIES, INC.
$.0001 par common
PETERBOROUGH SAVINGS BANK (New Hampshire)
$.01 par common
PETROLANE INCORPORATED
Class B, $.01 par common
PRIME RETAIL, INC.
$.01 par common
Series B, cumulative convertible preferred
PROCEPT, INC.
$.01 par common
PROPHET 21, INC.
$.01 par common
QLOGIC CORPORATION
$.10 par common
QUALITY DINING, INC.
No par common
QUALITY SYSTEMS, INC.
$.01 par common
RAMTRON INTERNATIONAL CORPORATION
$.01 par common
REDFED BANCORP INC. (California)
$.01 par common
RELIANCE BANCORP, INC. (New York)
$.01 par common
RENASSANCE COMMUNICATIONS CORP.
$.01 par common
REPTRON ELECTRONICS, INC.
$.01 par common
RETIREMENT CARE ASSOCIATES, INC.
$.0001 par common
RIVERVIEW SAVINGS BANK, F.S.B. (Washington)
$1.00 par common
ROANOKE GAS COMPANY
$5.00 par common
ROCK-TENN COMPANY
Class A, $.01 par common
SA HOLDINGS, INC.
$.0001 par common
SANCTUARY WOODS MULTIMEDIA CORPORATION

No par common
SECURITY ENVIRONMENTAL SYSTEMS INC.
$.03 par common
SERVING SOFTWARE INC.
$.01 par common
SHUFFLE MASTER, INC.
Warrants (expire 01–20–98)
SHURGARD STORAGE CENTERS, INC.
Class A, $.01 par common
SIGMATRON INTERNATIONAL, INC.
$.01 par common
SOFTDESK INC.
$.01 par common
SOFTKEY INTERNATIONAL INC.
$.01 par common
Warrants (expire 03–26–96)
SONIC SOLUTIONS
No par common
SOUTHERN MISSOURI BANCORP INC.
$.01 par common
SOUTHERN STARR BROADCASTING GROUP, INC.
$.10 par common
STANDISH CARE COMPANY, THE
$.01 par common
Series A, $.01 par cumulative convertible preferred
SUNSHINE MINING COMPANY
Warrants (expire 03–09–99)
TATHAM OFFSHORE, INC.
$.01 par common
TELULAR CORPORATION
$.01 par common
TEXAS REGIONAL BANCSHARES, INC.
Class A voting, $1.00 par common
TJ SYSTEMS CORPORATION
Series A, $.01 par convertible preferred
TOTAL CONTAINMENT, INC.
$.01 par common
TRACTOR SUPPLY COMPANY
$.008 par common
TRANSTEXAS GAS CORPORATION
$.01 par common
TRIANGLE BANCORP, INC. (North Carolina)
No par common
TRIPLE S PLASTICS, INC.
No par common
TRISM, INC.
$.01 par common
TUFCO TECHNOLOGIES, INC.
$.01 par common
ULTRAK, INC.
No par common
UNIROYAL TECHNOLOGY CORPORATION
Warrants (expire 06–01–2003)
UNITED STATES EXPLORATION, INC.
$.0001 par common
UROMED CORPORATION
No par common
USA MOBILE COMMUNICATIONS HOLDINGS INC.
$.01 par common
VAUGHN COMMUNICATIONS, INC.
$.10 par common
VECTRA BANKING CORPORATION
$.01 par common
VENEZUELAN GOLDFIELDS LTD.
No par common
VIVUS INC.
No par common
WANDEL & GOLTERMANN TECHNOLOGIES INC.
$.01 par common
WAYNE SAVINGS AND LOAN COMPANY, INC. (Ohio)
$1.00 par common
WEBCO INDUSTRIES, INC.
$.01 par common
WHOLESALE CELLULAR USA INC.
$.01 par common
WILLARD PEASE OIL AND GAS COMPANY
Series A, $.01 par cumulative convertible preferred
WIRELESS CABLE OF ATLANTA, INC.
$1.00 par common
WTD INDUSTRIES, INC.
No par common
XCELLENET INC.
$.01 par common
XPEDITE SYSTEMS, INC.
$.01 par common

Additions to the List of Foreign Margin Stocks

AISIN SEIKO CO., LTD.
¥ 50 par common
AIWA CO., LTD.
¥ 50 par common
AKITA BANK, LTD.
¥ 50 par common
ALPS ELECTRIC CO., LTD.
¥ 50 par common
AMADA CO., LTD.
¥ 50 par common
AMADA METRECS CO., LTD.
¥ 50 par common
AMANO CORP.
¥ 50 par common
ANRITSU CORP.
¥ 50 par common
AOKI CORP.
¥ 50 par common
AOKI INTERNATIONAL CO., LTD.
¥ 50 par common
AOMORI BANK, LTD.
¥ 50 par common
ASAHI BANK, LTD.
¥ 50 par common
ASAHI DIAMOND INDUSTRIAL CO., LTD.
¥ 50 par common
ASATSU INC.
¥ 50 par common
ASHIKAGA BANK LTD.
¥ 50 par common
ATSUGI NYLON INDUSTRIAL CO., LTD.
¥ 50 par common
AUTOBACS SEVEN CO., LTD.
¥ 50 par common
BANK OF FUKUOKA, LTD.
¥ 50 par common
BANK OF HIROSHIMA
¥ 50 par common
BANK OF KINKI LTD.
¥ 50 par common
BANK OF KYOTO, LTD.
¥ 50 par common
BANK OF NAGOYA, LTD.
¥ 50 par common
BANK OF YOKOHAMA, LTD.
¥ 50 par common
BANYU PHARMACEUTICAL CO., LTD.
¥ 50 par common
BEST DENKI CO., LTD.
¥ 50 par common
BROTHER INDUSTRIES, LTD.
¥ 50 par common
CASIO COMPUTER CO., LTD.
¥ 50 par common
CHIBA BANK, LTD.
¥ 50 par common
CHIYODA CORP.
¥ 50 par common
CHIYODA FIRE & MARINE INSURANCE CO., LTD.
¥ 50 par common
CHUDENKO CORP.
¥ 50 par common
CHUGAI PHARMACEUTICAL CO., LTD.
¥ 50 par common
CHUGOKU BANK LTD.
¥ 50 par common
CHUGOKU ELECTRIC POWER CO. INC.
¥ 50 par common
CHUO TRUST & BANKING CO., LTD.
¥ 50 par common
CITIZEN WATCH CO., LTD.
¥ 50 par common
COSMO OIL CO. LTD.
¥ 50 par common
COSMO SECURITIES CO. LTD.
¥ 50 par common
CREDIT SAISON CO. LTD.
¥ 50 par common
CSK CORP.
¥ 50 par common
DAI-SHOWA PAPER MFG. CO. LTD.
¥ 50 par common
DAI-TOKYO FIRE & MARINE INSURANCE CO. LTD.
¥ 50 par common
DAICEL CHEMICAL INDUSTRIES LTD.
¥ 50 par common
DAIDO STEEL CO. LTD.
¥ 50 par common
DAIHATSU MOTOR CO. LTD.
¥ 50 par common
DAIICHI CORP.
¥ 50 par common
DAIICHI PHARMACEUTICAL CO. LTD.
¥ 50 par common
DAIKEN CORP.
¥ 50 par common
DAIKIN INDUSTRIES LTD.
¥ 50 par common
DAIKYO INC.
¥ 50 par common
DAIMARU INC.
¥ 50 par common
DAINIPPON INK & CHEMICALS INC.
¥ 50 par common
DAINIPPON PHARMACEUTICAL CO. LTD.
¥ 50 par common
DAINIPPON SCREEN MFG. CO. LTD.
¥ 50 par common
DAITO TRUST CONSTRUCTION CO. LTD.
¥ 50 par common
DAIWA BANK LTD.
¥ 50 par common
DAIWA SECURITIES CO. LTD.
¥ 50 par common
DENNY'S JAPAN CO. LTD.
¥ 50 par common
DOWA FIRE & MARINE INSURANCE CO. LTD.
¥ 50 par common
EAST JAPAN RAILWAY CO.
¥ 50 par common
EIGHTEENTH BANK LTD.
¥ 50 par common
EISAI CO. LTD.
¥ 50 par common
EZAKI GILCO CO. LTD.
¥ 50 par common
FAMILYMART CO. LTD.
¥ 50 par common
FANUC CO. LTD.
¥ 50 par common
FUJI HEAVY INDUSTRIES LTD.

¥ 50 par common
FUJIKURA LTD.
¥ 50 par common
FUJISAWA PHARMACEUTICAL CO. LTD.
¥ 50 par common
FUJITA KANKO INC.
¥ 50 par common
FUKUYAMA TRANSPORTING CO., LTD.
¥ 50 par common
FUTABA CORP.
¥ 50 par common
FUTABA INDUSTRIAL CO. LTD.
¥ 50 par common
GENERAL SEKIYU K.K.
¥ 50 par common
GODO STEEL LTD.
¥ 50 par common
GREEN CROSS CORP.
¥ 50 par common
GUNMA BANK LTD.
¥ 50 par common
GUNZE LTD.
¥ 50 par common
HACHIJUNI BANK LTD.
¥ 50 par common
HANKYU CORP.
¥ 50 par common
HANKYU DEPARTMENT STORES INC.
¥ 50 par common
HANSHIN ELECTRIC RAILWAY CO. LTD.
¥ 50 par common
HANWA CO. LTD.
¥ 50 par common
HASEKO CORP.
¥ 50 par common
HAZAMA CORP.
¥ 50 par common
HEIWADO CO. LTD.
¥ 50 par common
HIGASHI-NIPPON BANK LTD.
¥ 50 par common
HIGO BANK LTD.
¥ 50 par common
HIROSE ELECTRIC CO. LTD.
¥ 50 par common
HITACHI CABLE LTD.
¥ 50 par common
HITACHI CHEMICAL CO. LTD.
¥ 50 par common
HITACHI CONSTRUCTION MACHINERY CO. LTD.
¥ 50 par common
HITACHI CREDIT CORP.
¥ 50 par common
HITACHI KOKI CO. LTD.
¥ 50 par common
HITACHI MAXELL LTD.
¥ 50 par common
HITACHI METALS LTD.
¥ 50 par common
HITACHI SALES CORP.
¥ 50 par common
HITACHI SOFTWARE ENGNEERING CO. LTD.
¥ 50 par common
HITACHI TRANSPORT SYSTEM LTD.
¥ 50 par common
HITACHI ZOSEN CORP.
¥ 50 par common
HOKKAIDO BANK LTD.
¥ 50 par common
HOKKAIDO ELECTRIC POWER CO. INC.
¥ 500 par common
HOKKAIDO TAKUSHOKU BANK LTD.
¥ 50 par common
HOKKOKU BANK LTD.
¥ 50 par common
HOKUETSU BANK LTD.
¥ 50 par common
HOKUETSU PAPER MILLS LTD.
¥ 50 par common
HOKURIKU BANK LTD.
¥ 50 par common
HOKURIKU ELECTRIC POWER CO. INC.
¥ 50 par common
HOUSE FOOD CORP.
¥ 50 par common
HOYA CORP.
¥ 50 par common
HYOGO BANK LTD.
¥ 50 par common
INAX CORP.
¥ 50 par common
ISHIHARA SANGYO KAISHA LTD.
¥ 50 par common
ITOCHU CORP.
¥ 50 par common
ITOHAM FOODS INC.
¥ 50 par common
IYO BANK LTD.
¥ 50 par common
IZUMI CO. LTD.
¥ 50 par common
JACCS CO. LTD.
¥ 50 par common
JAPAN AIRPORT TERMINAL CO. LTD.
¥ 50 par common
JAPAN DIGITAL LABORATORY CO. LTD.
¥ 50 par common
JAPAN SECURITIES FINANCE CO. LTD.
¥ 50 par common
JAPAN SYNTHETIC RUBBER CO LTD.
¥ 50 par common
JGC CORP.
¥ 50 par common
JOYO BANK LTD.
¥ 50 par common
JUROKU BANK LTD.
¥ 50 par common
JUSCO CO. LTD.
¥ 50 par common
KAGOSHIMA BANK LTD.
¥ 50 par common
KAKEN PHARMACEUTICAL CO. LTD.
¥ 50 par common
KAMIGUMI CO. LTD.
¥ 50 par common
KANDENKO CO. LTD.
¥ 50 par common
KANEKA CORP.
¥ 50 par common
KANEMATSU CORP.
¥ 50 par common
KANKAKU SECURITIES CO. LTD.
¥ 50 par common
KANSAI PAINT CO. LTD.
¥ 50 par common
KAO CORP.
¥ 50 par common
KATOKICHI CO. LTD.
¥ 50 par common
KAYABA INDUSTRY CO. LTD.
¥ 50 par common
KEIYO BANK LTD.
¥ 50 par common
KEIYO CO. LTD.
¥ 50 par common
KENWOOD CORP.
¥ 50 par common
KEYENCE CORP.
¥ 50 par common
KINDEN CORP.
¥ 50 par common
KINKI NIPPON RAILWAY CO. LTD.
¥ 50 par common
KISSEI PHARMACEUTICAL CO. LTD.
¥ 50 par common
KIYO BANK LTD.
¥ 50 par common
KOA FIRE & MARINE INSURANCE CO. LTD.
¥ 50 par common
KOA OIL CO. LTD.
¥ 50 par common
KOKUSAI DENSHIN DENWA CO. LTD. (KDD)
¥ 500 par common
KOKUSAI ELECTRIC CO. LTD.
¥ 50 par common
KOKUSAI SECURITIES CO. LTD.
¥ 50 par common
KONAMI CO. LTD.
¥ 50 par common
KUMAGAI GUMI CO. LTD.
¥ 50 par common
KURABO INDUSTRIES LTD.
¥ 50 par common
KURIMOTO LTD.
¥ 50 par common
KURITA WATER INDUSTRIES LTD.
¥ 50 par common
KYOCERA CORP.
¥ 50 par common
KYODO PRINTING CO. LTD.
¥ 50 par common
KYOWA EXEO CORP.
¥ 50 par common
KYUDENKO CORP.
¥ 50 par common
KYUSHU ELECTRIC POWER CO. INC.
¥ 500 par common
KYUSHU MATSUSHITA ELECTRIC CO. LTD.
¥ 50 par common
MABUCHI MOTOR CO. LTD.
¥ 50 par common
MAEDA CORP.
¥ 50 par common
MAEDA ROAD CONSTRUCTION CO. LTD.
¥ 50 par common
MAKITA CORP.
¥ 50 par common
MARUDAI FOOD CO. LTD.
¥ 50 par common
MARUETSU INC.
¥ 50 par common
MARUHA CORP.
¥ 50 par common
MATSUSHITA COMMUNICATION INDUSTRIAL CO. LTD.
¥ 50 par common
MATSUSHITA REFRIGERATION CO.
¥ 50 par common
MATSUSHITA SEIKO CO. LTD.
¥ 50 par common
MATSUSHITA-KOTOBUKI ELECTRONICS INDUSTRIES LTD.
¥ 50 par common
MAX CO. LTD.
¥ 50 par common
MICHINOKU BANK LTD.
¥ 50 par common
MIKUNI COCA-COLA BOTTLING CO. LTD.
¥ 50 par common
MINEBEA CO. LTD.
¥ 50 par common
MINOLTA CAMERA CO. LTD.
¥ 50 par common
MISAWA HOMES CO. LTD.

¥ 50 par common
MITSUBISHI CABLE INDUSTRIES LTD.
¥ 50 par common
MITSUBISHI GAS CHEMICAL CO. INC.
¥ 50 par common
MITSUBISHI MOTORS CORP.
¥ 50 par common
MITSUBISHI PETROCHEMICAL CO. LTD.
¥ 50 par common
MITSUI CONSTRUCTION CO. LTD.
¥ 50 par common
MITSUI ENGINEERING & SHIPBUILDING CO. LTD.
¥ 50 par common
MITSUI PETROCHEMICAL INDUSTRIES LTD.
¥ 50 par common
MITSUI REAL ESTATE SALES CO. LTD.
¥ 50 par common
MITSUI-SOKO CO. LTD.
¥ 50 par common
MITSUMI ELECTRIC CO. LTD.
¥ 50 par common
MIZUNO CORP.
¥ 50 par common
MOCHIDA PHARMACEUTICAL CO. LTD.
¥ 50 par common
MORINAGA MILK INDUSTRY CO. LTD.
¥ 50 par common
MURATA MFG. CO. LTD.
¥ 50 par common
MUSASHINO BANK LTD.
¥ 50 par common
NAGASAKIYA CO. LTD.
¥ 50 par common
NAGASE & CO. LTD.
¥ 50 par common
NAGOYA RAILROAD CO. LTD.
¥ 50 par common
NAMCO LTD.
¥ 50 par common
NATIONAL HOUSE INDUSTRIAL CO. LTD.
¥ 50 par common
NCR JAPAN LTD.
¥ 50 par common
NEW JAPAN SECURITIES CO. LTD.
¥ 50 par common
NEW OJI PAPER CO. LTD.
¥ 50 par common
NGK SPARK PLUG CO. LTD.
¥ 50 par common
NHK SPRING CO. LTD.
¥ 50 par common
NICHICON CORP.
¥ 50 par common
NICHIEI CONSTRUCTION CO. LTD.
¥ 50 par common
NICHII CO. LTD.
¥ 50 par common
NICHIMEN CORP.
¥ 50 par common
NIPPON COMSYS CORP.
¥ 50 par common
NIPPON CREDIT BANK LTD.
¥ 50 par common
NIPPON DENSETSU KOGYO CO. LTD.
¥ 50 par common
NIPPON ELECTRIC GLASS CO. LTD.
¥ 50 par common
NIPPON FIRE & MARINE INSURANCE CO. LTD.
¥ 50 par common
NIPPON HODO CO. LTD.
¥ 50 par common
NIPPON MEAT PACKERS INC.
¥ 50 par common
NIPPON PAINT CO. LTD.
¥ 50 par common
NIPPON ROAD CO. LTD.
¥ 50 par common
NIPPON SANSO CORP.
¥ 50 par common
NIPPON SHOKUBAI CO. LTD.
¥ 50 par common
NIPPON TELEVISION NETWORK CORP.
¥ 50 par common
NIPPON TRUST BANK LTD.
¥ 50 par common
NIPPON ZEON CO. LTD.
¥ 50 par common
NISHI-NIPPON BANK LTD.
¥ 50 par common
NISHI-NIPPON RAILROAD CO. LTD.
¥ 50 par common
NISHIMATSU CONSTRUCTION CO. LTD.
¥ 50 par common
NISSAN CHEMICAL INDUSTRIES LTD.
¥ 50 par common
NISSAN FIRE & MARINE INSURANCE CO. LTD.
¥ 50 par common
NISSEI SANGYO CO. LTD.
¥ 50 par common
NISSHA PRINTING CO. LTD.
¥ 50 par common
NISSHIN FIRE & MARINE INSURANCE CO. LTD.
¥ 50 par common
NISSHIN STEEL CO. LTD.
¥ 50 par common
NISSHINBO INDUSTRIES INC.
¥ 50 par common
NISSHO IWAI CORP.
¥ 50 par common
NISSIN FOOD PRODUCTS CO. LTD.
¥ 50 par common
NITSUKO CORP.
¥ 50 par common
NITTO DENKO CORP.
¥ 50 par common
NOK CORP.
¥ 50 par common
NORITZ CORP.
¥ 50 par common
OGAKI KYORITSU BANK LTD.
¥ 50 par common
OKASAN SECURITIES CO. LTD.
¥ 50 par common
OKUMURA CORP.
¥ 50 par common
OLYMPUS OPTICAL CO. LTD.
¥ 50 par common
OMRON CORP.
¥ 50 par common
ONO PHARMACEUTICAL CO. LTD.
¥ 50 par common
ONWARD KASHIYAMA CO. LTD.
¥ 50 par common
ORIENT CORP.
¥ 50 par common
ORIX CORP.
¥ 50 par common
PENTA-OCEAN CONSTRUCTION CO. LTD.
¥ 50 par common
PIONEER ELECTRONIC CORP.
¥ 50 par common
Q.P. CORP.
¥ 50 par common
RAITO KOGYO CO. LTD.
¥ 50 par common
RENGO CO. LTD.
¥ 50 par common
RENOWN INC.
¥ 50 par common
RINNAI CORP.
¥ 50 par common
ROHM CO. LTD.
¥ 50 par common
RYOSAN CO. LTD.
¥ 50 par common
SAGAMI RAILWAY CO. LTD.
¥ 50 par common
SAIBU GAS CO. LTD.
¥ 50 par common
SAKATA SEED CORP.
¥ 50 par common
SANKI ENGINEERING CO. LTD.
¥ 50 par common
SANKYO ALUMINIUM INDUSTRY CO. LTD.
¥ 50 par common
SANKYU INC.
¥ 50 par common
SANTEN PHARMACEUTICAL CO. LTD.
¥ 50 par common
SANWA SHUTTER CORP.
¥ 50 par common
SANYO CHEMICAL INDUSTRIES LTD.
¥ 50 par common
SANYO SECURITIES CO. LTD.
¥ 50 par common
SECOM CO. LTD.
¥ 50 par common
SEIBU RAILWAY CO. LTD.
¥ 50 par common
SEIKO CORP.
¥ 50 par common
SEINO TRANSPORTATION CO. LTD.
¥ 50 par common
SEIYU LTD.
¥ 50 par common
SEKISUI HOUSE LTD.
¥ 50 par common
SENSHUKAI CO. LTD.
¥ 50 par common
SEVEN-ELEVEN JAPAN CO. LTD.
¥ 50 par common
SEVENTY-SEVEN (77) BANK LTD.
¥ 50 par common
SHIKOKU ELECTRIC POWER CO. INC
¥ 50 par common
SHIMADZU CORP.
¥ 50 par common
SHIMAMURA CO. LTD.
¥ 50 par common
SHIMANO INC.
¥ 50 par common
SHINMAYWA INDUSTRIES LTD.
¥ 50 par common
SHIONOGI & CO. LTD.
¥ 50 par common
SHISEIDO CO. LTD.
¥ 50 par common
SHIZUOKA BANK LTD.
¥ 50 par common
SHOWA SANGYO CO. LTD.
¥ 50 par common
SIEBE PLC
¥ 50 par common
SKYLARK CO. LTD.
¥ 50 par common
SMC CORP.
¥ 50 par common
SNOW BRAND MILK PRODUCTS CO. LTD.
¥ 50 par common
SS PHARMACEUTICAL CO. LTD.
¥ 50 par common
STANLEY ELECTRIC CO. LTD.
¥ 50 par common
SUMITOMO BAKELITE CO. LTD.

¥ 50 par common
SUMITOMO CONSTRUCTION CO. LTD.
¥ 50 par common
SUMITOMO FORESTRY CO. LTD.
¥ 50 par common
SUMITOMO HEAVY INDUSTRIES LTD.
¥ 50 par common
SUMITOMO MARINE & FIRE INSURANCE CO. LTD.
¥ 50 par common
SUMITOMO RUBBER INDUSTRIES LTD.
¥ 50 par common
SUMITOMO TRUST & BANKING CO. LTD.
¥ 50 par common
SUMITOMO WAREHOUSE CO. LTD.
¥ 50 par common
SURUGA BANK LTD.
¥ 50 par common
SXL CORP.
¥ 50 par common
TADANO LTD.
¥ 50 par common
TAIHEI DENGYO KAISHA LTD.
¥ 50 par common
TAISEI PREFAB CONSTRUCTION CO. LTD.
¥ 50 par common
TAIYO YUDEN CO. LTD.
¥ 50 par common
TAKARA STANDARD CO. LTD.
¥ 50 par common
TAKUMA CO. LTD.
¥ 50 par common
TANABE SEIYAKU CO. LTD.
¥ 50 par common
TERUMO CORP.
¥ 50 par common
TOA CORP.
¥ 50 par common
TOA STEEL CO. LTD.
¥ 50 par common
TOAGOSEI CHEMICAL INDUSTRY CO. LTD.
¥ 50 par common
TODA CONSTRUCTION CO. LTD.
¥ 50 par common
TOEI CO. LTD.
¥ 50 par common
TOENEC CORP.
¥ 50 par common
TOHO BANK LTD.
¥ 50 par common
TOHO CO. LTD.
¥ 50 par common
TOHO GAS CO. LTD.
¥ 50 par common
TOKAI BANK LTD.
¥ 50 par common
TOKUYAMA SODA CO. LTD.
¥ 50 par common
TOKYO BROADCASTING SYSTEM INC.
¥ 50 par common
TOKYO DOME CORP.
¥ 50 par common
TOKYO ELECTRON LTD.
¥ 50 par common
TOKYO OHKA KOGYO CO. LTD.
¥ 50 par common
TOKYO ROPE MFG. CO. LTD.
¥ 50 par common
TOKYO SOWA BANK LTD.
¥ 50 par common
TOKYO STEEL MFG. CO. LTD.
¥ 50 par common
TOKYO STYLE CO. LTD.
¥ 50 par common
TOKYO TATEMONO CO. LTD.
¥ 50 par common
TOKYO TOMIN BANK LTD.
¥ 50 par common
TOKYOTOKEIBA CO. LTD.
¥ 50 par common
TOKYU CONSTRUCTION CO. LTD.
¥ 50 par common
TOKYU CORP.
¥ 50 par common
TOKYU LAND CORP.
¥ 50 par common
TOMEN CORP.
¥ 50 par common
TOSHIBA CERAMICS CO. LTD.
¥ 50 par common
TOSHOKU LTD.
¥ 50 par common
TOSTEM CORP.
¥ 50 par common
TOYO COMMUNICATION EQUIPMENT CO. LTD.
¥ 50 par common
TOYO ENGINEERING CORP.
¥ 50 par common
TOYO EXTERIOR CO. LTD.
¥ 50 par common
TOYO INK MFG. CO. LTD.
¥ 50 par common
TOYO SUISAN KAISHA LTD.
¥ 50 par common
TOYO TRUST & BANKING CO. LTD.
¥ 50 par common
TOYOTA AUTO BODY CO. LTD.
¥ 50 par common
TOYOTA TSUSHO CORP.
¥ 50 par common
TSUMURA & CO.
¥ 50 par common
UNI-CHARM CORP.
¥ 50 par common
UNIDEN CORP.
¥ 50 par common
UNY CO. LTD.
¥ 50 par common
USHIO INC.
¥ 50 par common
WACOAL CORP.
¥ 50 par common
WAKO SECURITIES CO. LTD.
¥ 50 par common
WHEELOCK & CO. LTD.
¥ 50 par common
YAKULT HONSHA CO. LTD.
¥ 50 par common
YAMAGUCHI BANK LTD.
¥ 50 par common
YAMAHA MOTOR CO. LTD.
¥ 50 par common
YAMAICHI SECURITIES CO. LTD.
¥ 50 par common
YAMANASHI CHUO BANK LTD.
¥ 50 par common
YAMATAKE-HONEYWELL CO. LTD.
¥ 50 par common
YAMATO TRANSPORT CO. LTD.
¥ 50 par common
YAMAZAKI BANKING CO. LTD.
¥ 50 par common
YAOHAN JAPAN CORP.
¥ 50 par common
YASUDA TRUST & BANKING CO. LTD.
¥ 50 par common
YODOGAWA STEEL WORKS LTD.
¥ 50 par common
YORK-BENIMARU CO. LTD.
¥ 50 par common
YOSHITOMI PHARMACEUTICAL INDUSTRIES LTD.
¥ 50 par common
YUASA CORP.
¥ 50 par common
ZEXEL CORP.
¥ 50 par common

By order of the Board of Governors of the Federal Reserve System, acting by its Director of the Division of Banking Supervision and Regulation pursuant to delegated authority (12 CFR 265.7(f)(10)), April 19, 1994.

William W. Wiles,

Secretary of the Board.

[FR Doc. 94–10688 Filed 5–4–94; 8:45 am]

BILLING CODE 6210–01–U

SMALL BUSINESS ADMINISTRATION

13 CFR Part 121

Small Business Size Standards; Inflation Adjusted Size Standards

AGENCY: Small Business Administration.

ACTION: Final rule, correction regarding effective date.

SUMMARY: SBA is amending information concerning the effective date of its final rule published in the **Federal Register** on April 7, 1994 (59 FR 16513), applying an inflation adjustment percentage of 48.2% to certain receipts-based industry size standards. The amendment clarifies application of the effective date for various SBA programs.

FOR FURTHER INFORMATION CONTACT: Gary M. Jackson, Director, Size Standards Staff (202) 205–6618.

SUPPLEMENTARY INFORMATION: On April 7, 1994, SBA published a final rule increasing the receipts-based size standards for certain industries by a factor of 48.2% (59 FR 16513) and identified the effective date as April 22, 1994. In response to inquiries, SBA is issuing this notice to clarify application of the effective date for various SBA programs. SBA calls to the attention of the public its regulation at 13 CFR 121.205 concerning the effective date of changes to SBA's size regulations, including changes in size standards. Except for noncompetitive Section 8(a) contracts, the new size standards are applicable to all solicitations issued on or after April 22, 1994. As for noncompetitive Section 8(a) contracting actions, the new size standards are applicable to offers of requirements that are accepted by SBA subsequent to April 22, 1994. The new size standards are effective as to applications for financial assistance received by SBA on or after April 22, 1994.

Dated: April 29, 1994.

Erskine B. Bowles,

Administrator.

[FR Doc. 94–10843 Filed 5–4–94; 8:45 am]

BILLING CODE 8025–01–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 93–NM–184–AD; Amendment 39–8884; AD 94–08–12]

Airworthiness Directives; Aerospatiale Model ATR72 Series Airplanes, Equipped With Dunlop Main Landing Gear Wheels, Part Number AHA1752 Pre Mod 6

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Aerospatiale Model ATR72 series airplanes, that requires inspections to detect cracking in the brake side half hub in the bearing housing area of certain main landing gear (MLG) wheels, and replacement of the MLG wheel, if necessary. This amendment also requires the eventual replacement of certain MLG wheels with other wheels, as terminating action for the repetitive inspections. This amendment is prompted by in-service experience that indicates the possibility of fatigue cracking occurring in the subject area. The actions specified by this AD are intended to prevent failure of the brake side half hub due to fatigue cracking, which could lead to separation of the MLG wheel and tire from the axle.

DATES: Effective June 6, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 6, 1994.

ADDRESSES: The service information referenced in this AD may be obtained from Dunlop Limited, Aviation Division, Silverton House, Vincent Square, London SW1P 2PL, United Kingdom. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Sam Grober, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–1187; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to certain Aerospatiale Model ATR72 series airplanes was published in the **Federal Register** on November 19, 1993 (58 FR 61038). That action proposed to require repetitive eddy current inspections to detect cracking in the bearing housing of the brake side half hub of Dunlop MLG wheels, part number AHA1752 Pre Mod 6. Additionally, that action proposed to require that, if any cracked half hub assemblies are detected, the complete wheel must be replaced. If certain improved replacement wheels are installed, the repetitive eddy current inspections may be discontinued. That action also proposed to require the eventual replacement of all MLG wheels having part number AHA1752 Pre Mod 6 with other (improved) wheels, as terminating action for the repetitive inspections.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

The commenter supports the proposed rule.

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

The FAA estimates that 16 airplanes of U.S. registry will be affected by this AD, that it will take approximately 2 work hours per airplane to accomplish the required actions, and that the average labor rate is $55 per work hour. Based on these figures, the total cost impact of the inspection actions on U.S. operators is estimated to be $1,760, or $110 per airplane, per inspection. Should a cracked half hub assembly be found, replacement wheel assemblies will be provided by Dunlop at no charge to the operator.

The required wheel replacement action will require approximately 2 work hours to accomplish, at an average labor charge of $55 per work hour. Replacement parts will be provided by Dunlop at no charge to the operators, as part of Dunlop's repair/replacement program. Based on these figures, the total cost impact of the replacement actions on U.S. operators is estimated to be $1,760, or $110 per airplane.

The total cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–08–12 Aerospatiale: Amendment 39–8884. Docket 93–NM–184–AD.

Applicability: Model ATR72 airplanes; equipped with Dunlop main landing gear (MLG) wheels, part number AHA1752 Pre Mod 6; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the brake side half hub due to fatigue cracking, which could lead to separation of the MLG wheel and tire from the axle, accomplish the following:

(a) At the next tire change after the effective date of this AD, or within 60 days after the effective date of this AD, whichever occurs later, conduct an eddy current inspection to detect cracking in the bearing housing of the brake side half hub of Dunlop MLG wheels, part number AHA1752 Pre Mod 6, in accordance with the Accomplishment Instructions of Dunlop Limited, Aviation Division, Service Bulletin AHA1752–32–1069, dated June 28, 1993.

(b) If no cracking is detected, repeat the inspection specified in paragraph (a) of this AD thereafter at every tire change until the requirements of paragraph (d) of this AD are accomplished.

(c) If any cracking is detected, prior to further flight, accomplish one of the following:

(1) Replace the complete MLG wheel with a serviceable MLG wheel having part number AHA1752 Pre Mod 6. Thereafter, repeat the inspections specified in paragraph (a) of this AD at every tire change. Or

(2) Replace the complete MLG wheel with a MLG wheel having part number AHA1752 Post Mod 6. Such replacement constitutes terminating action for the inspection requirements of this AD. Or

(3) Replace the complete MLG wheel with a MLG wheel having part number AHA1890. Such replacement constitutes terminating action for the inspection requirements of this AD.

(d) Within 6 months after the effective date of this AD, replace all Dunlop MLG wheels having part number AHA1752 Pre Mod 6, with MLG wheels having either part number AHA1752 Post Mod 6 or part number AHA1890. Such replacement constitutes terminating action for the requirements of this AD.

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(f) Special flight permits may be issued in accordance with Federal Aviation Regulations (FAR) 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(g) The inspections shall be done in accordance with Dunlop Limited, Aviation Division, Service Bulletin AHA1752–32–1069, dated June 28, 1993. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Dunlop Limited, Aviation Division, Silverton House, Vincent Square, London SW1P 2PL, United Kingdom. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on June 6, 1994.

Issued in Renton, Washington, on April 8, 1994.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 94–9001 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–U

---

14 CFR Part 39

[Docket No. 94–NM–54–AD; Amendment 39–8905; AD 94–09–16]

Airworthiness Directives; Airbus Model A300–600 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain Model A300–600 series airplanes. This action requires replacement of certain Feel and Limitation Computers (FLC) with modified FLC's. This amendment is prompted by reports that the elevator control on several in-service airplanes operated with stiffness. The actions specified in this AD are intended to prevent stiff operation of the elevator control and undetected loss of the rudder travel limitation function, which may adversely affect controllability of the airplane.

EFFECTIVE DATES: May 20, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 20, 1994.

Comments for inclusion in the Rules Docket must be received on or before July 5, 1994.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 94–NM–54–AD, 1601 Lind Avenue SW., Renton, Washington 98055–4056.

The service information referenced in this AD may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Stephen Slotte, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington 98055–4056; telephone (206) 227–2797; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION: The Direction Général de l'Aviation Civile (DGAC), which is the airworthiness authority for France, recently notified the FAA that an unsafe condition may exist on certain Airbus Model A300–600 series airplanes. The DGAC advises that operators of Model A300–600 series airplanes reported that the elevator control on several in-service airplanes operated with stiffness. Investigation into the cause of this stiffness revealed that the Feel and Limitation Computer (FLC) may be detecting spurious low voltage. This condition, if not corrected, could result in stiff operation of the elevator control and undetected loss of the rudder travel limitation function, which may adversely affect controllability of the airplane.

Airbus has issued Service Bulletin A300–27–6025, dated September 15, 1993, that describes procedures for replacement of certain FLC's with modified FLC's. These replacement FLC's have been modified in accordance with Aerospatiale Service Bulletin 35–900–27–013, dated September 29, 1993 (for FLC's having part number 35–900–2000–200), or Aerospatiale Service Bulletin 35–900–27–012, dated September 29, 1993 (for FLC's having part number 35–900–2000–201). The Aerospatiale service bulletins describe procedures for adjustment of the "UNDERVOLTAGE DETECTION" signal with new values to preclude stiff operation of the elevator control. The DGAC classified the Airbus service bulletin as mandatory and issued French Airworthiness Directive 94–046–156(B), dated February 16, 1994, in order to assure the continued airworthiness of these airplanes in France.

This airplane model is manufactured in France and is type certificated for operation in the United States under the provisions of § 21.29 of the Federal Aviation Regulations and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the DGAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the DGAC, reviewed all available information, and determined that AD action is necessary for products

of this type design that are certificated for operation in the United States.

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, this AD is being issued to prevent stiff operation of the elevator control and undetected loss of rudder travel limitation function, which may adversely affect controllability of the airplane. This AD requires replacement of certain FLC's with modified FLC's. The actions are required to be accomplished in accordance with the Airbus service bulletin described previously.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption ADDRESSES. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 94–NM–54–AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–09–16 Airbus Industrie: Amendment 39–8905. Docket 94–NM–54–AD.

Applicability: Model A300–600 series airplanes, as listed in Airbus Industrie Service Bulletin A300–27–6025, dated September 15, 1993; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent stiff operation of the elevator control and undetected loss of the rudder travel limitation function, which may adversely affect controllability of the airplane, accomplish the following:

(a) Within 45 days after the effective date of this AD, replace Feel and Limitation Computers (FLC), having part number (P/N) 35–900–2000–200 or 35–900–2000–201, serial numbers 755 and subsequent, with an FLC that has been previously modified, in accordance with Airbus Service Bulletin A300–27–6025, dated September 15, 1993.

(b) As of the effective date of this AD, no person shall install, on any airplane, an FLC, P/N 35–900–2000–200 or 35–900–2000–201, that has not been previously modified in accordance with Airbus Service Bulletin A300–27–6025, dated September 15, 1993.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(d) Special flight permits may be issued in accordance with Federal Aviation Regulations (FAR) 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The replacement shall be done in accordance with Airbus Service Bulletin A300–27–6025, dated September 15, 1993. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

(f) This amendment becomes effective on May 20, 1994.

Issued in Renton, Washington, on April 26, 1994.

James V. Devany,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 94–10509 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–U

14 CFR Part 39

[Docket No. 93–ANE–80; Amendment 39–8897; AD 94–09–08]

Airworthiness Directives; Allied-Signal Inc., Garrett Engine Division, TPE331 Series Turboprop and Model TSE331–3U Turboshaft Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule, request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain Allied-Signal Inc., Garrett Engine Division, TPE331 series turboprop and Model TSE331–3U turboshaft engines. This action requires inspection of certain third stage turbine stator assemblies, and replacement, if necessary, with serviceable assemblies. This amendment is prompted by reports of six third stage turbine stator assemblies assembled with inner seal supports made of incorrect material that results in a significantly reduced cyclic life. The actions specified by this AD are intended to prevent an uncontained failure of the third stage turbine wheel.

DATES: May 20, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 20, 1994.

Comments for inclusion in the Rules Docket must be received on or before July 5, 1994.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 93–ANE–80, 12 New England Executive Park, Burlington, MA 01803–5299.

The service information referenced in this AD may be obtained from AlliedSignal, Inc., Aviation Services Division, Data Distribution Dept. 64–3/2102–IM, P.O. Box 29003, Phoenix, AZ 85038–9003. This information may be examined at the FAA, New England Region, Office of the Assistant Chief Counsel, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3229 East Spring Street, Long Beach, CA 90806–2425; telephone (310) 988–5246, fax (310) 988–5210.

SUPPLEMENTARY INFORMATION: The Federal Aviation Administration (FAA) has received reports of six third stage turbine stator assemblies assembled with inner seal supports made of incorrect material that significantly reduces the cyclic life of the assembly. The manufacturer has identified part serial numbers of 150 third stage turbine stator assemblies that may contain the inner seal supports made of Hastelloy S material. These assemblies were repaired at the Garrett General Aviation Service Division (GGASD) facility in Phoenix, Arizona between November 1988 and May 1991. Fatigue failure of the inner seal support has resulted in the seal support moving aft and contacting the third stage turbine wheel. This condition, if not corrected, can result in an uncontained failure of the third stage turbine wheel.

The FAA has reviewed and approved the technical contents of AlliedSignal Aerospace Alert Service Bulletin (ASB) No. TPE331–A72–0906, dated October 15, 1993, that describes procedures for inspecting the third stage turbine stator assemblies, and replacing, if necessary, with serviceable assemblies.

Since an unsafe condition has been identified that is likely to exist or develop on other engines of this same type design, this AD is being issued to prevent an uncontained failure of the third stage turbine wheel. This AD requires inspection of third stage turbine stator assemblies to determine the acceptability of the inner seal supports, and replacement, if necessary, with serviceable assemblies. The actions are required to be accomplished in accordance with the service bulletin described previously.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 93–ANE–80." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and is not a "significant regulatory action" under Executive Order 12866.

It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation

Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–09–08 Allied-Signal Inc., Garrett Engine Division: Amendment 39–8897. Docket 93–ANE–80.

Applicability: Allied-Signal Inc., Garrett Engine Division, Model TPE331–1, –2, –2UA, –3U, –3UW, –5, –5A, –6, and –6A turboprop and Model TSE331–3U turboshaft engines incorporating third stage stator turbine assemblies, Part Number (P/N) 868379–3, repaired at the Garrett General Aviation Service Division (GGASD) facility in Phoenix, Arizona, between November 1988 and May 1991, and identified by serial numbers listed in AlliedSignal Aerospace Alert Service Bulletin (ASB) No. TPE331–A72–0906, dated October 15, 1993. These engines are installed on but not limited to Mitsubishi MU–2B series (MU–2 series); Construcciones Aeronauticas, S.A. (CASA) C–212 series; Fairchild SA226 series (Swearingen Merlin and Metro series); Prop-Jets, Inc. Model 400; Twin Commander 680 and 690 (Jetprop Commander), Rockwell Commander S–2R, Shorts Brothers and Harland, Ltd. SC7 (Skyvan), Dornier 228 series, Beech 18 and 45 series and Models JRB–6, 3N, 3NM, 3TM, and B100, Pilatus PC–6 series (Fairchild Porter, Peacemaker), De Havilland Model DH 104 series 7AXC (Dove), and Ayres S–2R series airplanes; and Sikorsky S–55 series helicopters.

Compliance: Required as indicated, unless accomplished previously.

To prevent an uncontained failure of the third stage turbine wheel, accomplish the following:

(a) Inspect suspect third stage turbine stator assemblies, P/N 868379–3, and replace, if necessary, with serviceable assemblies, in accordance with the Accomplishment Instructions of AlliedSignal Aerospace ASB No. TPE331–A72–0906, dated October 15, 1993, and the following schedule:

Third stage turbine stator cycles in service since repair by GGASD	Inspection schedule
900 or more cycles.	Within 50 cycles in service after the effective date of this AD.
450 to 899 cycles.	Within 150 cycles in service after the effective date of this AD, but not to exceed 950 cycles in service since repair by GGASD.
Less than 450 cycles.	Prior to accumulating 600 cycles in service since repair by GGASD.

Note: The FAA has determined that cracking of third stage turbine stator assemblies is related to operating cycles, rather than operating hours.

(b) If cycles cannot be determined, calculate cycles by multiplying third stage turbine stator assembly hours time in service by 1.5.

(c) An alternative method of compliance or adjustment of the initial compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles Aircraft Certification Office.

Note: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Los Angeles Aircraft Certification Office.

(d) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the aircraft to a location where the requirements of this AD can be accomplished.

(e) The inspection, and replacement, if necessary, of the third stage turbine stator assembly, shall be accomplished in accordance with the following ASB, which also identifies third stage turbine stator assemblies, P/N 868379–3, repaired at GGASD between November 1988 and May 1991, by serial number:

Document No.	Pages	Date
AlliedSignal Aerospace ASB No. TPE331–A72–0906. Total pages: 10.	1–10	Oct. 15, 1993.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from AlliedSignal, Inc., Aviation Services Division, Data Distribution Dept. 64–3/2102–IM, P.O. Box 29003, Phoenix, AZ 85038–9003. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

(f) This amendment becomes effective on May 20, 1994.

Issued in Burlington, Massachusetts, on April 19, 1994.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 94–10365 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–P

---

14 CFR Part 39

[Docket No. 92–NM–157–AD; Amendment 39–8893; AD 94–09–05]

Airworthiness Directives; de Havilland, Inc., Model DHC–7 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain de Havilland Model DHC–7 series airplanes, that requires a one-time inspection to assess the adequacy of the clearance between various adapter plates and seal retaining angles on the fuselage side access panel, and modification of both the forward and rear seal retention angles. This amendment is prompted by reports of incidents involving corrosion and fatigue cracking in commuter-class airplanes that are approaching or have exceeded their economic design goal. The actions specified by this AD are intended to prevent degradation of the structural capabilities of the affected airplanes.

DATES: Effective June 6, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 6, 1994.

ADDRESSES: The service information referenced in this AD may be obtained from de Havilland, Inc., Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 181 South Franklin Avenue, room 202, Valley Stream, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Sol Maroof, Aerospace Engineer, Airframe Branch, ANE–172, FAA, New York

Aircraft Certification Office, 181 South Franklin Avenue, room 202, Valley Stream, New York 11581; telephone (516) 791–6220; fax (516) 791–9024.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to certain de Havilland Model DHC–7 series airplanes was published as a supplemental notice of proposed rulemaking (NPRM) in the **Federal Register** on January 4, 1994 (59 FR 266). That action proposed to require a one-time inspection to assess the adequacy of the clearance between various adapter plates and seal retaining angles on the fuselage side access panel, and modification of both the forward and rear seal retention angles.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

The commenter supports the proposed rule.

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

The FAA estimates that 44 airplanes of U.S. registry will be affected by this AD, that it will take approximately 8 work hours per airplane to accomplish the modifications and inspections, and that the average labor rate is $55 per work hour. Required parts will be nominal in cost. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $19,360, or $440 per airplane.

The total cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–09–05 De Havilland, Inc.: Amendment 39–8893. Docket 92–NM–157–AD.

Applicability: Model DHC–7 series airplanes having serial numbers 1 through 99 inclusive, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent structural failure, accomplish the following:

(a) For airplanes having serial numbers 1 through 77 inclusive, 79 through 83 inclusive, 85, and 86: Within 12 months after the effective date of this AD, inspect the clearance between the wing forward pick-up adapter plates and the seal retaining angle on the fuselage side access panel in accordance with de Havilland Service Bulletin 7–57–11, dated December 17, 1982.

(1) If the adapter plates are undamaged or if scoring on the adapter plates does not exceed 0.050 inch in depth, prior to further flight, accomplish Modification 7/2319 in accordance with the service bulletin.

(2) If scoring on the adapter plates is equal to or exceeds 0.050 inch in depth, prior to further flight, repair in accordance with a method approved by the Manager, New York Aircraft Certification Office (ACO), ANE–170, FAA, Engine and Propeller Directorate.

(b) For airplanes having serial numbers 1 through 99 inclusive: Within 12 months after the effective date of this AD, inspect the clearance between the rear mounting adapter plates and the seal retaining angle on the fuselage side access panel in accordance with de Havilland Service Bulletin 7–57–19, dated February 24, 1984.

(1) If the adapter plates are undamaged or if scoring on the adapter plates does not exceed 0.050 inch in depth, prior to further flight, accomplish Modification 7/2355 in accordance with the service bulletin.

(2) If scoring on the adapter plates is equal to or exceeds 0.050 inch in depth, prior to further flight, repair in accordance with a method approved by the Manager, New York ACO, ANE–170, FAA, Engine and Propeller Directorate.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York ACO, ANE–170, FAA, Engine and Propeller Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York ACO.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York ACO.

(d) Special flight permits may be issued in accordance with Federal Aviation Regulations (FAR) 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The inspections and modifications shall be done in accordance with de Havilland Service Bulletin 7–57–11, dated December 17, 1982, and de Havilland Service Bulletin 7–57–19, dated February 24, 1984. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from de Havilland, Inc., Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 181 South Franklin Avenue, Room 202, Valley Stream, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on June 6, 1994.

Issued in Renton, Washington, on April 18, 1994.

Darrell M. Pederson, Acting Manager,

Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 94–9730 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–U

14 CFR Part 39

[Docket No. 93–ANE–04; Amendment 39–8877; AD 94–08–05]

Airworthiness Directives; General Electric Company CF6 Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to General Electric Company (GE) CF6–45/–50 series turbofan engines, that requires installation of a fan stator case stiffening ring assembly, and a new stage one fan shroud. This amendment is prompted by a report of an uncontained stage one fan blade failure, which resulted in an inflight engine shutdown, and damage to the aircraft. The actions specified by this AD are intended to prevent an uncontained stage one fan blade failure, which can result in an inflight engine shutdown, and damage to the aircraft.

DATES: Effective July 5, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 5, 1994.

ADDRESSES: The service information referenced in this AD may be obtained from General Electric Aircraft Engines, CF6 Distribution Clerk, Room 132, 111 Merchant Street, Cincinnati, OH 45246. This information may be examined at the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Robert J. Ganley, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299, telephone (617) 238–7138; fax (617) 238–7199.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to General Electric Company (GE) CF6–45/–50 series turbofan engines was published in the **Federal Register** on January 11, 1994 (59 FR 1503). That action proposed to require installation of a fan stator case stiffening ring assembly and a new stage one fan shroud, which will result in reduced running clearances, and lower fan blade stresses. The compliance end date of December 31, 1996, ensures timely compliance without forced engine removals based on hardware availability. The actions would be required to be accomplished in accordance with GE CF6–50 Service Bulletin (SB) No. 72–573, Revision 5, dated September 15, 1981.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Two commenters support the rule as proposed.

One commenter states that the compliance end-date of August 31, 1995, in compliance paragraph (a) of the proposed rule should be extended to December 31, 1996, in order to avoid forced engine removals. The Federal Aviation Administration (FAA) concurs. The FAA has determined that flight safety will not be compromised by extending the compliance end-date to December 31, 1996. The final rule has been changed accordingly.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the change described previously. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

There are approximately 67 GE CF6–45/–50 series turbofan engines of the affected design in the worldwide fleet. The FAA has been advised by the manufacturer that there are no engines on U.S. registered aircraft that would be affected by this AD. However, should an affected engine be imported on an aircraft and placed on the U.S. registry in the future, it would take approximately 48 work hours to accomplish the required actions, and that the average labor rate is $55 per work hour. Required parts will cost approximately $9,360 per engine. Based on these figures, the total cost impact of the AD is estimated to be $12,000 per engine.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–08–05 General Electric Company: Amendment 39–8877. Docket 93–ANE–04.

Applicability: General Electric Company (GE) CF6–45/–50 series turbofan engines installed on, but not limited to, Airbus A300 series, Boeing 747 series, and McDonnell Douglas DC–10 series aircraft.

Compliance: Required as indicated, unless accomplished previously.

To prevent an uncontained stage one fan blade failure, which can result in inflight engine shutdown, and damage to the aircraft, accomplish the following:

(a) For engines that have not been modified in accordance with any revision level of GE CF6–50 Service Bulletin (SB) No. 72–573, prior to the effective date of this AD, install a fan stator case stiffening ring assembly and stage one fan shroud, in accordance with GE CF6–50 SB No. 72–573, Revision 5, dated September 15, 1981, by December 31, 1996.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

Note: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Engine Certification Office.

(c) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the aircraft to a location where the requirements of this AD can be accomplished.

(d) The modification shall be done in accordance with the following service bulletin:

Document No.	Pages	Revision	Date
GE CF6–50 SB No. 72–573 ..... Total Pages: 17.	1–17	5	Sept. 15, 1981.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from General Electric Aircraft Engines, CF6 Distribution Clerk, Room 132, 111 Merchant Street, Cincinnati, OH 45246. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

(e) This amendment becomes effective on July 5, 1994.

Issued in Burlington, Massachusetts, on April 5, 1994.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 94–9002 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–P

---

14 CFR Part 39

[Docket No. 93–ANE–41; Amendment 39–8907; AD 94–09–18]

Airworthiness Directives; General Electric Company; CF6 Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to General Electric Company (GE) CF6–6/–45/–50 series turbofan engines, that requires an inspection for cracks in the stage 1 high pressure turbine (HPT) disk rim bolt holes, and stage 2 HPT disk rim and inner bolt holes; and replacement, if necessary, with serviceable parts. This amendment is prompted by a report of an uncontained stage 1 HPT disk failure which resulted in an aborted takeoff. The actions specified by this AD are intended to prevent an uncontained stage 1 or stage 2 HPT disk failure, which could result in an inflight engine shutdown, rejected takeoff, or damage to the aircraft.

DATES: Effective June 6, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 6, 1994.

ADDRESSES: The service information referenced in this AD may be obtained from General Electric Aircraft Engines, CF6 Distribution Clerk, room 132, 111 Merchant Street, Cincinnati, OH 45246. This information may be examined at the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Robert J. Ganley, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299; telephone (617) 238–7138; fax (617) 238–7199.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to General Electric Company (GE) CF6–6/–45/–50 series turbofan engines was published as a notice of proposed rulemaking (NPRM) in the **Federal Register** on October 19, 1993 (58 FR 53893). That action proposed to require an eddy current inspection for cracks in the stage 1 high pressure turbine (HPT) disk rim bolt holes, and stage 2 HPT disk rim and inner bolt holes; and replacement, if necessary, with serviceable parts. The inspection, and replacement, if necessary, would be performed in accordance with GE CF6–6 Service Bulletin (SB) No. 72–1002, dated February 12, 1993; CF6–6 SB No. 72–1003, Revision 1, dated June 17, 1993; CF6–50 SB No. 72–1057, Revision 1, dated June 17, 1993; and CF6–50 SB No. 72–1059, dated February 12, 1993.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

One commenter supports the rule as proposed.

One commenter states that the compliance end-date of February 28, 1994, in compliance paragraph (b)(6) of the proposed rule should be replaced by 1,000 cycles in service (CIS) after the effective date of this AD, in order to avoid forced engine removals. The FAA concurs. This change is consistent with the results of the failure analysis performed by the manufacturer, and is supported by the positive inspection results to date. This final rule has been revised accordingly.

One commenter states that the compliance end-date of February 28, 1994, in compliance paragraph (b)(6) of the proposed rule should be extended to one year after the effective date of this AD, in order to avoid forced engine removals. The FAA concurs in part. The FAA agrees that the current compliance end-date may cause forced engine removals; however, an extension of this date alone may still cause an undue burden on low cycle/low time operators. A cyclic definition in lieu of a compliance end-date will help alleviate this potential problem. The manufacturer has informed the FAA that a typical operator accumulates approximately 1,000 CIS in one year. This change is consistent with the results of the failure analysis performed by the manufacturer, and is supported by the positive inspection results to date. Therefore, the compliance end-date of February 28, 1994, in paragraph (b)(6) in the proposed rule has been replaced in this final rule by 1,000 CIS after the effective date of this AD.

Two commenters state that the compliance end-date of May 31, 1994, in compliance paragraph (a)(1) and (a)(2) should be removed, and 4,500 cycles since new (CSN) should be replaced by 5,400 CSN to avoid forced engine removals. The FAA concurs. This change is consistent with the results of the failure analysis performed by the manufacturer, and is supported by the positive inspection results to date. This final rule has been revised accordingly.

Two commenters state that the compliance end-date of May 31, 1994, in compliance paragraph (a)(3) should be replaced by 1,400 CIS after the effective date of this AD to avoid forced engine removals. The FAA concurs. This change is consistent with the results of the failure analysis performed

by the manufacturer, and is supported by the positive inspection results to date. This final rule has been revised accordingly.

Two commenters state that the compliance end-date of February 28, 1994, in compliance paragraphs (a)(4)(i) and (a)(4)(ii) should be removed, 3,500 CSN should be replaced by 4,500 CSN, and 3,000 CSN should be replaced by 3,500 CSN to avoid forced engine removals. The FAA concurs in part. The FAA agrees that the current compliance end-date may cause forced engine removals, but the proposed CSN changes are not consistent with the results of the failure analysis performed by the manufacturer. The results of this analysis suggest that 3,500 CSN can be changed to 4,000 CSN; however, 3,000 CSN can not be changed. This final rule has been revised accordingly.

Two commenters state that the compliance end-date of February 28, 1994, in compliance paragraph (a)(4)(iii) should be replaced by 1,000 CIS after the effective date of this AD, and 3,000 CSN should be replaced by 3,500 CSN to avoid forced engine removals. The FAA concurs in part. The FAA agrees that the current compliance end-date may cause forced engine removals, but the proposed CSN change is not consistent with the results of the failure analysis performed by the manufacturer. The results of this analysis suggest that 3,000 CSN can not be changed. This final rule has been revised accordingly.

One commenter states that the compliance end-date of May 31, 1994, in compliance paragraphs (a)(5)(i) and (a)(5)(ii) should be removed, and 4,500 CSN should be replaced by 6,000 CSN to avoid forced engine removals. The FAA concurs in part. The FAA agrees that the current compliance end-date may cause forced engine removals, but the proposed CSN change is not consistent with the results of the failure analysis performed by the manufacturer. The results of this analysis suggest that 4,500 CSN can be changed to 5,400 CSN. The final rule has been revised accordingly.

One commenter states that the compliance end-date of May 31, 1994, in compliance paragraph (a)(5)(iii) should be replaced by 2,000 CIS after the effective date of this AD to avoid forced engine removals. The FAA concurs in part. The FAA agrees that the current compliance end-date may cause forced engine removals, but the proposed CIS is not consistent with the results of this failure analysis performed by the manufacturer. The results of this analysis suggest that 1,400 CIS is appropriate. This final rule has been revised accordingly.

Although no comments were received regarding compliance paragraphs (b)(1) to (b)(5), the FAA has changed these paragraphs to be consistent with the corresponding paragraphs in paragraph (a) of this final rule.

The economic analysis section of the proposed rule assumed that all inspected disks would require replacement. The manufacturer has informed the FAA that this assumption is overly conservative based on analysis and inspection results to date, and that only approximately 2% of the inspected disks will require replacement. The 2% figure translates to approximately 10 disks installed on aircraft of U.S. registry. The economic analysis section of this final rule has been revised accordingly.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

There are approximately 650 GE CF6-6/-45/-50 series turbofan engines of the affected design in the worldwide fleet. The FAA estimates that 500 engines installed on aircraft of U.S. registry will be affected by this AD, that it will take approximately 108 work hours per engine to accomplish the required actions, and that the average labor rate is $55 per work hour. Required parts will cost approximately $77,314 per engine. Based on these figures, and assuming that 10 of the inspected disks will require replacement, the total cost impact of the AD on U.S. operators is estimated to be $3,743,140.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air Transportation, Aircraft, Aviation Safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94-09-18 General Electric Company: Amendment 39-8907. Docket 93-ANE-41

Applicability: General Electric Company (GE) CF6-6/ -45/-50 series turbofan engines installed on but not limited to Airbus A300 series, Boeing 747 series, and McDonnell Douglas DC-10 series aircraft.

Compliance: Required as indicated, unless accomplished previously.

To prevent an uncontained stage 1 or stage 2 high pressure turbine (HPT) disk failure, which could result in an inflight engine shutdown, rejected takeoff, or damage to the aircraft, accomplish the following:

(a) Eddy current inspect (ECI) stage 1 and stage 2 HPT disks for cracks in accordance with the Accomplishment Instructions of GE CF6-6 Service Bulletin (SB) No. 72-1002, dated February 12, 1993, and CF6-6 SB No. 72-1003, Revision 1, dated June 17, 1993, as follows:

(1) For GE CF6-6 series stage 1 HPT disks, Part Numbers (P/N) 9137M40P01 and 9687M39P07, with serial numbers (S/N) listed in Appendix I or II of GE CF6-6 SB No. 72-1002, dated February 12, 1993, which have accumulated less than 2,500 cycles since new (CSN) on the effective date of this airworthiness directive (AD), ECI the rim bolt holes at the next engine shop visit after accumulating 2,500 CSN, but not to exceed 5,400 CSN.

(2) For GE CF6-6 series stage 1 HPT disks, P/N 9137M40P01 and 9687M39P07, with S/N listed in Appendix I or II or GE CF6-6 SB No. 72-1002, dated February 12, 1993, which have accumulated 2,500 CSN or more, but less than 4,000 CSN on the effective date of this AD, ECI the rim bolt holes at the next

engine shop visit, but not to exceed 5,400 CSN.

(3) For GE CF6–6 series stage 1 HPT disks, P/N 9137M40P01 and 9687M39P07, with S/N listed in Appendix I or II of GE CF6–6 SB No. 72–1002, dated February 12, 1993, which have accumulated 4,000 CSN or more on the effective date of this AD, ECI the rim bolt holes at the next engine shop visit, or prior to accumulating 1,400 cycles in service (CIS) after the effective date of this AD, whichever occurs earlier.

(4) For GE CF6–6 series stage 2 HPT disks, P/N 9084M52P02 and 9084M52P05, with S/N listed in Appendix I or II of GE CF6–6 SB No. 72–1003, Revision 1, dated June 17, 1993, which have not accomplished the inner bolt hole ECI prior to the effective date of this AD in accordance with GE CF6–6 Shop Manual, GEK 9266, Chapter 72–53–04, accomplish the following:

(i) For disks which have accumulated less than 2,000 CSN on the effective date of this AD, ECI the rim and inner bolt holes at the next engine shop visit after accumulating 2,000 CSN, but not to exceed 4,000 CSN.

(ii) For disks which have accumulated 2,000 CSN or more, but less than 3,000 CSN on the effective date of this AD, ECI the rim and inner bolt holes at the next engine shop visit, but not to exceed 4,000 CSN.

(iii) For disks which have accumulated 3,000 CSN or more on the effective date of this AD, ECI the rim and inner bolt holes at the next engine shop visit, or prior to accumulating 1,000 CIS after the effective date of this AD, whichever occurs earlier.

(5) For GE CF6–6 series stage 2 HPT disks, P/N 9084M52P02 and 9084M52P05, with S/N listed in Appendix I or II of GE CF6–6 SB No. 72–1003, Revision 1, dated June 17, 1993, which have accomplished the inner bolt hole ECI prior to the effective date of this AD in accordance with GE CF6–6 Shop Manual, GEK 9266, Chapter 72–53–04, and not found cracked, accomplish the following:

(i) For disks which have accumulated less than 2,000 CSN on the effective date of this AD, ECI the rim and inner bolt holes at the next engine shop visit after accumulating 2,000 CSN, but not to exceed 5,400 CSN.

(ii) For disks which have accumulated 2,000 CSN or more, but less than 4,000 CSN on the effective date of this AD, ECI the rim and inner bolt holes at the next engine shop visit, prior to accumulating 4,500 CSN, but not to exceed 5,400 CSN.

(iii) For disks which have accumulated 4,000 CSN or more on the effective date of this AD, ECI the rim and inner bolt holes at the next engine shop visit, or prior to accumulating 1,400 CIS after the effective date of this AD, whichever occurs earlier.

(6) GE CF6–6 series stage 1 HPT disks referenced in paragraphs (a)(1), (a)(2), and (a)(3) of this AD, that have been inspected by ECI in accordance with the procedures outlined in GE CF6–6 All Operators Wire (AOW) 92–6–09, dated September 24, 1992, or GE CF6–6 Engine Shop Manual, GEK 9266, Chapter 72–53–03, prior to the effective date of this AD, and whose CSN at the time of inspection was 2,500 or more, already meet the inspection requirements of paragraphs (a)(1), (a)(2), and (a)(3) of this AD.

(7) GE CF6–6 series stage 2 HPT disks referenced in paragraphs (a)(4) and (a)(5) of this AD, that have been inspected by ECI in accordance with the procedures outlined in GE CF6–6 AOW 92–6–09, dated September 24, 1992; GE CF6–6 SB No. 72–1003, dated February 12, 1993; or GE CF6–6 Engine Shop Manual, GEK 9266, Chapter 72–53–04, prior to the effective date of this AD, and whose CSN at the time of inspection was 2,000 or more, already meet the inspection requirements of paragraphs (a)(4) and (a)(5) of this AD.

(b) ECI stage 1 and stage 2 HPT disks for cracks in accordance with the Accomplishment Instructions of GE CF6–50 SB No. 72–1057, Revision 1, dated June 17, 1993, and CF6–50 SB No. 72–1059, dated February 12, 1993, as follows:

(1) For GE CF6–45/–50 series stage 1 HPT disks, P/N 9283M31P02, 9283M55P04, and 9283M55P05, with S/N listed in Appendix I, II, or III of GE CF6–50 SB No. 72–1059, dated February 12, 1993, which have accumulated less than 2,500 CSN on the effective date of this AD, ECI the rim bolt holes at the next engine shop visit after accumulating 2,500 CSN, but not to exceed 5,400 CSN.

(2) For GE CF6–45/–50 series stage 1 HPT disks, P/N 9283M31P02, 9283M55P04, and 9283M55P05, with S/N listed in Appendix I, II, or III of GE CF6–50 SB No. 72–1059, dated February 12, 1993, which have accumulated 2,500 CSN or more, but less than 4,000 CSN on the effective date of this AD, ECI the rim bolt holes at the next engine shop visit, but not to exceed 5,400 CSN.

(3) For GE CF6–45/–50 series stage 1 HPT disks P/N 9283M31P02, 9283M55P04, and 9283M55P05, with S/N listed in Appendix I, II, or III of GE CF6–50 SB No. 72–1059, dated February 12, 1993, which have accumulated 4,000 CSN or more on the effective date of this AD, ECI the rim bolt holes at the next engine shop visit, or prior to accumulating 1,400 CIS after the effective date of this AD, whichever occurs earlier.

(4) For GE CF6–45/–50 series stage 2 HPT disks, P/N 9045M35P18 and 1474M49P06, with S/N listed in the Appendix of GE CF6–50 SB No. 72–1057, Revision 1, dated June 17, 1993, which have accumulated less than 2,000 CSN on the effective date of this AD, ECI the rim and inner bolt holes at the next engine shop visit after accumulating 2,000 CSN, but not to exceed 4,000 CSN.

(5) For GE CF6–45/–50 series stage 2 HPT disks, P/N 9045M35P18 and 1474M49P06, with S/N listed in the Appendix of GE CF6–50 SB No. 72–1057, Revision 1, dated June 17, 1993, which have accumulated 2,000 CSN or more, but less than 3,000 CSN on the effective date of this AD, ECI the rim bolt holes at the next engine shop visit, but not to exceed 4,000 CSN.

(6) For GE CF6–45/–50 series stage 2 HPT disks, P/N 9045M35P18 and 1474M49P06, with S/N listed in the Appendix of GE CF6–50 SB No. 72–1057, Revision 1, dated June 17, 1993, which have accumulated 3,000 CSN or more on the effective date of this AD, ECI the rim and inner bolt holes at the next engine shop visit, or prior to accumulating 1,000 CIS after the effective date of this AD, whichever occurs earlier.

(7) GE CF6–45/–50 series stage 1 HPT disks referenced in paragraphs (b)(1), (b)(2), and (b)(3) of this AD, that have been inspected by ECI in accordance with the procedures outlined in GE CF6–50 AOW 92–50–15, dated September 24, 1992, or GE CF6–50 Engine Task Numbered Shop Manual, GEK 50481, Chapter 72–53–03, prior to the effective date of this AD, and whose CSN at the time of inspection was 2,500 or more, already meet the inspection requirements of paragraphs (b)(1), (b)(2), and (b)(3) of this AD.

(8) GE CF6–45/–50 series stage 2 HPT disks referenced in paragraphs (b)(4), (b)(5), and (b)(6) of this AD, that have been inspected by ECI in accordance with the procedures outlined in GE CF6–50 AOW 92–50–15, dated September 24, 1992; GE CF6–50 SB No. 72–1057, dated February 12, 1993; or GE CF6–50 Engine Task Numbered Shop Manual, GEK 50481, Chapter 72–53–04, prior to the effective date of this AD, and whose CSN at the time of inspection was 2,000 or more, already meet the inspection requirements of paragraphs (b)(4), (b)(5), and (b)(6) of this AD.

(c) Remove from service disks found cracked, and replace with serviceable parts. Inspect replacement disks in accordance with paragraphs (a) or (b) of this AD, if applicable.

(d) For the purpose of this AD, an engine shop visit is defined as the induction of an engine into a shop for maintenance involving the separation of any major flange.

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

Note: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Engine Certification Office.

(f) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the aircraft to a location where the requirements of this AD can be accomplished.

(g) The inspections shall be done in accordance with the following service bulletins:

Document No.	Pages	Revision	Date
GE CF6–6 SB			
No. 72–1002	1–12	Original	February 12, 1993.
Total Pages: 12.			
GE CF6–6 SB			
No. 72–1003	1–3	1	June 17, 1993.
	4–21	Original	February 12, 1993.
Total Pages: 21.			
GE CF6–50 SB			
No. 72–1057	1–2	1	June 17, 1993.
	3–14	Original	February 12, 1993.
Total Pages: 14.			
GE CF6–50 SB			
No. 72–1059	1–17	Original	February 12, 1993
Total Pages: 17.			

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from General Electric Aircraft Engines, CF6 Distribution Clerk, Room 132, 111 Merchant Street, Cincinnati, OH 45246. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

(h) This amendment becomes effective on June 6, 1994.

Issued in Burlington, Massachusetts, on April 26, 1994.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 94–10502 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–P

---

14 CFR Part 39

[Docket No. 93–NM–186–AD; Amendment 39–8881; AD 94–08–09]

Airworthiness Directives; Jetstream Model ATP Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to Jetstream Model ATP airplanes, that requires a one-time inspection and appropriate torque loading check of certain wing top surface stringer joint fasteners, and correction of discrepancies. This amendment is prompted by a report of loose fasteners on the wing top surface stringer joint bolts at Rib 0. The actions specified by this AD are intended to prevent reduced structural integrity of the wing top surface stringer joints at Rib 0, which subsequently could lead to reduced structural integrity of the wing.

DATES: Effective June 6, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 6, 1994.

ADDRESSES: The service information referenced in this AD may be obtained from Jetstream Aircraft, Inc., Librarian for Service Bulletins, P.O. Box 16029, Dulles International Airport, Washington, DC 20041–6029. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: William Schroeder, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–2148; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to Jetstream Model ATP airplanes was published in the **Federal Register** on December 15, 1993 (58 FR 65569). That action proposed to require a one-time inspection and appropriate torque loading check of certain wing top surface stringer joint fasteners, and correction of discrepancies.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

The commenter supports the proposal.

Since issuance of the notice, Jetstream Aircraft Limited has issued Revision 3 of BAe ATP Service Bulletin ATP–57–14, dated December 15, 1993. This revision of the service bulletin is essentially identical to Revision 1, which was referenced in the notice, but contains certain editorial changes. The FAA has revised the final rule to include a reference to Revision 3 of the service bulletin as an additional source of appropriate service information.

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the change previously described. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

The FAA estimates that 10 airplanes of U.S. registry will be affected by this AD, that it will take approximately 50 work hours per airplane to accomplish the required actions, and that the average labor rate is $55 per work hour. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $27,500, or $2,750 per airplane.

The total cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic

impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94-08-09 Jetstream Aircraft Limited (formerly British Aerospace): Amendment 39-8881. Docket 93-NM-186-AD.

Applicability: Model ATP airplanes; serial numbers 2001 through 2053 inclusive, and 2055; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent reduced structural integrity of the wing top surface stringer joints at Rib 0, which subsequently could lead to reduced structural integrity of the wing, accomplish the following:

(a) Prior to the accumulation of 10,000 total hours time-in-service, or within the next 600 hours time-in-service after the effective date of this AD, whichever occurs later, perform a detailed visual inspection and appropriate torque loading check of the fasteners in the stringer joint brackets (part number JD534J0015) at the wing top surface stringer joints for stringers 1 through 19 at Rib 0, in accordance with paragraph 2.A. of British Aerospace BAe ATP Service Bulletin ATP-57-14, Revision 1, dated September 27, 1993; or Revision 3, dated December 15, 1993. If any discrepancy, as specified in the service bulletin, is detected, prior to further flight, correct it in accordance with the service bulletin.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM-113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM-113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM-113.

(c) Special flight permits may be issued in accordance with Federal Aviation Regulations (FAR) 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(d) The inspection, torque loading check, and correction of discrepancies shall be done in accordance with the following British Aerospace BAe ATP Service Bulletins, which contain the specified list of effective pages:

Service bulletin number and date	Page No.	Revision level shown on page	Date shown on page
ATP-57-14, Revision 1, Sept. 27, 1993	1-3	1	Sept. 27, 1993.
	4-5, 7, 9, 11, 13, 15	0	Aug. 14, 1993.
	6, 8, 10, 12, 14	(1)	(1)
ATP-57-14, Revision 3, Dec. 15, 1993	1-2	3	Dec. 15, 1993.
	3-5	2	Nov. 24, 1993.
	7, 9, 11, 13, 15	0	Aug. 14, 1993.
	6, 8, 10, 12, 14	(1)	(1)

[1] These papers are not used.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Jetstream Aircraft, Inc., Librarian for Service Bulletins, P.O. Box 16029, Dulles International Airport, Washington, DC 20041-6029. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on June 6, 1994.

Issued in Renton, Washington, on April 6, 1994.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 94-8685 Filed 5-4-94; 8:45 am]

BILLING CODE 4910-13-U

14 CFR Part 39

[Docket No. 93-NM-166-AD; Amendment 39-8883; AD 94-08-11]

Airworthiness Directives; Jetstream Aircraft Limited Model ATP Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Jetstream Model ATP airplanes, that requires replacement of certain circuit breakers on the left- and right-hand AC generator panel assemblies with new circuit breakers. This amendment is prompted by reports of failures due to localized overheating of the electric power circuit for the air conditioning recirculation fan in the environmental control system (ECS). The actions specified by this AD are intended to prevent the recirculation fan circuit from overheating, which could lead to smoke and/or flame in the fuselage.

DATES: Effective on June 6, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 6, 1994.

ADDRESSES: The service information referenced in this AD may be obtained from Jetstream Aircraft, Inc., P.O. Box 16029, Dulles International Airport, Washington, DC 20041-6029. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: William Schroeder, Aerospace Engineer, Standardization Branch, ANM-113,

FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–2148; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to certain Jetstream Model ATP airplanes was published in the **Federal Register** on November 22, 1993 (58 FR 61635). That action proposed to require replacement of certain Texas Instrument circuit breakers on the left- and right-hand AC generator panel assemblies with certain Genelco circuit breakers.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

The commenter supports the proposed rule.

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

The FAA estimates that 10 airplanes of U.S. registry will be affected by this AD, that it will take approximately 2 work hours per airplane to accomplish the required actions, and that the average labor rate is $55 per work hour. Required parts will cost approximately $225 per airplane. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $3,350, or $335 per airplane.

The total cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–08–11 Jetstream Aircraft Limited (Formerly British Aerospace): Amendment 39–8883. Docket 93–NM–166–AD.

Applicability: Model ATP airplanes, serial numbers 2002 through 2065 inclusive, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent the recirculation fan circuit from overheating, which could lead to smoke and/or flame in the fuselage, accomplish the following:

(a) Within 600 hours time-in-service after the effective date of this AD, replace Texas Instrument circuit breakers 1HG3 and 2HG3 having part number (P/N) 6TC4–10, on the left- and right-hand AC generator panel assemblies at zones 131–05–00 and 132–05–00, respectively, with Genelco circuit breakers having P/N 4330–014–10, in accordance with Jetstream Service Bulletin ATP–21–24–10306A, dated July 30, 1993.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(c) Special flight permits may be issued in accordance with Federal Aviation Regulations (FAR) 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(d) The replacement shall be done in accordance with Jetstream Service Bulletin ATP–21–24–10306A, dated July 30, 1993. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Jetstream Aircraft, Inc., P.O. Box 16029, Dulles International Airport, Washington, DC 20041–6029. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on June 6, 1994.

Issued in Renton, Washington, on April 8, 1994.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 94–9004 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–U

---

14 CFR Part 39

[Docket No. 94–NM–53–AD; Amendment 39–8906; AD 94–09–17]

Airworthiness Directives; McDonnell Douglas Model DC–10 Series Airplanes and KC–10A (Military) Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to all McDonnell Douglas Model DC–10 series airplanes and KC–10A (military) airplanes. This action requires inspections to determine the serial numbers and to detect defects in the upper and lower lock links on the nose landing gear (NLG), and rework or replacement of any defective link found. This amendment is prompted by reports of cracking and subsequent failure of certain lock links on these airplanes, which have been attributed to forging defects in the lock links. The actions specified in this AD are intended to prevent collapse of the NLG.

DATES: Effective May 20, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 20, 1994.

Comments for inclusion in the Rules Docket must be received on or before July 5, 1994.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 94–NM–53–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

The service information referenced in this AD may be obtained from McDonnell Douglas Corporation, P.O. Box 1771, Long Beach, California 90801–1771, Attention: Business Unit Manager, Technical Administrative Support, Dept. L51, M.C. 2–98. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Maureen Moreland, Aerospace Engineer, Airframe Branch, ANM–121L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California 90806–2425; telephone (310) 988–5238; fax (310) 988–5210.

SUPPLEMENTARY INFORMATION: The FAA has received a report of cracking and subsequent failure of an upper lock link on the center landing gear (CLG) of a McDonnell Douglas Model MD–11 series airplane. Results of a subsequent analysis attributed the failure to forging defects in the lock link. An investigation conducted by the manufacturer revealed two additional upper links on the CLG with similar forging defects. The lower lock link on the CLG and the upper and lower lock links on the nose landing gear (NLG) are similar in design and are manufactured by the same supplier as the upper lock link on the CLG; therefore, defective lock links could be installed at any of these locations. Failure of the lock links on the CLG would result in collapse of the CLG; collapse of the CLG would not present an unsafe condition. However, cracking and subsequent failure of the lock links on the NLG, if not corrected, could result in collapse of the NLG. This situation could result in reduced controllability of the airplane during takeoff or landing.

The FAA has issued a separate AD to address this unsafe condition on Model MD–11 series airplanes [reference AD 94–09–01, amendment 39–8889 (59 FR 18722, April 20, 1994)]. However, since the NLG lock links used on Model MD–11 series airplanes can also be used on Model DC–10 series airplanes and KC–10A (military) airplanes, the FAA finds that the latter airplane models also are subject to the identified unsafe condition.

The FAA has reviewed and approved McDonnell Douglas DC–10 Alert Service Bulletin A32–237, dated April 11, 1994, that describes procedures for a visual inspection to determine the serial numbers of the upper and lower NLG lock links; an eddy current inspection to detect defects in suspect lock links; and rework of any defective lock link found, or replacement of any defective lock link with a servicable link. Reworking or replacing the lock links will minimize the possibility of failure of the lock links on NLG and subsequent collapse of a landing gear.

Since an unsafe condition has been identified that is likely to exist or develop on other Model DC–10 series airplanes and KC–10A (military) airplanes of the same type design, this AD is being issued to prevent collapse of the NLG. This AD requires inspections to determine the serial numbers and to detect defects in the upper and lower lock links on the NLG, and rework or replacement of any defective link found. The actions are required to be accomplished in accordance with the service bulletin described previously. This AD also requires that operators submit a report of inspection findings to the FAA.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

The required compliance time of 120 days is usually sufficient to allow for a brief comment period before adoption of a final rule. In this AD, however, that compliance time was selected because of a short-term problem with availability of sufficient replacement parts if defects are found; a shorter compliance time might have resulted in the unnecessary removal of airplanes from service pending delivery of replacement parts. Nevertheless, the FAA has determined that immediate adoption is necessary in this case because of the importance of initiating the required inspections as soon as possible.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption **ADDRESSES.** All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 94–NM–53–AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy

of it, if filed, may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–09–17 McDonnell Douglas: Amendment 39–8906. Docket 94–NM–53–AD.

Applicability: All Model DC–10 series airplanes and KC–10A (military) airplanes, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent collapse of the nose landing gear (NLG), accomplish the following:

(a) Within 120 days after the effective date of this AD, perform a visual inspection to determine the serial number of the upper lock links, part number ACG7396–1, and lower lock links, part number ACG7237–1, on the NLG; in accordance with McDonnell Douglas DC–10 Alert Service Bulletin A32–237, dated April 11, 1994.

(b) If the serial number of the lock link coincides with any of the suspect serial numbers listed in McDonnell Douglas DC–10 Alert Service Bulletin A32–237, dated April 11, 1994, perform an eddy current inspection to detect defects in the suspect lock link, in accordance with the alert service bulletin.

(c) If any defect is found, prior to further flight, accomplish either paragraph (c)(1) or (c)(2) of this AD in accordance with McDonnell Douglas DC–10 Alert Service Bulletin A32–237, dated April 11, 1994.

(1) Rework the lock link. Or

(2) Replace the defective lock link with a serviceable lock link that has been inspected in accordance with paragraphs (a) and (b) of this AD, or that has been reworked in accordance with paragraph (c)(1) of this AD.

(d) Within 10 days after accomplishing the inspection required by paragraph (b) of this AD, submit a report of inspection findings to the Manager, Los Angeles Aircraft Certification Office (ACO), 3229 East Spring Street, Long Beach, California 90806–2425; fax (310) 988–5210. The report must include the inspection results, a description of any discrepancy found, the part numbers of all links inspected, the airplane serial number, and the number of landings and flight hours on the airplane. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*) and have been assigned OMB Control Number 2120–0056.

(e) As of the effective date of this AD, no person shall install an upper lock link, part number ACG7396–1, or a lower lock link, part number ACG7237–1, on the NLG of any airplane unless that lock link has been inspected in accordance with McDonnell Douglas DC–10 Alert Service Bulletin A32–237, dated April 11, 1994.

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

(g) Special flight permits may be issued in accordance with Federal Aviation Regulations (FAR) 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(h) The actions shall be done in accordance with McDonnell Douglas DC–10 Alert Service Bulletin A32–237, dated April 11, 1994. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from McDonnell Douglas Corporation, P.O. Box 1771, Long Beach, California 90801–1771, Attention: Business Unit Manager, Technical Administrative Support, Dept. L51, M.C. 2–98. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(i) This amendment becomes effective on May 20, 1994.

Issued in Renton, Washington, on April 26, 1994.

James V. Devany,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 94–10506 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–U

14 CFR Part 39

[Docket No. 91–ANE–47; Amendment 39–8878; AD 94–08–06]

Airworthiness Directives; Pratt & Whitney JT9D–7R4 Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to Pratt & Whitney JT9D–7R4 series turbofan engines, that requires initial and repetitive fan blade leading edge inspections, and either installation of fan blade sets with modified fan blade shrouds or rework of the fan blade shrouds as a terminating action to the inspections. This amendment is prompted by reports of flutter-induced fan blade fractures. The actions specified by this AD are intended to prevent fan blade fracture and uncontained engine failure, resulting in possible damage to the aircraft.

DATES: Effective July 5, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 5, 1994.

ADDRESSES: The service information referenced in this AD may be obtained from Pratt & Whitney, 400 Main Street, East Hartford, CT 06108. This information may be examined at the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: John Fisher, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299; telephone (617) 238–7149, fax (617) 238–7199.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to Pratt & Whitney (PW) JT9D–7R4 series turbofan engines was published in the **Federal Register** on June 2, 1993 (58 FR 31356). That action proposed to require initial and repetitive on-wing or shop fan blade leading edge inspections to check for leading edge damage in accordance with PW Service Bulletin (SB) No. 72–255, Revision 5, dated January 8, 1990; and to require fan blade set replacement or optional rework of the fan blade shrouds

in accordance with PW SB No. 72–309, Revision 9, dated June 12, 1991. Though the NPRM referenced PW SB No. 72–309, Revision 9, dated June 12, 1991, this final rule incorporates the later Revision 10, dated September 2, 1993, which is substantially unchanged from Revision 9. Rework of the fan blade shrouds in accordance with PW SB No. 72–309, Revision 9, dated June 12, 1991, is an acceptable alternate means of compliance for paragraphs (c) and (d) of this AD.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

One comment states that the proposed 90-day requirement for initializing the inspection program poses a significant hardship and economic impact due to difficulty in scheduling engine maintenance. This comment requests extending the initializing period to 180 days. The Federal Aviation Administration (FAA) agrees that the proposed initial 90-day eddy current inspection requirement may be burdensome to some operators. The FAA has therefore added a visual inspection as an option to the eddy current inspection in this final rule. This visual inspection offers greater flexibility in scheduling as it can easily be performed in the field. The FAA does not concur, however, in extending the initializing period to 180 days, as this time period does not offer an adequate level of safety based on risk analysis results. This final rule establishes an interval of 200 cycles in service (CIS) before visual or eddy current inspection that should enable operators to initialize the inspection program with minimum disruption to scheduling without reducing flight safety. Also, the FAA has added guidance emphasizing the manner in which the visual inspection should be performed.

One comment requests eliminating the reference in paragraphs (a) and (b) of the proposed rule to the leading edge refurbishment described in PW Service Bulletin (SB) No. 72–117, as the determining factor for beginning the inspection program. The comment further states that a previous AD, 90–14–08, already requires the leading edge refurbishment described in PW SB No. 72–117, and therefore meets the intent of paragraphs (a) and (b) of the proposed rule. The FAA concurs. Repetitive leading edge refurbishment as described in PW SB No. 72–117 is already required by AD 90–14–08. The compliance section of this AD has been changed from the wording in the NPRM to eliminate reference to leading edge refurbishment, and combines paragraphs (a) and (b) of the proposed rule into a new paragraph (a) which has the same inspection requirements and interval of 200 CIS as the repetitive inspections of paragraph (c) of the proposed rule.

One comment states that the mandatory incorporation of the fan blade shroud angle rework to 52 degrees as described in PW SB No. 72–309 should be relaxed from within two years after the effective date of this AD to the next engine shop visit, thereby reducing the potential for on-wing maintenance induced error. The FAA does not concur. The FAA has determined that it is necessary to expeditiously remove fan blades with the 62 degree shroud configuration, thereby reducing the potential for operating the fan blade in flutter. The FAA has reviewed a risk analysis study that indicates that a two-year time period for incorporating this modification is required to lower the risk sufficiently to avert future potential uncontained fan blade failures.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

There are approximately 730 PW JT9D–7R4 series engines of the affected design in the worldwide fleet. The FAA estimates that 220 engines installed on aircraft of U.S. registry would be affected by this AD, and that the average labor rate is $55 per work hour. The inspections required by this AD will take approximately 1.6 work hours per engine. The blade rework will cost approximately $15,600 per engine. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $3,451,360.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air Transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–08–06 Pratt & Whitney: Amendment 39–8878. Docket 91–ANE–47.

Applicability: Pratt & Whitney (PW) JT9D–7R4 series turbofan engines installed on but not limited to Boeing Models 747 and 767 aircraft, and Airbus Models A300 and A310 aircraft.

Compliance: Required as indicated, unless accomplished previously.

To prevent fan blade fracture and uncontained engine failure, resulting in possible damage to the aircraft, accomplish the following:

(a) Perform an initial visual or eddy current inspection of the fan blade set leading edges for leading edge damage within 200 cycles in service (CIS) after the effective date of this AD, and rework or replace fan blades as necessary, in accordance with the Accomplishment Instructions of PW Service Bulletin (SB) No. 72–255, Revision 5, dated January 8, 1990. Perform the fan blade leading edge visual inspections using a strong white light, as well as fingernails and fingertips when inspecting for nicked, eroded, or blunt leading edges.

(b) Thereafter, perform repetitive visual or eddy current fan blade leading edge inspections, at intervals not to exceed 200 CIS, and rework or replace fan blades as necessary, in accordance with the Accomplishment Instructions of PW SB No. 72–255, Revision 5, dated January 8, 1990. Perform the fan blade leading edge visual

inspections using a strong white light, as well as fingernails and fingertips when inspecting for nicked, eroded, or blunt leading edges.

(c) For PW Model JT9D-7R4H1 engines, install a new or reworked fan blade set with a 52 degree shroud angle, in accordance with PW SB No. 72-309, Revision 10, dated September 2, 1993, within 1 year after the effective date of this AD.

(d) For PW Models JT9D-7R4D, D1, E, E1, G2, and E4 engines, install a new or reworked fan blade set with a 52 degree shroud angle, in accordance with PW SB No. 72-309, Revision 10, dated September 2, 1993, within 2 years after the effective date of this AD.

(e) Installation of a new or reworked fan blade set with a 52 degree fan blade shroud angle, in accordance with paragraphs (c) or (d) of this AD, constitutes a terminating action to the inspection requirements of paragraphs (a) and (b) of this AD.

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

Note: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Certification Office.

(g) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(h) The modification and inspections shall be done in accordance with the following service bulletins:

Document No.	Pages	Revision	Date
PW SB No. 72-255	1-2	5	Jan. 8, 1990.
	3-4	4	Aug. 25, 1988.
	5	5	Jan. 8, 1990.
	6-8	3	Aug. 17, 1987.
Total Pages: 8.			
PW SB No. 72-309	1	10	Sept. 2, 1993.
	2	8	Apr. 5, 1989.
	3-4	9	Jun. 12, 1991.
	5	(1)	Oct. 2, 1986.
	6	1	Nov. 7, 1986.
	7	5	Jul. 22, 1987.
	8-10	8	Apr. 5, 1989.
	11	10	Sept. 2, 1993
	12-18	8	Apr. 5, 1989
	19-20	10	Sept. 2, 1993
	21	8	Apr. 5, 1989
Total Pages: 21.			

[1] Original.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Pratt & Whitney, 400 Main Street, East Hartford, CT 06108. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(i) This amendment becomes effective on July 5, 1994.

Issued in Burlington, Massachusetts, on April 5, 1994.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 94-10394 Filed 5-4-94; 8:45 am]

BILLING CODE 4910-13-P

---

14 CFR Part 39

[Docket No. 94-ANE-04; Amendment 39-8808; AD 94-03-02]

Airworthiness Directives; Pratt & Whitney Canada PW100 Series Turboprop Engines; C

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document makes a correction to Airworthiness Directive (AD) 94-03-02 applicable to Pratt & Whitney Canada PW100 series turboprop engines that was published in the **Federal Register** on February 1, 1994 (59 FR 4565). The AD number and date for the Canadian AD referenced in the SUPPLEMENTARY INFORMATION is incorrect. This document corrects that number and date. In all other respects, the original document remains the same.

EFFECTIVE DATE: February 16, 1994.

SUPPLEMENTARY INFORMATION: A final rule airworthiness directive applicable to Pratt & Whitney Canada (PWC) Model PW118, PW118A, PW120, PW120A, PW121, PW123, PW124B, and PW125B turboprop engines, was published in the **Federal Register** on Tuesday, February 1, 1994 (59 FR 4565). The following correction is needed:

On page 4566, in the first column, in the SUPPLEMENTARY INFORMATION, in the second paragraph, in the second line, "XX, dated January XX" should read "01, dated January 5."

Issued in Burlington, MA, on April 20, 1994.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 94-10504 Filed 5-4-94; 8:45 am]

BILLING CODE 4910-13-P

---

14 CFR Part 39

[Docket No. 92-ANE-50; Amendment 39-8896; AD 94-09-07]

Airworthiness Directives; Teledyne Continental Motors IO-346, IO-520, and IO-550 Series Piston Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Teledyne Continental Motors (TCM) IO-346, IO-520, and IO-550 series piston engines, that requires initial and repetitive inspections of the engine mount brackets for cracks, and if found cracked, replacement with improved design engine mount brackets. All engine mount brackets require replacement with improved design

engine mount brackets at the next engine removal after the effective date of this AD. This amendment is prompted by reports of cracks in engine mount brackets on engines that have completed at least one overhaul cycle. The actions specified by this AD are intended to prevent engine separation from the aircraft due to cracks in the engine mount brackets.

DATES: Effective July 5, 1994.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 5, 1994.

ADDRESSES: The service information referenced in this AD may be obtained from Teledyne Continental Motors, P.O. Box 90, Mobile, AL 36601; telephone (205) 438–3411. This information may be examined at the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Jerry Robinette, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, Small Airplane Directorate, 1669 Phoenix Parkway, suite 210C, Atlanta, GA 30349; telephone (404) 991–3810, fax (404) 991–3606.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to Teledyne Continental Motors (TCM) IO–346, IO–520, and IO–550 series piston engines was published in the **Federal Register** on October 20, 1993 (58 FR 54072). That action proposed to require initial and repetitive dye penetrant inspections for cracks in certain lower left engine mount brackets, Part Number (P/N) 630695. If the lower left engine mount bracket is found cracked, that proposed rule would require replacing both the lower left and lower right engine mount brackets with improved design engine mount brackets, P/N 653306 and 653305, respectively. If a crack is not detected, the lower left engine mount bracket would require repetitive inspections at intervals not to exceed 500 hours time in service (TIS) until the next engine removal, at which time engine mount brackets, P/N 630694 and 630695, would be replaced with improved design engine mount brackets, P/N 653306 and 653305. Installation of these improved design engine mount brackets would constitute terminating action to the inspection requirements of that AD. The actions would be required to be accomplished in accordance with TCM Service Bulletin (SB) No. M92–13, dated September 4, 1992.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the one comment received.

The commenter supports the proposed rule but states that the interval for the repetitive inspections should be reduced from 500 hours TIS to 100 hours TIS. The commenter states that if the bracket is found broken, the airframe engine mount and surrounding areas should be inspected for damage and the upper brackets and all bolts and nuts should be replaced as they may be overstressed. The commenter further states that the pilot should visually inspect the brackets on each preflight.

The FAA does not concur with the recommendation to reduce the repetitive inspection interval to 100 hours TIS. Data provided from the manufacturer indicates that the repetitive inspection interval of 500 hours TIS is sufficient once the initial inspection is satisfactorily completed.

The FAA does not concur with the commenter's recommendation to inspect the airframe engine mount and surrounding areas for damage and to replace all bolts and nuts if the bottom brackets are found broken. Once the bottom brackets are broken, there is essentially no load being transmitted to the lower airframe structure. In addition, a structural analysis of the bolt strength indicates that with only the two upper mounts securing the engine, safety factors exceed required values for normal category "g" loading. Therefore, none of the bolts and nuts should be overstressed.

The FAA does not concur with the commenter's recommendation to require the pilot to visually inspect the brackets on each preflight. Based on the data presented above, the FAA has determined that it is not necessary to inspect the brackets on each preflight.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

There are approximately 9,750 TCM IO–346, IO–520, and IO–550 series piston engines of the affected design in the worldwide fleet. The FAA estimates that 8,300 engines installed on aircraft of U.S. registry will be affected by this AD, that it will take approximately 2 work hours per inspection, and if the engine mount brackets must be replaced, an additional 4 work hours will be required. The average labor rate is $55 per work hour. Required parts will cost approximately $320 per engine. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $5,395,000.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air Transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–09–07 Teledyne Continental Motors: Amendment 39–8896. Docket 92–ANE–50.

Applicability: Teledyne Continental Motors (TCM) engine models IO–346A, IO–346B, IO–520C, IO–520CB, and IO–550C; rebuilt engine model IO–520C with serial numbers (S/N) 287051–R and lower; rebuilt engine model IO–520CB with S/N 282226–R and lower; rebuilt engine model IO–550C with S/N 271742–R and lower; and all

factory overhauled IO–520C, IO–520CB, and IO–550C engines with a build date prior to August 6, 1992. These engines are installed on but not limited to Beech model A23, A23A, 95–C55, 95–C55A, D55, D55A, E55, E55A, 58, and 58A airplanes.

Compliance: Required as indicated, unless accomplished previously.

To prevent engine separation from the aircraft due to cracks in the engine mount brackets, accomplish the following:

(a) For engines with engine mount brackets that have completed at least one engine overhaul cycle, or have accumulated 2,500 or more hours time in service (TIS) on the effective date of this AD, inspect the lower left engine mount bracket, Part Number (P/N) 630695, for cracks using the dye penetrant techniques specified in this paragraph and in accordance with TCM Service Bulletin (SB) No. M92–13, dated September 4, 1992, within the next 50 hours TIS after the effective date of this AD.

(1) Perform the dye penetrant inspection as follows:

Note: Military Specification MIL-I–6866 and American Society of Testing Materials specifications ASTM E1417–93 and E165–9 contain additional information on dye penetrant inspection processes.

(i) *Preparation:* clean and dry all parts in such a manner as to leave the surfaces free from grease, oil, soaps, alkalies, and other substances which would interfere with inspection. Vapor degreasing is generally suitable for this purpose.

(ii) *Penetrant Application Procedure:* after preparation, spray or brush the parts with the penetrant, and allow to stand for not less than 5 minutes. The effectiveness of the penetrant increases if left standing for a longer time, as the penetrant will reach finer discontinuities.

(iii) *Penetrant Cleaning:* clean the parts thoroughly using a medium which will remove penetrant from the surfaces of parts; wash with water when the penetrant is water soluble. When other than water soluble penetrants are used, the penetrant shall be removed with a suitable cleaner. Avoid excessive cleaning which would remove the penetrant from discontinuities.

(iv) *Drying:* dry the parts as thoroughly as possible. Drying of parts may be accomplished by evaporation at room temperature or by placing the parts in a circulating warm air oven or in the air stream of a hot air dryer. Avoid excessive drying time or drying temperatures above 75°C (165°F) to prevent excessive evaporation of the penetrant. If heat is used for drying parts, cool parts to approximately 50°C (120°F) before proceeding to the developing procedure.

(v) *Developing:* apply the developer to the dry parts as lightly and as evenly as possible, using as thin a coating of developer as is possible. A translucent film is adequate. Mix wet developer by agitation immediately prior to applying it. After applying the developer, take care that no penetrant indication is disturbed or obliterated in subsequent handling.

(vi) *Examination:* examine the developed penetrant indications in accordance with the dye penetrant manufacturer's instructions. Examine parts for indications of discontinuities open to the surface.

(vii) *Final cleaning:* clean the parts following the inspection to remove penetrant and developer.

Note 1: *Caution:* Because of differences among penetrants, take care to ensure that the final cleaner, the penetrant, the penetrant remover, and the developer are suitable for use with each other.

Note 2: *Caution:* All penetrant materials should be kept as free from moisture as possible.

Note 3: *Caution:* Most penetrants, cleaning agents, and developer suspensions are low flash point material; use caution to prevent fires.

(2) If no crack is detected, inspect in accordance with paragraph (a) of this AD at intervals not to exceed 500 hours TIS since the last inspection.

(3) If a crack is detected, prior to further flight replace both the lower left engine mount bracket, P/N 630695, and lower right engine mount bracket, P/N 630694, with improved design engine mount brackets, P/N 653306 and 653305, respectively.

(b) For all engines, replace both the lower left engine mount bracket, P/N 630695, and lower right engine mount bracket, P/N 630694, with improved design engine mount brackets, P/N 653306 and 653305, respectively, at the next engine removal after the effective date of this AD.

(c) Installation of the improved design engine mount brackets, P/N 653306 and 653305, constitutes terminating action to the inspection requirements of this AD.

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office. The request should be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta Aircraft Certification Office.

Note: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Atlanta Aircraft Certification Office.

(e) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the aircraft to a location where the requirements of this AD can be accomplished.

(f) The inspection and replacement shall be done in accordance with the following service bulletin:

Document No.	Pages	Revision	Date
TCM SB M92–13 ..... Total Pages: 2.	1–2	Original	Sept. 4, 1992.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Teledyne Continental Motors, P.O. Box 90, Mobile, AL 36601; telephone (205) 438–3411. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

(g) This amendment becomes effective on July 5, 1994.

Issued in Burlington, Massachusetts, on April 19, 1994.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 94–10500 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–P

14 CFR Part 39

[Docket No. 94–ANE–12; Amendment 39–8895; AD 94–06–09]

Airworthiness Directives; Teledyne Continental Motors (Formerly Bendix) Magnetos

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule, request for comments.

SUMMARY: This document publishes in the **Federal Register** an amendment adopting airworthiness directive (AD) 94–06–09 that was sent previously to all known U.S. owners and operators of Teledyne Continental Motors (TCM) (formerly Bendix) SC–20, SC–200, and S–1200 series magnetos by individual letters. This AD requires inspection to determine if capacitors that may have an intermittent open circuit condition are installed in magnetos, and replacement, if necessary, with serviceable capacitors. This amendment is prompted by reports that TCM produced and delivered magneto capacitors that have the potential for an intermittent open circuit condition that may exist between the internal through-lead and the p-lead stud terminal. The actions specified by this AD are intended to prevent possible injury or death to ground personnel due to a non-grounded magneto.

DATES: Effective May 20, 1994, to all persons except those persons to whom it was made immediately effective by priority letter AD 94–06–09, issued on

March 9, 1994, which contained the requirements of this amendment.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 20, 1994.

Comments for inclusion in the Rules Docket must be received on or before July 5, 1994.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 94–ANE–12, 12 New England Executive Park, Burlington, MA 01803–5299.

The applicable service information may be obtained from Teledyne Continental Motors, P.O. Box 90, Mobile, AL 36601; telephone (205) 438–3411. This information may be examined at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Jerry Robinette, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, Small Airplane Directorate, 1669 Phoenix Parkway, suite 210C, Atlanta, GA 30349; telephone (404) 991–3810, fax (404) 991–3606.

SUPPLEMENTARY INFORMATION: On March 9, 1994, the Federal Aviation Administration (FAA) issued priority letter airworthiness directive (AD) 94–06–09, applicable to Teledyne Continental Motors (TCM) (formerly Bendix) SC–20, SC–200, and S–1200 series magnetos, which requires inspection to determine if capacitors that may have an intermittent open circuit condition are installed in magnetos, and replacement, if necessary, with serviceable capacitors. That action was prompted by reports that TCM produced and delivered magneto capacitors, Part Number (P/N) 10–349276, which have the potential for an intermittent open circuit condition that may exist between the internal through-lead and the p-lead stud terminal. The potential open circuit condition was initially discovered during a production engine test run at TCM. Further investigation revealed this problem to be limited to two lot numbers, 93–40 and 93–42, approximately 500 capacitors total. To date 241 of the capacitors have been found and taken out of service. These parts were used in magnetos produced at TCM for company use, Textron Lycoming use, after market sales, and for individual capacitors sold as spares to the field after October 27, 1993. These individual replacement parts can be fitted into TCM or Bendix magnetos.

A capacitor with the intermittent open circuit condition described can result in a "hot mag" (i.e. the magneto is not grounded when the ignition/magneto switch is placed in the off position). The magneto is therefore capable of producing ignition, and if the propeller is moved with some residual fuel left in the cylinders, the engine could start momentarily. This momentary engine start could turn the propeller with enough force to cause injury or death to ground personnel struck by the turning propeller. Capacitors with an intermittent open circuit condition may show no revolutions per minute (RPM) drop-off during the magneto check prior to flight. This condition, if not corrected, could result in possible injury or death to ground personnel due to a non-grounded magneto.

The FAA has reviewed and approved the technical contents of TCM Critical Service Bulletin (CSB) 641, dated February 1, 1994, that describes procedures for determining if magnetos contain capacitors, P/N 10–349276, that may have an intermittent open circuit condition.

Since the unsafe condition described is likely to exist or develop on other products of the same type design, the FAA issued priority letter AD 94–06–09 to prevent possible injury or death to ground personnel due to a non-grounded magneto. The AD requires inspection within 10 hours time in service after the effective date of this AD to determine if affected capacitors are installed in magnetos, and replacement, if necessary, with serviceable capacitors. All affected magnetos must be metal stamped with the letter "E" to show compliance. The actions are required to be accomplished in accordance with the service bulletin described previously.

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD effective immediately by individual letters issued on March 9, 1994, to all known U.S. owners and operators of TCM (formerly Bendix) SC–20, SC–200, and S–1200 series magnetos installed on but not limited to reciprocating engine powered Beech, Cessna, Maule, Mooney, Piper, and Robinson aircraft. These conditions still exist, and the AD is hereby published in the **Federal Register** as an amendment to § 39.13 of part 39 of the Federal Aviation Regulations (FAR) to make it effective to all persons.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 94–ANE–12." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26,

1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

94–06–09 Teledyne Continental Motors: Amendment 39–8895. Docket 94–ANE–12.

Applicability: Teledyne Continental Motors (TCM) (formerly Bendix) magnetos new and rebuilt TCM Model SC–20, Part Number (P/N) 10–500XXX–X series; Model SC–200, P/N 10–600XXX–X series; and Model S–1200, P/N 10–349XXX–X series, magnetos with Serial Numbers (S/N) J2793XXX(R) through J3193XXX(R), K0193XXX(R) through K3093XXX(R) and L0193XXX(R) through L2293XXX(R) inclusive, with capacitor, P/N 10–349276, with date code 93–40 or 93–42. In addition, all TCM Model SC–20, P/N 10–500XXX–X series; SC–200, P/N 10–600XXX–X series; and S–1200, P/N 10–349XXX–X series, magnetos that have capacitor, P/N 10–349276, identified with date code 93–40 or 93–42, installed after October 27, 1993. Also, any TCM or Bendix magneto regardless of serial number that was fitted after October 27, 1993, with capacitors P/N 10–349276, sold as individual replacement parts with date code 93–40 or 93–42. These magnetos are installed on but not limited to reciprocating engine powered Beech, Cessna, Maule, Mooney, Piper, and Robinson aircraft.

Note: The "X" represents numbers in the P/N and S/N that have no significance in determining applicability: Only the first five digits are needed. The "(R)" at the end of the S/N indicates a rebuilt magneto. The absence of an "(R)" indicates a new magneto.

Compliance: Required as indicated, unless accomplished previously.

To prevent possible injury or death to ground personnel due to a non-grounded magneto, accomplish the following:

Note: Warning: Do not move propellers by hand on engines that may contain affected capacitors until the inspection procedures required by this airworthiness directive (AD) are completed. Ground personnel should avoid the propeller arc.

(a) Within the next 10 hours time in service after the effective date of this AD, inspect affected magnetos for the presence of capacitor P/N 10–349276, in accordance with the Detailed Instructions, paragraphs 1, 1.1, and 1.2 of TCM Critical Service Bulletin (CSB) 641, dated February 1, 1994, and, if necessary, replace with a serviceable part as follows:

(1) If the capacitor is marked with a date code other than 93–40 or 93–42, reinstall the capacitor in the magneto and metal stamp the letter "E" in accordance with the Identification paragraph of TCM CSB641, dated February 1, 1994, to show compliance with this AD. No further action is required.

(2) If the capacitor is marked with either date code 93–40 or 93–42, replace with a serviceable capacitor of the same P/N but with a date code other than 93–40 or 93–42, and metal stamp the letter "E" in accordance with the Identification paragraph of TCM CSB641, dated February 1, 1994, to show compliance with this AD.

(b) Prior to installation, inspect uninstalled capacitor, P/N 10–349276, and replace, if necessary, with a serviceable part, in accordance with the Detailed Instruction, paragraph 2.1 of TCM CSB641, dated February 1, 1994.

Note: TCM Critical Service Bulletin CSB94–1 dated February 1, 1994, and Lycoming Service Bulletin 517 dated February 25, 1994, refers to this subject.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office. The request should be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta Aircraft Certification Office.

Note: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Atlanta Aircraft Certification Office.

(d) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the aircraft to a location where the requirements of this AD can be accomplished.

(e) The inspections shall be done in accordance with the following service bulletin:

Document No.	Pages	Revision	Date
TCM CSB641 ..... Total pages: 2.	1–2	Original	Feb. 1, 1994.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Teledyne Continental Motors, P.O. Box 90, Mobile, AL 36601; telephone (205) 438–3411. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective May 20, 1994, to all persons except those persons to whom it was made immediately effective by priority letter AD 94–06–09, issued March 9, 1994, which contained the requirements of this amendment.

Issued in Burlington, Massachusetts, on April 19, 1994.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 94–10366 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Parts 25 and 602

[TD 8536]

RIN 1545–AM86

Adjustments Under Special Valuation Rules

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Final regulations.

SUMMARY: This document contains final regulations providing for an adjustment in computing the Federal estate or gift

tax imposed on the transfer of interests to which the special valuation rules of section 2701 of the Internal Revenue Code previously applied. This document also contains a technical amendment to the final regulations under section 2702 pertaining to short taxable years of trusts. Changes to the applicable law were made by the Omnibus Budget Reconciliation Act of 1990 (the 1990 Act). The final regulations provide needed guidance for taxpayers to comply with the 1990 Act.

EFFECTIVE DATE: May 4, 1994.

FOR FURTHER INFORMATION CONTACT: Fred E. Grundeman, (202) 622–3090 (not a toll-free telephone number).

SUPPLEMENTARY INFORMATION:

Paperwork Reduction Act

The collection-of-information requirements contained in the final regulations under sections 2701(e)(6) and 2702 have been reviewed and approved by the Office of Management and Budget in accordance with the requirements of the Paperwork Reduction Act (44 U.S.C. 3504(h)) under control number 1545–1273. The estimated average annual burden per recordkeeper attributable to these final regulations is two minutes. The estimated average annual burden per respondent attributable to these final regulations is ten minutes.

These estimates approximate the average time expected to be necessary for the collection of information. They are based upon the information available to the IRS and do not include an estimate of annual burden per recordkeeper applicable to Forms 706 and 709. Individual respondents and recordkeepers may require more or less time depending on their particular circumstances.

Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be sent to the Internal Revenue Service, Attn: IRS Reports Clearance Officer, PC:FP, Washington, DC 20224, and to the Office of Management and Budget, Attn: Desk Officer for the Department of the Treasury, Office of Information and Regulatory Affairs, Washington, DC 20503.

Background

Proposed Regulations

Proposed § 25.2701–5 (relating to adjustments to mitigate double taxation) was published in the **Federal Register** on February 4, 1992. This document adopts final regulations under § 25.2701–5.

Mitigation of Effects of Double Taxation

Section 2701 of the Internal Revenue Code (Code) provides special valuation rules to determine the amount of the gift when an individual transfers an equity interest in a corporation or partnership to a member of the individual's family. For section 2701 to apply, the transferor or an applicable family member must, immediately after the transfer, hold an equity interest having liquidation rights or distribution rights that are preferential to the rights of the transferred interest (an applicable retained interest).

If section 2701 applies to a transfer, the amount of the transferor's gift is determined using a subtraction method of valuation. Generally, in determining the value of any applicable retained interest held by the transferor or an applicable family member, liquidation rights and certain distribution rights in a controlled entity are valued at zero.

Section 2701(e)(6) provides that if there is a subsequent transfer or inclusion in the gross estate of any applicable retained interest that was valued under the rules of section 2701, appropriate adjustments are to be made, pursuant to regulations, to reflect the increase in the amount of any prior taxable gift made by the transferor or decedent by reason of such valuation.

The proposed regulations mitigate the effect of double taxation through a reduction to a decedent's adjusted taxable gifts. In general, the amount of the reduction is the lesser of: (1) The amount by which the transferor's taxable gifts were increased as a result of the application of section 2701 to the initial transfer, or (2) the amount by which the individual's taxable transfers were increased as a result of not applying the valuation rules of section 2701 upon the subsequent transfer of the applicable retained interest.

Under certain circumstances, the proposed regulations provide that the transferor's spouse is treated as the transferor for purposes of making the adjustment. However, because a transferor will often acquire (by gift, inheritance, or purchase) an applicable retained interest initially held by an applicable family member and because of the administrative complexity inherent in allowing assignability of the adjustment between the transferor and any other applicable family member, the proposed regulations do not provide for an adjustment by any individual other than the transferor or the transferor's spouse.

Potential for Loss of Benefit

One commentator argued that some taxpayers will be deprived of the benefit of the adjustment if it is not: (1) Available for lifetime transfers, and (2) freely assignable to all applicable family members. In response to this comment, the final regulations adopt a rule generally allowing the adjustment in the computation of the transferor's gift tax if either the transferor or an applicable family member transfers an applicable retained interest to or for the benefit of an individual other than the transferor or an applicable family member.

In addition, if the applicable retained interest has not been so transferred prior to the death of the transferor, the executor of the transferor's estate is entitled to make the adjustment in computing the transferor's estate tax provided that the executor can demonstrate the fair market value of the applicable retained interest as of the date of death of the transferor.

However, after carefully considering the merits of a freely assignable adjustment, the IRS and the Treasury have determined that in light of the relief otherwise provided, the administrative complexity involved in tracking the adjustment would far outweigh the additional benefit that would be gained therefrom.

"Purge" Method

One commentator argued that double taxation is avoided only if the adjustment produces no greater tax than would be produced if the initial transfer had not been made (and the value of the entity did not change prior to the transferor's death). In the view of this commentator, section 2701 requires prepayment of transfer tax as the "cost" of a corporate or partnership freeze. Under this view, the section 2701(e)(6) adjustment would be accomplished through a mechanism whereby the transferor's transfer tax base is "purged" of the effect of section 2701.

The final regulations continue the approach of the proposed regulations in that they provide the same relief as that advocated above except in those cases where the retained interest declines in value between the date of the initial transfer and the date of the subsequent transfer. Because a reduction in the value of the entity may occur as the result of indirect (hard to detect) transfers to younger generations, the IRS and the Treasury believe that adoption of the purge method is inconsistent with the purpose of section 2701 and would perpetuate the abuses Congress sought to eliminate.

Split Gifts

The proposed regulations provide that the effects of section 2513 (pertaining to gift splitting between spouses) are to be

ignored in making the adjustment under section 2701(e)(6). One commentator argued that part of the adjustment could be lost depending upon which spouse died first. In response to this comment, the final regulations provide adjustments for split gifts that are generally consistent with the principles of section 2001(d) and (e) (pertaining to the treatment of split gifts in the computation of the estate tax).

Transfers to Spouse

Under the proposed regulations, the transfer of an applicable retained interest to the transferor's spouse results in the automatic assignment of the adjustment to the spouse. One commentator argued that this automatic assignment will result in loss of the adjustment if the spouse has not made sufficient prior gifts. Under the final regulations, the adjustment is not assigned to the spouse but, instead, is generally available to the transferor or the executor of the transferor's estate.

Effect on Prior Section 2701 Transfers

The final regulations are effective with respect to section 2701 interests transferred after May 4, 1994. For section 2701 transfers occurring on or before May 4, 1994, taxpayers may rely on the final regulations, the previously proposed regulations or any other reasonable interpretation of the statute.

Final Regulations Under Section 2702

The final regulations contain a technical amendment to the regulations under section 2702 pertaining to the governing instrument requirements for qualified interests under section 2702. The amendment, pertaining to the treatment of short taxable years, simplifies the valuation of an annuity or unitrust interest by eliminating the need to pro-rate the first year's payment in the case of a short taxable year.

Special Analyses

It has been determined that this Treasury decision is not a significant regulatory action as defined in EO 12866. Therefore, regulatory assessment is not required. It has also been determined that section 553(b) of the Administrative Procedures Act (5 U.S.C. chapter 5) and the Regulatory Flexibility Act (5 U.S.C. chapter 6) do not apply to these regulations, and, therefore, a Regulatory Flexibility Analysis is not required. Pursuant to section 7805(f) of the Internal Revenue Code, the notice of proposed rulemaking preceding these regulations was submitted to the Small Business Administration for comment on its impact on small business.

Drafting Information

The principal author of these regulations is Fred E. Grundeman, Office of Chief Counsel, IRS. Other personnel from the IRS and Treasury Department participated in their development.

List of Subjects

26 CFR Part 25

Gift taxes, Reporting and recordkeeping requirements.

26 CFR Part 602

Reporting and recordkeeping requirements

Adoption of Amendments to the Regulations

Accordingly, 26 CFR parts 25 and 602 are amended as follows:

PART 25—GIFT TAX; GIFTS MADE AFTER DECEMBER 31, 1954

Paragraph 1. The authority citation for part 25 is amended by adding an entry in numerical order to read as follows:

Authority: 26 U.S.C. 7805 * * *. Section 25.2701–5 also issued under 26 U.S.C. 2701(e)(6).* * *

Par. 2. In § 25.2701–0, table of contents entries are added under § 25.2701–5 to read as follows:

§ 25.2701–0 Table of contents.

* * * * *

§ 25.2701–5 Adjustments to mitigate double taxation.

(a) Reduction of transfer tax base.
(1) In general.
(2) Federal gift tax modification.
(3) Federal estate tax modification.
(4) Section 2701 interest.
(b) Amount of reduction.
(c) Duplicated amount.
(1) In general.
(2) Transfer tax value—in general.
(3) Special transfer tax value rules.
(d) Examples.
(e) Computation of reduction if initial transfer is split under section 2513.
(1) In general.
(2) Transfers during joint lives.
(3) Transfers at or after death of either spouse.
(f) Examples.
(g) Double taxation otherwise avoided.
(h) Effective date.

* * * * *

Par. 3. In § 25.2701–1, paragraph (a)(1) is amended by adding a sentence at the end to read as follows:

§ 25.2701–1 Special valuation rules in the case of transfers of certain interests in corporations and partnerships.

(a) * * *

(1) * * * Section 25.2701–5 provides an adjustment to mitigate the effects of double taxation when an applicable retained interest is subsequently transferred.

* * * * *

Par. 4. Text is added to § 25.2701–5 to read as follows:

§ 25.2701–5 Adjustments to mitigate double taxation.

(a) *Reduction of transfer tax base*—(1) *In general.* This section provides rules under which an individual (the initial transferor) making a transfer subject to section 2701 (the initial transfer) is entitled to reduce his or her taxable gifts or adjusted taxable gifts (the reduction). The amount of the reduction is determined under paragraph (b) of this section. See paragraph (e) of this section if section 2513 (split gifts) applied to the initial transfer.

(2) *Federal gift tax modification.* If, during the lifetime of the initial transferor, the holder of a section 2701 interest (as defined in paragraph (a)(4) of this section) transfers the interest to or for the benefit of an individual other than the initial transferor or an applicable family member of the initial transferor in a transfer subject to Federal estate or gift tax, the initial transferor may reduce the amount on which the initial transferor's tentative tax is computed under section 2502(a). The reduction is first applied on any gift tax return required to be filed for the calendar year in which the section 2701 interest is transferred; any excess reduction is carried forward and applied in each succeeding calendar year until the reduction is exhausted. The amount of the reduction that is used in a calendar year is the amount of the initial transferor's taxable gifts for that year. Any excess reduction remaining at the death of the initial transferor may be applied by the executor of the initial transferor's estate as provided under paragraph (a)(3) of this section. See paragraph (a)(4) of this section for the definition of a section 2701 interest. See § 25.2701–6 for rules relating to indirect ownership of equity interests transferred to trusts and other entities.

(3) *Federal estate tax modification.* Except as otherwise provided in this paragraph (a)(3), in determining the Federal estate tax with respect to an initial transferor, the executor of the initial transferor's estate may reduce the amount on which the decedent's tentative tax is computed under section 2001(b) (or section 2101(b)) by the amount of the reduction (including any excess reduction carried forward under paragraph (a)(2) of this section). The amount of the reduction under this paragraph (a)(3) is limited to the amount that results in zero Federal estate tax

with respect to the estate of the initial transferor.

(4) *Section 2701 interest.* A section 2701 interest is an applicable retained interest that was valued using the special valuation rules of section 2701 at the time of the initial transfer. However, an interest is a section 2701 interest only to the extent the transfer of that interest effectively reduces the aggregate ownership of such class of interest by the initial transferor and applicable family members of the initial transferor below that held by such persons at the time of the initial transfer (or the remaining portion thereof).

(b) *Amount of reduction.* Except as otherwise provided in paragraphs (c)(3)(iv) (pertaining to transfers of partial interests) and (e) (pertaining to initial split gifts) of this section, the amount of the reduction is the lesser of—

(1) The amount by which the initial transferor's taxable gifts were increased as a result of the application of section 2701 to the initial transfer; or

(2) The amount (determined under paragraph (c) of this section) duplicated in the transfer tax base at the time of the transfer of the section 2701 interest (the duplicated amount).

(c) *Duplicated amount*—(1) *In general.* The duplicated amount is the amount by which the transfer tax value of the section 2701 interest at the time of the subsequent transfer exceeds the value of that interest determined under section 2701 at the time of the initial transfer. If, at the time of the initial transfer, the amount allocated to the transferred interest under § 25.2701–3(b)(3) (*Step 3* of the valuation methodology) is less than the entire amount available for allocation at that time, the duplicated amount is a fraction of the amount described in the preceding sentence. The numerator of the fraction is the amount allocated to the transferred interest at the time of the initial transfer (pursuant to § 25.2701–3(b)(3)) and the denominator of the fraction is the amount available for allocation at the time of the initial transfer (determined after application of § 25.2701–3(b)(2)).

(2) *Transfer tax value—in general.* Except as provided in paragraph (c)(3) of this section, for purposes of paragraph (c)(1) of this section the transfer tax value of a section 2701 interest is the value of that interest as finally determined for Federal transfer tax purposes under chapter 11 or chapter 12, as the case may be (including the right to receive any distributions thereon (other than qualified payments)), reduced by the amount of any deduction allowed with respect to the section 2701 interest to the extent that the deduction would not have been allowed if the section 2701 interest were not included in the transferor's total amount of gifts for the calendar year or the transferor's gross estate, as the case may be. Rules similar to the rules of section 691(c)(2)(C) are applicable to determine the extent that a deduction would not be allowed if the section 2701 interest were not so included.

(3) *Special transfer tax value rules*—(i) *Transfers for consideration.* Except as provided in paragraph (c)(3)(iii) of this section, if, during the life of the initial transferor, a section 2701 interest is transferred to or for the benefit of an individual other than the initial transferor or an applicable family member of the initial transferor for consideration in money or money's worth, or in a transfer that is treated as a transfer for consideration in money or money's worth, the transfer of the section 2701 interest is deemed to occur at the death of the initial transferor. In this case, the estate of the initial transferor is entitled to a reduction in the same manner as if the initial transferor's gross estate included a section 2701 interest having a chapter 11 value equal to the amount of consideration in money or money's worth received in the exchange (determined as of the time of the exchange).

(ii) *Interests held by applicable family members at date of initial transferor's death.* If a section 2701 interest in existence on the date of the initial transferor's death is held by an applicable family member and, therefore, is not included in the gross estate of the initial transferor, the section 2701 interest is deemed to be transferred at the death of the initial transferor to or for the benefit of an individual other than the initial transferor or an applicable family member of the initial transferor. In this case, the transfer tax value of that interest is the value that the executor of the initial transferor's estate can demonstrate would be determined under chapter 12 if the interest were transferred immediately prior to the death of the initial transferor.

(iii) *Nonrecognition transactions.* If an individual exchanges a section 2701 interest in a nonrecognition transaction (within the meaning of section 7701(a)(45)), the exchange is not treated as a transfer of a section 2701 interest and the transfer tax value of that interest is determined as if the interest received in exchange is the section 2701 interest.

(iv) *Transfer of less than the entire section 2701 interest.* If a transfer is a transfer of less than the entire section 2701 interest, the amount of the reduction under paragraph (a)(2) or (a)(3) of this section is reduced proportionately.

(v) *Multiple classes of section 2701 interest.* For purposes of paragraph (b) of this section, if more than one class of section 2701 interest exists, the amount of the reduction is determined separately with respect to each such class.

(vi) *Multiple initial transfers.* If an initial transferor has made more than one initial transfer, the amount of the reduction with respect to any section 2701 interest is the sum of the reductions computed under paragraph (b) of this section with respect to each such initial transfer.

(d) *Examples.* The following examples illustrate the provisions of paragraphs (a) through (c) of this section.

Facts. (1) *In general.* (i) P, an individual, holds 1,500 shares of $1,000 par value preferred stock of X corporation (bearing an annual noncumulative dividend of $100 per share that may be put to X at any time for par value) and 1,000 shares of voting common stock of X. There is no other outstanding common stock of X.

(ii) On January 15, 1991, when the aggregate fair market value of the preferred stock is $1,500,000 and the aggregate fair market value of the common stock is $500,000, P transfers common stock to P's child. The fair market value of P's interest in X (common and preferred) immediately prior to the transfer is $2,000,000, and the section 2701 value of the preferred stock (the section 2701 interest) is zero. Neither P nor P's spouse, S, made gifts prior to 1991.

(2) *Additional facts applicable to Examples 1 through 3.* P's transfer consists of all 1,000 shares of P's common stock. With respect to the initial transfer, the amount remaining after Step 2 of the subtraction method of § 25.2701–3 is $2,000,000 ($2,000,000 minus zero), all of which is allocated to the transferred stock. P's aggregate taxable gifts for 1991 (including the section 2701 transfer) equal $2,500,000.

(3) *Additional facts applicable to Examples 4 and 5.* P's initial transfer consists of one-half of P's common stock. With respect to the initial transfer in this case, only $1,000,000 (one-half of the amount remaining after Step 2 of the subtraction method of § 25.2701–3) is allocated to the transferred stock. P's aggregate taxable gifts for 1991 (the section 2701 transfer and P's other transfers) equal $2,500,000.

Example 1. Inter vivos transfer of entire section 2701 interest. (i) On October 1, 1994, at a time when the value of P's preferred stock is $1,400,000, P transfers all of the preferred stock to P's child. In computing P's 1994 gift tax, P, as the initial transferor, is entitled to reduce the amount on which P's tentative tax is computed under section 2502(a) by $1,400,000.

(ii) The amount of the reduction computed under paragraph (b) of this section is the

lesser of $1,500,000 (the amount by which the initial transferor's taxable gifts were increased as a result of the application of section 2701 to the initial transfer) or $1,400,000 (the duplicated amount). The duplicated amount is 100 percent (the portion of the section 2701 interest subsequently transferred) times $1,400,000 (the amount by which the gift tax value of the preferred stock ($1,400,000 at the time of the subsequent transfer) exceeds zero (the section 2701 value of the preferred stock at the time of the initial transfer)).

(iii) The result would be the same if the preferred stock had been held by P's parent, GM, and GM had, on October 1, 1994, transferred the preferred stock to or for the benefit of an individual other than P or an applicable family member of P. In that case, in computing the tax on P's 1994 and subsequent transfers, P would be entitled to reduce the amount on which P's tentative tax is computed under section 2502(a) by $1,400,000. If the value of P's 1994 gifts is less than $1,400,000, P is entitled to claim the excess adjustment in computing the tax with respect to P's subsequent transfers.

Example 2. Transfer of section 2701 interest at death of initial transferor. (i) P continues to hold the preferred stock until P's death. The chapter 11 value of the preferred stock at the date of P's death is the same as the fair market value of the preferred stock at the time of the initial transfer. In computing the Federal estate tax with respect to P's estate, P's executor is entitled to a reduction of $1,500,000 under paragraph (a)(3) of this section.

(ii) The result would be the same if P had sold the preferred stock to any individual other than an applicable family member at a time when the value of the preferred stock was $1,500,000. In that case, the amount of the reduction is computed as if the preferred stock were included in P's gross estate at a fair market value equal to the sales price. If the value of P's taxable estate is less than $1,500,000, the amount of the adjustment available to P's executor is limited to the actual value of P's taxable estate.

(iii) The result would also be the same if the preferred stock had been held by P's parent, GM, and at the time of P's death, GM had not transferred the preferred stock.

Example 3. Transfer of after-acquired preferred stock. On September 1, 1992, P purchases 100 shares of X preferred stock from an unrelated party. On October 1, 1994, P transfers 100 shares of X preferred stock to P's child. In computing P's 1994 gift tax, P is not entitled to reduce the amount on which P's tentative tax is computed under section 2502(a) because the 1994 transfer does not reduce P's preferred stock holding below that held at the time of the initial transfer. See paragraph (a)(4) of this section.

Example 4. Inter vivos transfer of entire section 2701 interest. (i) On October 1, 1994, at a time when the value of P's preferred stock is $1,400,000, P transfers all of the preferred stock to P's child. In computing P's 1994 gift tax, P, as the initial transferor, is entitled to reduce the amount on which P's tentative tax is computed under section 2502(a) by $700,000.

(ii) The amount of the reduction computed under paragraph (b) of this section is the lesser of $750,000 (($1,500,000 × .5 ($1,000,000 over $2,000,000)) the amount by which the initial transferor's taxable gifts were increased as a result of the application of section 2701 to the initial transfer) or $700,000 (($1,400,000 × .5) the duplicated amount). The duplicated amount is 100 percent (the portion of the section 2701 interest subsequently transferred) times $700,000; e.g., one-half (the fraction representing the portion of the common stock transferred in the initial transfer ($1,000,000/$2,000,000)) of the amount by which the gift tax value of the preferred stock at the time of the subsequent transfer ($1,400,000) exceeds zero (the section 2701 value of the preferred stock at the time of the initial transfer).

Example 5. Subsequent transfer of less than the entire section 2701 interest. On October 1, 1994, at a time when the value of P's preferred stock is $1,400,000, P transfers only 250 of P's 1,000 shares of preferred stock to P's child. In this case, the amount of the reduction computed under paragraph (b) is $175,000 (one-fourth (250/1,000) of the amount of the reduction available if P had transferred all 1,000 shares of preferred stock).

(e) *Computation of reduction if initial transfer is split under section 2513*—(1) *In general.* If section 2513 applies to the initial transfer (a split initial transfer), the special rules of this paragraph (e) apply.

(2) *Transfers during joint lives.* If there is a split initial transfer and the corresponding section 2701 interest is transferred during the joint lives of the donor and the consenting spouse, for purposes of determining the reduction under paragraph (a)(2) of this section each spouse is treated as if the spouse was the initial transferor of one-half of the split initial transfer.

(3) *Transfers at or after death of either spouse*—(i) *In general.* If there is a split initial transfer and the corresponding section 2701 interest is transferred at or after the death of the first spouse to die, the reduction under paragraph (a)(2) or (a)(3) of this section is determined as if the donor spouse was the initial transferor of the entire initial transfer.

(ii) *Death of donor spouse.* Except as provided in paragraph (e)(3)(iv) of this section, the executor of the estate of the donor spouse in a split initial transfer is entitled to compute the reduction as if the donor spouse was the initial transferor of the section 2701 interest otherwise attributable to the consenting spouse. In this case, if the consenting spouse survives the donor spouse—

(A) The consenting spouse's aggregate sum of taxable gifts used in computing each tentative tax under section 2502(a) (and, therefore, adjusted taxable gifts under section 2001(b)(1)(B) (or section 2101(b)(1)(B)) and the tax payable on the consenting spouse's prior taxable gifts under section 2001(b)(2) (or section 2101(b)(2))) is reduced to eliminate the remaining effect of the section 2701 interest; and

(B) Except with respect to any excess reduction carried forward under paragraph (a)(2) of this section, the consenting spouse ceases to be treated as the initial transferor of the section 2701 interest.

(iii) *Death of consenting spouse.* If the consenting spouse predeceases the donor spouse, except for any excess reduction carried forward under paragraph (a)(2) of this section, the reduction with respect to any section 2701 interest in the split initial transfer is not available to the estate of the consenting spouse (regardless of whether the interest is included in the consenting spouse's gross estate). Similarly, if the consenting spouse predeceases the donor spouse, no reduction is available to the consenting spouse's adjusted taxable gifts under section 2001(b)(1)(B) (or section 2101(b)(1)(B)) or to the consenting spouse's gift tax payable under section 2001(b)(2) (or section 2101(b)(2)). See paragraph (a)(2) of this section for rules involving transfers by an applicable family member during the life of the initial transferor.

(iv) *Additional limitation on reduction.* If the donor spouse (or the estate of the donor spouse) is treated under this paragraph (e) as the initial transferor of the section 2701 interest otherwise attributable to the consenting spouse, the amount of additional reduction determined under paragraph (b) of this section is the amount determined under that paragraph with respect to the consenting spouse. If a reduction was previously available to the consenting spouse under this paragraph (e), the amount determined under this paragraph (e)(3)(iv) with respect to the consenting spouse is determined as if the consenting spouse's taxable gifts in the split initial transfer had been increased only by that portion of the increase that corresponds to the remaining portion of the section 2701 interest. The amount of the additional reduction (i.e., the amount determined with respect to the consenting spouse) is limited to the amount that results in a reduction in the donor spouse's Federal transfer tax no greater than the amount of the increase in the consenting spouse's gift tax incurred by reason of the section 2701 interest (or the remaining portion thereof).

(f) *Examples.* The following examples illustrate the provisions of paragraph (e) of this section. The examples assume the facts set out in this paragraph (f).

Facts. (1) In each example assume that P, an individual, holds 1,500 shares of $1,000 par value preferred stock of X corporation (bearing an annual noncumulative dividend of $100 per share that may be put to X at any time for par value) and 1,000 shares of voting common stock of X. There is no other outstanding stock of X. The annual exclusion under section 2503 is not allowable with respect to any gift.

(2) On January 15, 1991, when the aggregate fair market value of the preferred stock is $1,500,000 and the aggregate fair market value of the common stock is $500,000, P transfers all 1,000 shares of the common stock to P's child. Section 2701 applies to the initial transfer because P transferred an equity interest (the common stock) to a member of P's family and immediately thereafter held an applicable retained interest (the preferred stock). The fair market value of P's interest in X immediately prior to the transfer is $2,000,000 and the section 2701 value of the preferred stock (the section 2701 interest) is zero. With respect to the initial transfer, the amount remaining after Step 2 of the subtraction method of § 25.2701–3 was $2,000,000 ($2,000,000 minus zero), all of which is allocated to the transferred stock. P had made no gifts prior to 1991. The sum of P's aggregate taxable gifts for the calendar year 1991 (including the section 2701 transfer) is $2,500,000. P's spouse, S, made no gifts prior to 1991.

(3) P and S elected pursuant to section 2513 to treat one- half of their 1991 gifts as having been made by each spouse. Without the application of section 2701, P and S's aggregate gifts would have been $500,000 and each spouse would have paid no gift tax because of the application of the unified credit under section 2505. However, because of the application of section 2701, both P and S are each treated as the initial transferor of aggregate taxable gifts in the amount of $1,250,000 and, after the application of the unified credit under section 2505, each paid $255,500 in gift tax with respect to their 1991 transfers. On October 1, 1994, at a time when the value of the preferred stock is the same as at the time of the initial transfer, P transfers the preferred stock (the section 2701 interest) to P's child.

Example 1. Inter vivos transfer of entire section 2701 interest. P transfers all of the preferred stock to P's child. P and S are each entitled to a reduction of $750,000 in computing their 1994 gift tax. P is entitled to the reduction because P subsequently transferred the one-half share of the section 2701 interest as to which P was the initial transferor to an individual who was not an applicable family member of P. S is entitled to the reduction because P, an applicable family member with respect to S, transferred the one-half share of the section 2701 interest as to which S was the initial transferor to an individual other than S or an applicable family member of S. S may claim the reduction against S's 1994 gifts. If S's 1994 taxable gifts are less than $750,000, S may claim the remaining amount of the reduction against S's next succeeding lifetime transfers.

Example 2. Inter vivos transfer of portion of section 2701 interest. P transfers one-fourth of the preferred stock to P's child. In this case, P and S are each entitled to a reduction of $187,500, the corresponding portion of the reduction otherwise available to each spouse (one-fourth of $750,000).

Example 3. Transfer at death of donor spouse. P, the donor spouse in the section 2513 election, dies on October 1, 1994, while holding all of the preferred stock. The executor of P's estate is entitled to a reduction in the computation of the tentative tax under section 2001(b). Since no reduction had been previously available with respect to the section 2701 interest, P's estate is entitled to a full reduction of $750,000 with respect to the one-half share of the preferred stock as to which P was the initial transferor. In addition, P's estate is entitled to an additional reduction of up to $750,000 for the remaining section 2701 interest as to which S was the initial transferor. The reduction for the consenting spouse's remaining section 2701 interest is limited to that amount that will produce a tax saving in P's Federal estate tax of $255,500, the amount of gift tax incurred by S by reason of the application of section 2701 to the split initial transfer.

Example 4. Transfer after death of donor spouse. The facts are the same as in *Example 3*, except that S acquires the preferred stock from P's estate and subsequently transfers the preferred stock to S's child. S is not entitled to a reduction because S ceased to be an initial transferor upon P's death (and S's prior taxable gifts were automatically adjusted at that time to the level that would have existed had the split initial transfer not been subject to section 2701).

Example 5. Death of donor spouse after inter vivos transfer. (i) P transfers one-fourth of the preferred stock to P's child. In this case, P and S are each entitled to a reduction of $187,500, the corresponding portion of the reduction otherwise available to each spouse (one-fourth of $750,000). S may claim the reduction against S's 1994 or subsequent transfers. P dies on November 1, 1994.

(ii) P's executor is entitled to include, in computing the reduction available to P's estate, the remaining reduction to which P is entitled and an additional amount of up to $562,500 ($750,000 minus $187,500, the amount of the remaining reduction attributable to the consenting spouse determined immediately prior to P's death). The amount of additional reduction available to P's estate cannot exceed the amount that will reduce P's estate tax by $178,625, the amount that S's 1991 gift tax would have been increased if the application of section 2701 had increased S's taxable gifts by only $562,500 ($750,000 − $187,500).

(g) *Double taxation otherwise avoided.* No reduction is available under this section if—

(1) Double taxation is otherwise avoided in the computation of the estate tax under section 2001 (or section 2101); or

(2) A reduction was previously taken under the provisions of section 2701(e)(6) with respect to the same section 2701 interest and the same initial transfer.

(h) *Effective date.* This section is effective for transfers of section 2701 interests after May 4, 1994. If the transfer of a section 2701 interest occurred on or before May 4, 1994, the initial transferor may rely on either this section, project PS–30–91 (1991–2 C.B. 1118, and 1992–1 C.B. 1239 (see § 601.601(d)(2)(ii)(*b*) of this chapter)) or any other reasonable interpretation of the statute.

Par. 5. Section 25.2702–3 is amended as follows:

1. A sentence is added to the end of paragraph (b)(3).
2. A sentence is added to the end of paragraph (c)(3).
3. The additions read as follows:

§ 25.2702–3 Qualified interests.

* * * * *

(b) * * *

(3) * * * Solely for purposes of this paragraph (b), the governing instrument meets the requirements of this section with respect to short taxable years, if any, and the last taxable year of the term if the governing instrument provides that the fixed amount or a pro-rata portion thereof must be payable for the final short period of the annuity interest.

* * * * *

(c) * * *

(3) * * * Solely for purposes of this paragraph (c), the governing instrument meets the requirements of this section with respect to short taxable years, if any, and the last taxable year of the term if the governing instrument provides that the fixed amount or a pro-rata portion thereof must be payable for the final short period of the unitrust interest.

* * * * *

PART 602—OMB CONTROL NUMBERS UNDER THE PAPERWORK REDUCTION ACT

Par. 6. The authority citation for part 602 continues to read as follows:

Authority: 26 U.S.C. 7805.

Par. 7. The table in § 602.101(c) is amended by adding the following citation in numerical order to read as follows:

25.2701–5 1545–1273

Michael P. Dolan,

Acting Commissioner of Internal Revenue.

Approved: April 18, 1994.

Leslie Samuels,

Assistant Secretary of the Treasury.

[FR Doc. 94–10727 Filed 5–4–94; 8:45 am]

BILLING CODE 4830–01–U

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 117

[CGD8–93–023]

RIN 2115–AE47

Drawbridge Operation Regulations; Pass Manchac, LA

AGENCY: Coast Guard, DOT.

ACTION: Final rule; correction.

SUMMARY: This notice corrects technical errors in the regulatory language of a final rule published in the **Federal Register** on March 30, 1994 (59 FR 14755). The final rule changed the regulation governing the operation of the bascule span bridge across Pass Manchac, mile 6.7 at Manchac, Louisiana, by permitting automated operation of the draw.

EFFECTIVE DATE: This regulation becomes effective on April 29, 1994.

FOR FURTHER INFORMATION CONTACT: Mr. John Wachter, Bridge Administration Branch, Eighth Coast Guard District, telephone (504) 589–2965.

Corrections

§ 117.489 [Corrected]

1. On Page 14755, second column, § 117.484, correct paragraph (b) by removing the last sentence and adding two sentences in its place to read "Navigation channel warning lights will be lit, and photoeléctric (infrared) boat detectors will monitor the waterway beneath the bridge for the presence of vessels. The waterway approaches to the bridge will be monitored by closed circuit TV (CCTV) cameras.".

2. On Page 14755, second column, § 117.484, correct paragraph (c) by revising the second sentence to read "The yardmaster will continuously monitor marine radio broadcasts on the normal and emergency marine radio channels throughout the warning period and at all times the bridge is closed.".

Dated: April 20, 1994.

J.C. Card,

Rear Admiral, U.S. Coast Guard Commander, Eighth Coast Guard District.

[FR Doc. 94–10855 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–14–M

33 CFR Part 165

[COTP Baltimore 94–007]

Regulated Navigation Area Regulation: Ice Operations in Chesapeake Bay

AGENCY: Coast Guard, DOT.

ACTION: Notice of termination.

SUMMARY: The Ice Navigation Season Regulated Navigation Area on the northern portion of the Chesapeake Bay and its tributaries, including the Chesapeake and Delaware Canal, is terminated April 20, 1994.

The regulations for this Regulated Navigation Area, found in 33 CFR 165.503, state that they shall be placed in effect and terminated at the direction of the Captain of the Port Baltimore by notice in the **Federal Register**. This notice terminates the regulation placed into effect by a **Federal Register** Notice published on February 9, 1994 (59 FR 5954).

The purpose of the Regulated Navigation Area was to enhance the safety of navigation in the affected waters. It required operators of certain vessels, during their vessel's transit of the Regulated Navigation Area, to be aware of currently effective Ice Navigation Season Captain of the Port Orders issued by the Captain of the Port, Baltimore.

EFFECTIVE DATE: This notice is effective 12 a.m., April 20, 1994.

FOR FURTHER INFORMATION CONTACT: Timothy P. Ryan, Chief Warrant Officer, U.S. Coast Guard Marine Safety Office, Baltimore Customs House, 40 South Gay Street, Baltimore, Maryland 21202–4022, (410) 962–2651.

SUPPLEMENTARY INFORMATION:

Drafting Information

The drafters of this regulation are Timothy P. Ryan, Chief Warrant Officer, project officer for the Captain of the Port, Baltimore, Maryland and Lieutenant Monica L. Lombardi, project attorney, Fifth Coast Guard District Legal Staff.

Dated: April 22, 1994.

G.S. Cope,

Captain, U.S. Coast Guard, Captain of the Port, Baltimore, Maryland.

[FR Doc. 94–10856 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–14–M

POSTAL SERVICE

39 CFR Part 111

Special Bulk Third-Class Eligibility Restrictions

AGENCY: Postal Service.

ACTION: Final rule.

SUMMARY: On October 28, 1993, the President signed into law Public Law 103–123, the Treasury, Postal Service, and General Appropriations Act for 1994. Title VII of the Act, the Revenue Forgone Reform Act, amends 39 U.S.C. 3626 by adding provisions to subsection (j) and new subsection (m). These sections concern the administration of special bulk third-class postage rates for certain qualified organizations. The provisions, which were not to take effect until after December 31, 1993, make certain types of advertisements, promotions, and offers, as well as some products, ineligible to be mailed at the special bulk third-class rates. This document contains regulations implementing the legislative changes.

EFFECTIVE DATE: September 4, 1994.

FOR FURTHER INFORMATION CONTACT: Ernest Collins, (202) 268–5316.

SUPPLEMENTARY INFORMATION: The Postal Service published in the **Federal Register** (58 FR 64918–64919) on December 10, 1993, a proposal to amend the Domestic Mail Manual to implement certain provisions of Public Law 103–123, the Treasury, Postal Service, and General Appropriations Act for 1994. These provisions made certain types of matter ineligible to be mailed at the special bulk third-class postage rates, which are available for use by certain qualified nonprofit organizations and political committees. The Postal Service requested comments by January 10, 1994. Subsequently, the comment period was extended to February 9, 1994, by notice in the **Federal Register** (58 FR 65959) on December 17, 1993. At the request of postal customers, the Postal Service held a public meeting on January 28, 1994, as announced in the **Federal Register** (59 FR 1512) on January 11, 1994, to facilitate the receipt of comments regarding the proposal to implement new statutory restrictions on the use of special bulk third-class mail.

The new legislation establishes additional content-based restrictions on matter eligible for special bulk third-class rates. In order for material that advertises, promotes, offers, or for a fee or consideration, recommends, describes, or announces the availability of any product or service to qualify for mailing at these rates, the sale of the product or the providing of the service must be substantially related to the exercise or performance by the organization of one or more of the purposes constituting the basis for the organization's authorization to mail at such rates. The determination whether a product or service is substantially related to an organization's purpose is to be made in accordance with standards established under the Internal Revenue Code.

The legislation also establishes restrictions for mailing products at the

special rates. The only products mailable at the special bulk third-class rates are low-cost products as defined under the Internal Revenue Code, items donated or contributed to the qualified organization, and periodical publications of qualified organizations. The Postal Service views the new provisions as supplementary to, rather than a change to or replacement for, existing restrictions on special rate mailings. That is, mailings ineligible for the special rates under existing rules remain ineligible for these rates, regardless of whether they violate the new restrictions. Further, mailings that violate the new restrictions would not be eligible for the special rates, regardless of whether they would be eligible under existing rules.

As a general matter, it should be recognized that the Postal Service has limited discretion on what may be mailed at the special rates. These historically subsidized rates are based on statutes that prescribe standards for who may mail at the special rates and what may be sent at those rates. The Postal Service views its role as the administrator of these laws. Accordingly, its goal in this rulemaking is to promulgate rules implementing Public Law 103–123.

As explained below, the new rules deny the use of special bulk third-class rates for mailpieces that contain advertisements for products or services of the qualified organization that are not "substantially related" to a purpose on which the organization's authorization to mail at the special bulk third-class rates is based. This prohibition applies to catalogs and publications containing such advertisements, regardless of the inclusion of other advertisements that do qualify for mailing at those rates. Paid advertisements that do not violate any of the current restrictions will continue to be allowed in publications sent at the special bulk third-class rates, as long as they pass the "substantially related" test. These new rules are in addition to, and are designed to be compatible with, existing prohibitions on the use of special bulk third-class rates for improper cooperative mailings, and certain advertising for credit cards, insurance policies, and travel arrangements. As a separate matter, the Postal Service will revise mailing statements for special bulk third-class mailings by citing the appropriate Domestic Mail Manual section to call mailers' attention to provisions with which they need to be familiar.

Evaluation of Comments Received

Written comments from almost 600 religious, educational, fraternal, charitable, labor, and agricultural organizations and individuals were received by the Postal Service. In addition, 14 commenters offered oral comments at the public meeting.

Four hundred seventeen comments oppose enforcement of the "substantially related" test to determine whether an advertisement, promotion, or offer is mailable at the special bulk third-class rates. They state that the test would be detrimental to fundraising activities needed to sustain operating budgets, harm religious publications of all faiths, and impair organizations' abilities to carry on their religious, educational, or charitable functions.

As explained above, the Postal Service's responsibility is to implement and administer a new statutory provision restricting the use of special bulk third-class rates. This law specifically requires that the sale of a product or the providing of a service must be "substantially related (aside from the need, on the part of the organization promoting such product or service, for income or funds or the use it makes of the profits derived) to the exercise or performance by the organization of one or more of the purposes constituting the basis for the organization's authorization to mail at such rates" (i.e., special bulk third-class rates). Consequently, the Postal Service and qualified organizations are required to use the "substantially related" test to determine whether an advertisement, promotion, or offer is mailable at the special bulk third-class rates.

The statute further states that the "substantially related" test for products and services must be consistent with the standards established by the Internal Revenue Service (IRS) and courts reviewing IRS decisions. Accordingly, the rules adopted by the Postal Service follow these standards.

To be "substantially related" in accordance with IRS standards, an advertised product or service must contribute importantly to the accomplishment of one or more of the purposes of the qualified organization. This means that the sale of the product or service must be directly related to accomplishing one or more of the purposes on which the organization's authorization to mail at the special bulk third-class rates is based. The sale of the product or offering of the service must have a causal relationship to the achievement of the exempt purposes (other than through the production of income) of the qualified organization. (Whether an activity generates income that will be used to accomplish one or more of the purposes of the qualified organization is not to be used as a factor in determining whether an advertisement passes the "substantially related" test.) A synopsis of IRS rulings regarding the definition of "substantially related" is in Internal Revenue Manual, sec. 7751, part (36) 40 (Exempt Organizations Handbook). Additionally, the Postal Service expects to publish a handbook that will provide further guidance to mailers.

One of the major points of contention throughout this rulemaking has been the classification of third-class newsletters, bulletins, and other publications containing paid advertising from parties other than the publisher. The proposed rule published on December 10, 1993, sets forth the Postal Service's view that these publications are subject to the new statutory restrictions, and would be excluded from mailing at the special bulk third-class rates if they contained paid advertising that did not comply with the "substantially related" test. Numerous commenters have opposed this interpretation, arguing that the statute contains a general exception for these publications, or that it reflects the intent of Congress to permit paid advertising, as distinguished from an organization's own advertising, to be sent at the special rates. The Postal Service believes that these objections are not well taken, and that the terms of the statute contain no special exception from the "substantially related" test for the advertising content of third-class publications.

The "substantially related" test is contained in new subparagraph (D) of 39 U.S.C. 3626(j)(1), which forbids the application of special bulk third-class rates to "mail which advertises, promotes, offers, or, for a fee or consideration recommends, describes, or announces the availability of" certain categories of products and services. The types of advertising already restricted under paragraph (j)(1) include advertisements for credit cards by subparagraph (A), for insurance policies by subparagraph (B), and for travel arrangements by subparagraph (C). Subparagraphs (A), (B), and (C) contain no exception for paid advertising in third-class publications, and the Postal Service has not applied any such exception in its enforcement of these provisions.

Unlike the earlier provisions, however, new subparagraph (D) does contain a specific exception related to publications. Subclause (D)(ii)(II) provides that "clause (i) [containing the substantially related test] shall not apply if the product involved is a periodical publication described in subsection (m)(2) [a periodical publication of a qualified nonprofit

organization] (including a subscription to receive any such publication)." By its terms, this provision recognizes that a periodical publication may also be a product that a nonprofit organization wishes to advertise, and it exempts the advertising for the publication (or for subscriptions to the publication) from the "substantially related" test. It in no way prevents the application of the test to third-party paid advertising for other products or services that may be contained in an issue of the publication itself.

A second specific exception concerning publications is contained in new 39 U.S.C. 3626 (m), which restricts what "mail consisting of products" may be sent at the special bulk third-class rates. Under paragraph (m)(1), such products must either have been received by the mailing organization as gifts or contributions, or be "low-cost articles" as defined in the Internal Revenue Code. Paragraph (m)(2) makes an exception from these requirements for a "periodical publication of a qualified nonprofit organization." Thus, the statute recognizes that a periodical publication may also be a product that a nonprofit organization wishes to mail, whether as a benefit to members or a premium for potential donors in the course of a fundraising appeal, and allows such mailings to go at the special rates. By its terms, however, the "product rule" of subsection (m) does not override the separate and distinct "advertising rules" of subsection (j), and the Postal Service believes that it would be erroneous to construe subsection (m) as a blanket exception to those rules. Such interpretation would rob the new "substantially related" test of subparagraph (j)(1)(D) of much of its effectiveness, by allowing mailers to convert ineligible third-class catalogs into eligible third-class "publications," and overturn the Postal Service's established enforcement policies regarding the credit card, insurance, and travel advertising restrictions in subparagraphs (j)(1)(A), (B), and (C).

The new restrictions do not apply to publications mailed at the special nonprofit second-class rates. However, if a publisher wishes to mail copies of a special second-class rate publication at the special bulk third-class rates as provided for in DMM E215.2.6, those copies are subject to these new rules. Accordingly, those copies may not be mailed at the special bulk third-class rates if they contain any material ineligible for the special rates.

It should be emphasized that the application of the "substantially related" test to third-party paid advertising in publications does not preclude all paid advertising in publications mailed at the special bulk third-class rates. If the product or service advertised is substantially related to one or more of the nonprofit's qualifying purposes, the publication may still be mailed at the special rates. Each situation must be considered on a case-by-case basis, including consideration of the product or service advertised and the nature of the nonprofit organization. Examples of acceptable types of advertisements include an advertisement for a blood glucose tester in a nonprofit diabetes association's publication and an advertisement for courses at one college in another college's publication.

It should also be noted that the "substantially related" test and other advertising restrictions do not apply if the material in question is not considered an advertisement under postal rules. The Postal Service received numerous comments concerning the listing of contributors in publications, such as the lists of individuals and firms that appear on the back page of many church bulletins. For purposes of these rules, acknowledgments of organizations or individuals who have contributed to the nonprofit mailer are not generally treated as advertising. 39 U.S.C. 3626(j)(2)(A). To prevent technical disputes in individual cases concerning the distinction between an advertisement and an acknowledgment, the rule will consider material to be acknowledgments, rather than advertising, if they appear on a page headed "Sponsors," "Contributors," "Donors" or a similar term, and each acknowledgment does not exceed the size of a business card (approximately 7 square inches). The listings should not be labeled as advertising in other portions of the publication or elsewhere (such as rate cards).

Similarly, organizations may still include information and response cards concerning membership benefits in publications sent at the special third-class rates. Such matter will still be required to comply with the restrictions in 39 U.S.C. 3626(j)(2)(B).

Consistent with Postal Service practice and policy, public service announcements for which no consideration has been paid will not be considered advertising, and may be included in publications sent at the special bulk third-class rates.

Finally, announcements of activities substantially all the work of which is contributed by the members or supporters of a qualified organization without compensation and advertisements for products and services, including products and services offered as prizes or premiums, substantially all of which have been received by a qualified organization as gifts or contributions, are considered to be "substantially related" to the organization's purposes.

One hundred twenty-seven comments asserted that the Postal Service's proposed rule did not follow the intent of Congress to base mailing restrictions on whether the qualified organization pays unrelated business income tax on the particular activity advertised. The law, however, does not adopt the test urged by the comments. Instead it clearly states that the products or services advertised must be "substantially related" to the purpose(s) on which the qualified organization's authorization to mail at special bulk third-class rates is based. This "relatedness" test is only one of the factors considered by the IRS in determining whether unrelated business income tax must be paid, but this part of the test is singled out by the statute as the standard that the Postal Service must follow. Accordingly, the Postal Service is directed to rely on the "substantially related" portion of the unrelated business income tax analysis but not the other parts.

Twenty-five comments oppose or protest increases in rates for nonprofit mailers over the next 6 years, the end of subsidized funding for nonprofit postage rates, and other aspects of the Revenue Forgone Reform Act that will have an adverse effect on the mailing activities of churches and church organizations. In general, these types of comments are beyond the scope of this rulemaking. These comments also questioned whether including new member information, financial information, attendance information, and announcements of upcoming church events would disqualify church bulletins from being sent at the special bulk third-class rates. This kind of information concerning the qualified organization's activities would generally be considered to be substantially related to the nonprofit religious purposes of a church.

Three comments requested that scholarly journals be allowed to continue to accept exchange advertisements and paid advertisements to attract new subscriptions and promote books and journals. The final rule allows paid advertisements to be in materials that are mailed at the special bulk third-class rates as long as the advertisements are for products or services related to the purposes on which the qualified organization's authorization to mail at special bulk third-class rates is based. Although each

advertisement must be considered on a case-by-case basis, the inclusion of exchange advertisements and third-party paid advertisements under the circumstances described would not appear to violate the "substantially related" test.

Ten comments stated that the proposed definition of "low-cost items" was inconsistent with the Internal Revenue Service definition. These comments are correct.

Accordingly, the definition for "low-cost items" in the final rule is the same definition that the Internal Revenue Service uses and includes a provision for annually increasing the cost of such items based on the cost of living.

Ten comments stated that requiring a separate certification at the time of mailing would be an administrative and logistical burden for mailers and the Postal Service, urged that mailers needed more information about the process and the consequences of improper certification, and questioned why such a statement could not be included on the mailing statement for each mailing. It was also suggested that the application for special bulk third-class mailing privileges be modified to state that the organization will submit only mailings it thinks qualify for the special bulk third-class rates. In response to these comments, it should be noted that the intended purpose of the certification statement was more instructive than regulatory. That is, the Postal Service was concerned that nonprofits should be aware of the restrictions on nonprofit rates. Because mailing statements are often signed by agents, there was concern that the nonprofits themselves may not be aware of the new rules. Further, although the publication of these rules and a one-time notice to the nonprofit organization would provide sufficient legal notice, the Postal Service took notice that the officers of nonprofit organizations, particularly smaller ones, regularly change, and was concerned that new officers might not be aware of the rules. Nevertheless, in view of the hardships noted by comments, a separate certification will not be required. Instead, the mailing statement that must be completed for each mailing will be modified to refer to the DMM section in which the standards for advertisements are located, as a reminder and a reference. The Postal Service will also explore other ideas to promote awareness of the rules, such as providing information pertaining to this final rule to qualified organizations before the effective date of the rule change.

Four comments expressed confusion between advertising, public "thank yous," and free advertisements, and asked for clarification. The definition for advertising that will be used to administer the new eligibility requirements for special bulk third-class matter is in DMM E211.11.1. As discussed above, public service announcements for which no consideration is paid are not considered advertising as stated in DMM E211.11.2. Two examples of a public service announcements are "Support the Red Cross Blood Drive" and "Buy U.S. Savings Bonds."

Eighty-one comments raised a variety of conflicting views from the perspective of commercial mailers and small or local religious and charitable organizations. The commercial mailers stated that it is unfair to business owners who are not members of a qualified organization to allow qualified organizations to include advertisements of their members in the materials they mail at the special bulk third-class rates, and higher postage should be paid when third-party advertisements are mailed with materials of a qualified organization. The small nonprofit organizations argued against imposing additional restrictions on the advertising in their publications and other materials they mail at the special bulk third-class rates. In general, those comments concern suggestions that the Postal Service has no authority to implement. The Postal Service is required to administer the statutory provisions that prohibit only certain types of advertising in nonprofit mail matter.

Three comments (two colleges and a religious organization) stated that advertisements for similar types of organizations and affiliated organizations should be permitted in materials mailed at the special bulk third-class rates. The statutes and implementing rules look to the nature of the product or service promoted, rather than to the identity of the advertiser. As noted above, paid advertisements for "substantially related" products or services may be mailed at the special bulk third-class rates, regardless of the identity of the advertiser.

One comment stated that the proposed regulations do not include provisions for informing mailers of enforcement decisions or of measures that may serve to assist mailers plan future mailings. Notice of changes in these standards will be published by the Postal Service in accordance with its usual procedures for rulemaking.

Two comments suggested that the proposed definition of "periodical publication" goes beyond the requirements of the new statute. Nothing in the new statute suggests an intent to modify the established postal definition of periodical publication derived from statutory standards, which the Postal Service believes to be consistent with the common usage and understanding of that term among mailers. The use of the existing definition for a periodical publication would seem consistent with the statute and would in addition help avoid ambiguity and confusion.

Seventy-six comments stated that the proposed rule change is vague and complex, does not clearly define "substantially related" and "contribute importantly," and does not indicate whether "front-end" and "back-end" premiums as well as emblematic products will qualify for mailing at the reduced rates. The Postal Service does not believe the rule is unclear. Moreover, the final rule clearly states that the phrases "substantially related" and "contribute importantly" will be administered in accordance with Internal Revenue Service rulings and precedents. In addition, as discussed, the Postal Service will produce a publication to provide further guidance and examples concerning the rules. The question whether front-end and back-end premium products, as well as emblematic products, are eligible for the special rates will be determined on a case-by-case basis by the statutory restrictions concerning the mailing of "products." That is, these products must meet the definition for low-cost items, be donated or contributed to the mailing organization, or be periodical publications.

Thirty-seven comments stated that they oppose retroactive applicability of eligibility restrictions if the qualified organization made an innocent mistake or lacked knowledge of the restriction at the time of mailing, and requested that the Postal Service excuse "minor infractions" regarding advertisements that do not meet the "substantially related" test. The statute does not provide any such exceptions, and the Postal Service is required to "maintain procedures for the prompt collection of postage deficiencies arising from" these rules. 39 U.S.C. 3626(k)(3). See also 39 U.S.C. 2601(a)(1), which requires the Postal Service to "collect debts due to the Postal Service." Indeed, the granting of an exception to some noncomplying mailers would appear to discriminate against mailers who pay postage at the appropriate rate. 39 U.S.C. 403(c). Here, the final rule is being published in advance of its effective date to give mailers time to adjust their methods of

operation, and the regulations contain sufficient detailed information to help mailers ensure that they comply with the new eligibility restrictions. In addition, mailers may obtain private legal or financial advice and counsel to assist in making their decisions. Nevertheless, the Postal Service will continue to consider requests for compromise or settlement of revenue deficiencies on a case-by-case basis, consistent with existing postal policies.

Five comments stated that the Postal Service needs to establish a procedure for mailers to obtain advance binding rulings regarding whether materials and products will be mailable at the special bulk third-class rates. In general, as discussed above, the Postal Service does not believe such a procedure is necessary because mailers have access to the many IRS determinations and precedents that govern how the eligibility restrictions are administered. The Postal Service also believes that nonprofit mailers that engage in any considerable amount of commercial advertising or business activity may have already obtained private legal or financial counsel to help them deal with such matters. The Postal Service further notes that it does not have the staffing to provide a large volume of such rulings in a timely and consistent fashion, has not had a formal procedure for providing such opinions in mail classification matters, and does not believe that it is feasible to provide such a procedure.

One comment was concerned that the Postal Service may disqualify a mailing announcing a meeting, seminar, or conference sponsored by the qualified organization if it contains a brochure for the hotel where the meeting will be held. This decision must necessarily be determined upon the specific circumstances of the mailing. Nevertheless, the Postal Service does not believe that the inclusion of such a brochure would necessarily prevent the mailpiece from being mailed at the special rates. For instance, it would be significant whether the brochure is donated to the qualified organization as information for individuals that will or may attend a meeting, seminar, or conference sponsored by the qualified organization at that hotel, as opposed to being provided by the hotel to the nonprofit with payment for inclusion in the mailpiece.

Seven comments stated that a "grace period" should be authorized to allow qualified organizations to mail materials that are in the process of being prepared for mailing to avoid having to discard them or pay a higher postage rate than was planned for the mailing. One comment suggested that the grace period be allowed and that the Postal Service publish a graduated phase-in schedule, beginning January 1, 1996, to allow for the acceptance of materials in the process of being prepared for mailing. One comment suggested a 90-day grace period consistent with this comment. The final rule will be effective September 4, 1994, more than 4 months after it is published. Although the Postal Service is sympathetic with the concerns expressed by comments seeking a more extended period, these interests must be balanced against the additional revenue loss caused by any delay in the effective date of the rules. This loss will ultimately be borne by postal customers. Additionally, it is noted that the rules will not become effective until a full 8 months after the January 1, 1994, date authorized in the legislation.

One comment from a nonprofit society stated that the regulations should provide specific "procedural rules" for reliance on Internal Revenue Service regulations and court decisions regarding the "substantially related" test. It is not clear what type of "procedural rules" the comment envisions. Nevertheless, the final rule makes it clear, as specified by Public Law 103–123, that the Postal Service will use standards established by the Internal Revenue Service and the courts with respect to determining whether a product or service is substantially related to the purpose(s) on which the qualified organization's authorization to mail at special bulk third-class rates is based.

Three comments stated that the Postal Service should determine that the "substantially related" test does not apply to an offer for a "back-end premium" (a product or service provided to a donor who first contributes a certain sum of money). To be mailable at the special bulk third-class rates, the "back-end premium" itself, if it is a product, must be a "low-cost" item or otherwise comply with 39 U.S.C. 3626(m). The solicitation seeking donations and offering the "back end premium" is, moreover, an advertisement, covered by the new "substantially related " test. Accordingly, the solicitation is mailable at the special rates only if the premium is substantially related to the nonprofit's qualifying purposes.

One comment stated that organizations that market training and education through the mail should not be allowed to mail at the special bulk third-class rates if they are not accredited educational institutions. The statutory provisions do not restrict the use of special rates in this manner, and this suggestion is beyond the authority of the Postal Service to adopt.

One comment stated that the Postal Service should allow third-class periodical publications that contain advertisements, have no subscribers, and meet the definition of a periodical to be mailable at the special bulk third-class rates until the Postal Service obtains approval from the Postal Rate Commission to accept such periodicals as second-class matter. Again, the statutory provisions do not authorize an exception of this type, and it is beyond the authority of the Postal Service to adopt. Organizations that wish to mail publications at the special second-class rates will be required to obtain authorization, under the existing eligibility requirements, to mail at those rates, which would generally require that the publication be primarily circulated to paid subscribers. Subscriptions may be paid for with dues or contributions, if the dues or contributions and the subscription price are separated to show the amount paid for the subscription. A membership organization applying for second-class mailing privileges under the narrowly defined "Publications of Institutions and Societies" category (see DMM E222) may pass a resolution specifying the amount that is to be used for a subscription to receive its periodical publication if each member knows how much is being paid for the subscription. Mailers should contact their postmasters for advice on the exact procedures they must follow to qualify their publications for special second-class mailing privileges.

List of Subjects in 39 CFR Part 111

Postal Service.

For the reasons discussed above, the Postal Service hereby adopts the following amendments to the Domestic Mail Manual, which is incorporated by reference in the Code of Federal Regulations (see 39 CFR part 111).

PART 111—[AMENDED]

1. The authority citation for 39 CFR part 111 is revised to read as follows:

Authority: 5 U.S.C. 552(a); 39 U.S.C. 101, 401, 403, 404, 3001–3011, 3201–3219, 3403–3406, 3621, 3626, 5001.

2. Domestic Mail Manual section E370 is amended by renumbering old 5.6 and 5.7 as 5.7 and 5.8, respectively; renumbering old 5.9 as 5.10; and adding new 5.4(d), 5.6, 5.7c, and 5.9. The text is as follows:

E-Eligibility

* * * * *

E370 Special (Nonprofit) Bulk Rates

* * * * *

5.0 Eligible and Ineligible Matter

* * * * *

5.4 Prohibitions

Except under 5.7, special bulk third-class rates may not be used for the entry of material that advertises, promotes, offers, or, for a fee or consideration, recommends, describes, or announces the availability of:

* * * * *

[Add new 5.4d as follows:]

d. Any product or service (other than those described in 5.4a , 5.4b, or 5.4c), if the sale of the product or the providing of such service is not substantially related to the exercise or performance by the organization of one or more of the purposes used by the organization to qualify for mailing at the special bulk third-class rates. The criteria in 5.6 are used as the bases for determining whether an advertisement, promotion, or offer for a product or service is mailable at the special bulk third-class rates.

[Change title of 5.5 as follows:]

5.5 Definitions, Insurance

[Add new 5.6 and renumber existing 5.6 and 5.7 as 5.7 and 5.8, respectively:]

5.6 Definitions, Substantially Related Advertising, Products

For the standards in 5.4d:

a. To be "substantially related," the sale of the product or the providing of the service must contribute importantly to the accomplishment of one or more of the qualifying purposes of the organization. This means that the sale of the product or the providing of the service must be directly related to accomplishing one or more of the purposes on which the organization's authorization to mail at the special bulk third-class rates is based. The sale of the product or the providing of the service must have a causal relationship to the achievement of the exempt purposes (other than through the production of income) of the qualified organization. (Whether selling the product or providing the service generates income that is used to accomplish the purposes of the qualified organization is not used as a factor in determining whether such activity is substantially related to the qualifying purpose or purposes of the organization.)

b. Standards established by the Internal Revenue Service (IRS) and the courts with respect to 26 U.S.C. 513 (a) and (c) of the Internal Revenue Code are used to determine whether an advertised product or service, whether sold or offered by the organization or by another party, is "substantially related" to the qualifying purposes of an organization.

(1) If the advertising material is for a product or service that is not substantially related, the material is not mailable at the special bulk third-class rates.

(2) If an organization pays unrelated business income tax on the sale of a product or the providing of a service, that activity is by IRS definition not substantially related to the organization's qualifying purposes. The fact that an organization does not pay such tax, however, does not establish that the activity is substantially related, because other criteria may exempt the organization from payment. Thus, the inclusion of an advertisement for a product or service in a mailpiece may disqualify the piece from using special bulk third-class rates, even if the mailer does not pay unrelated business income tax on its sale.

(3) Advertisements in the qualified organization's newsletter or other publication for one or more products or services that are not substantially related to the qualified organization's purposes, notwithstanding the presence of advertisements that are so related, are not mailable at the special bulk third-class rates. Third-party paid advertisements may be included in a publication mailed at the special bulk third-class rates if the products or services advertised are substantially related to one or more of the purposes for which the qualified organization is authorized to mail at the special bulk third-class rates. If the publication contains one or more advertisements ineligible for the special rates, the publication is not eligible for the special rates.

(4) Advertising for one or more products or services that are not substantially related to the qualified organization's purpose included in a catalog that also offers items that are so related is not mailable at the special bulk third-class rates. If the catalog contains one or more advertisements ineligible for the special rates, the catalog is not eligible for the special rates.

c. Public service announcements, e.g., "Support the Red Cross Blood Drive," for which no consideration has been paid are mailable at the special bulk third-class rates.

d. Announcements of activities, e.g., bake sale, car wash, charity auction, oratorical contest, substantially all the work of which is conducted by the members or supporters of a qualified organization without compensation are mailable at the special bulk third-class rates. Such activities are considered to be "substantially related" to the organization's purposes.

e. Advertisements for products and services, including products and services offered as prizes or premiums, substantially all of which have been received by a qualified organization as gifts or contributions. Such products and services are considered "substantially related" to the organization's purposes.

f. An advertisement, promotion, or offer for a periodical publication, including subscription order forms, meeting the eligibility criteria in E211 and published by one of the types of qualified nonprofit organizations listed in E370.2.0 is mailable at the special bulk third-class rates.

5.7 Other Matter

* * * * *

[Add new 5.7c as follows:]

c. A listing in a qualified organization's newsletter or other publication of the names of individuals or organizations who sponsor the publication or other activities of the qualified organization. The Postal Service presumes that an item is an acknowledgment of a sponsor and not an advertisement ineligible for special rates if it occupies not more than 7 square inches (the approximate size of a business card) and if it appears in a portion of the publication titled "Sponsors," "Contributors," "Donors," or a similar designation.

[Renumber old 5.9 as 5.10 and add new section 5.9 as follows:]

5.9 Products Mailable at Special Bulk Third-Class Rates

The following products are mailable at special bulk third-class rates:

a. Low-cost items within the meaning of 26 U.S.C. 513(h)(2), Internal Revenue Code. Under this standard, low-cost items are currently those having a cost of not more than $6.39 as of January 1, 1994. At the beginning of each calendar year, the value of low-cost items is adjusted for cost of living. The cost is the cost to the qualified nonprofit organization that mails the item or on whose behalf the item is mailed.

b. Items donated or contributed to the qualified organization. Such items need not meet the definition of low cost as described in 5.9a.

c. Periodical publication of a qualified nonprofit organization that does not contain any advertisements or other material ineligible to be mailed at the special bulk third-class rates under 5.4

a, b, c, or d. Periodical publication and qualified nonprofit organization are defined in 5.6f.

A transmittal letter making these changes in the pages of the Domestic Mail Manual will be published and will be transmitted to subscribers automatically. Notice of issuance will be published in the **Federal Register** as provided by 39 CFR 111.3.

Stanley F. Mires,

Chief Counsel, Legislative.

[FR Doc. 94–10852 Filed 5–2–94; 2:29 pm]

BILLING CODE 7710–12–U

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[LA–4–1–5637; FRL–4878–5]

Approval and Promulgation of Air Quality Implementation Plans; Louisiana; Correction of Volatile Organic Compound Reasonably Available Control Technology Rules

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action approves revisions to the Louisiana State Implementation Plan (SIP) as submitted by the Governor on the following days: June 13, 1990, October 26, 1990, May 24, 1991, and March 24, 1992. These revisions and this action are necessary for several reasons. First, on May 26, 1988, the EPA notified the State of Louisiana that its SIP for attaining the National ambient air quality standard (NAAQS) for ozone was substantially inadequate as it applied to the seven parishes comprising the Baton Rouge ozone nonattainment area: Ascension, East Baton Rouge, Iberville, Livingston, Pointe Coupee, St. James, and West Baton Rouge. This document called for the State to correct deficiencies in its Volatile Organic Compound (VOC) Reasonably Available Control Technology (RACT) rules as they applied to those parishes. Second, on November 8, 1989, the EPA notified Louisiana that its ozone SIP was substantially inadequate as it applied to Calcasieu Parish, which comprises the Lake Charles ozone nonattainment area, and also called for the State to correct existing deficiencies in its VOC RACT rules as these applied to Calcasieu Parish. Third, the Clean Air Act Amendments (CAAA) of 1990, required the State to revise its SIP to correct VOC RACT deficiencies within six months of enactment. Finally, the VOC RACT rules must be recodified to provide consistency between the State's code and the SIP. The effect of today's action will be to correct existing deficiencies in the VOC RACT rules of the Louisiana SIP as required by the EPA notices of deficiency and the CAAA and to recodify the VOC RACT rules to conform with the State's code. This action is being taken under section 110 and part D of the Clean Air Act (CAA), as amended by the CAAA of 1990.

EFFECTIVE DATE: This final rule will become effective on June 6, 1994.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the following locations:

U.S. Environmental Protection Agency, Region 6, Planning Section (6T-AP), 1445 Ross Avenue, suite 700, Dallas, Texas 75202–2733.

Louisiana Department of Environmental Quality, Air Quality Division, 7290 Bluebonnet Boulevard, Baton Rouge, Louisiana 70810.

Air Docket, 6102, Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: Guy Donaldson, EPA Air Programs Branch at (214) 655–7214.

SUPPLEMENTARY INFORMATION: In the **Federal Register** on November 24, 1987, the EPA's Proposed Post–1987 Policy for Ozone and Carbon Monoxide stated that air quality monitors revealed continued exceedances of the ozone standard in the Baton Rouge area of Louisiana and that a "SIP call" would be issued (See 52 FR 45044). A SIP call is a finding by the EPA that the SIP does not provide for attainment by the required date.[1] In a letter dated May 26, 1988, to Governor Buddy Roemer, the EPA notified the State of Louisiana that because the Baton Rouge area had failed to attain the NAAQS for ozone by December 31, 1987, as required under section 172 of the CAA, its SIP was substantially inadequate and would need to be revised. Later, on November 8, 1989, the EPA notified the State that its SIP as it applied to Calcasieu Parish was substantially inadequate to achieve the ozone NAAQS in that area (i.e., LakeCharles).[2] The EPA requested that the State respond to the SIP calls in two phases. Pursuant to the first phase, the State was to: (1) Correct identified deficiencies in the existing SIP's VOC regulations; (2) adopt VOC regulations previously required or committed to but never adopted; and (3) update the area's base year emissions inventory. Just as the Post 1987 SIP calls were being anticipated, the Louisiana Department of Environmental Quality recodified its air quality regulations. The bulk of this effort was conditionally approved March 8, 1989, at 54 FR 9783.[3] The VOC RACT rules were not approved as part of the recodification at that time because the majority of the VOC RACT rules as recodified were substantially changed from the rules previously approved as part of the SIP. This is because the State had revised its VOC RACT rules for various reasons, but the revisions had not been incorporated into the federally-approved SIP. Given the discrepancies between the State code and the SIP, the EPA decided not to approve the recodification of the VOC RACT rules to avoid confusing the public about which version was part of the federally-approved SIP. Now that the revised VOC regulations are considered acceptable, the EPA is simultaneously approving the substantive revisions and the recodification and will refer to the VOC RACT rules by the recodified designations.

Since the Post 1987 SIP calls, Congress amended the CAA on November 15, 1990. Public Law 101–549, 104 Stat. 2399, codified at 42 U.S.C. 7401–7671q. Under the CAAA, those areas that were designated nonattainment before enactment of the CAAA, and which retained that designation and were classified as marginal or above as of enactment,[4] were required to meet the section 182(a)(2)(A) RACT fix-up requirement by May 15, 1991. The Baton Rouge and Lake Charles nonattainment areas are

---

[1] Under the pre-amended Act, section 110(a)(2)(H) provided for a finding by the Administrator that a "plan is substantially inadequate to achieve the (NAAQS)." This provision was carried forth under the amended Act. In addition, Section 110(k)(5) of the amended Act reinforces the Agency's authority to make such a finding.

[2] To avoid repetition, hereinafter the Baton Rouge and Lake Charles SIP calls will be referred to as the Post 1987 SIP calls.

[3] The conditional approval of the rules has not been changed to final approval because the State still has not submitted changes to correct certain errors in the recodified rules. Also, since the publication of that conditional approval, the EPA has found that one rule, previously thought to be unchanged, was changed substantially. The Agency issued a correction to the conditional approval (57 FR 8075, March 6, 1992) to note that the language of the recodified rule in question is not being approved.

[4] Air monitoring data since the Post 1987 SIP call indicate that St. James Parish may have attained the NAAQS for ozone. It has retained its nonattainment designation but is classified as incomplete data. Therefore, St. James Parish is not subject to section 182(a)(2)(A) of the CAAA. Louisiana will, however, have to correct any deficiencies regarding enforceability of existing rules applicable to St. James Parish before the parish could be redesignated to attainment. See the General Preamble 57 FR 13498, at 13525 (April 16, 1992).

classified as serious and marginal, respectively, and therefore, are subject to the RACT fix-up requirement. Under section 182(a)(2)(A), those areas were required to correct RACT as it was required under pre-amendment guidance.[5] The Post 1987 SIP call letters interpreted that guidance and indicated corrections necessary for specific nonattainment areas.

The Louisiana Department of Environmental Quality (LDEQ) adopted revisions to the VOC RACT rules in a series of actions making revisions to various sections of LAC:33:III: Chapter 1 (pertaining to General Provisions), Chapter 21 (pertaining to Control of Emissions of Organic Compounds), and Chapter 61 (pertaining to Test Methods). The first submittal in response to the Post 1987 SIP calls, sent to the EPA in a letter dated June 13, 1990[6], contained revisions to Chapter 21 as adopted on January 20 and February 20, 1990. The second submittal from the Governor, dated October 26, 1990, contained further corrections to Chapter 21 as adopted July 20, 1990. A third submittal dated May 9, 1991, contained revisions as adopted by emergency rulemaking procedures on May 1, 1991. A fourth submittal, received May 24, 1991, contained revisions to the VOC regulations adopted by the LDEQ on November 20, 1990, and April 20, 1991.

Because the LDEQ could not meet the statutory deadline using its regular rulemaking procedures, it resorted to emergency procedures allowed under the State's Administrative Procedures Act (LSA R.S. 49:953(B), 30:2011, and 30:2054) to make final corrections to the VOC RACT rules. These procedures allow rules to be revised without public hearing but limit their effectiveness to 120 days. By using these procedures, Louisiana was able to make the required submission on May 9, 1991. However, since the rules are only effective for 120 days, the LDEQ also used its regular rulemaking process and adopted these rules again on July 20, 1991. These regulations were submitted to the EPA on March 26, 1992.

The Louisiana emergency measures submitted on May 9, 1991, were not subject to notice and public hearing at the State level. Pursuant to section 110(a)(1) of the CAAA, the EPA requires States to submit SIPs and SIP revisions that the State has adopted "after reasonable notice and public hearing." The State cured this defect through its submittal of March 26, 1992. At that time, the State resubmitted the same rules, after it fulfilled the public notice and hearing requirements. Therefore, the EPA is approving these submittals in this action.

At the same time that Louisiana submitted the rules that went through the public participation process, Louisiana resubmitted the recodification of the VOC RACT rules and submitted rules adopting capture efficiency test methods. Due to deficiencies in the recodified rules, they could not be approved when they were originally submitted. Because the deficiencies have now been corrected, the EPA can now approve the rules, and the State was asked to resubmit the recodified VOC RACT rules. The recodified VOC RACT rules, first submitted in 1988, serve as the baseline superseding all previous revisions concerning VOC RACT rules.

On September 30, 1992 (57 FR 45012), the EPA published a notice of proposed rulemaking in the **Federal Register** to approve the above rules into the Louisiana SIP because they correct the specified deficiencies identified under the SIP call and satisfied the requirements of section 182(a)(2)(A) of the CAAA. For a complete discussion of the EPA's evaluation of the submitted rules, the reader is directed to the **Federal Register** document referenced above. The EPA provided a 30 day comment period on the notice of proposed rulemaking. No adverse public comments were received.

Action

The EPA approves revisions to the Louisiana SIP as submitted on June 13, 1990, October 26, 1990, May 24, 1991, and March 26, 1992. These revisions to the VOC RACT rules satisfy the requirements of the May 26, 1988, SIP call for the Baton Rouge nonattainment area, the November 8, 1989, SIP call for the Lake Charles nonattainment area and the RACT fix-up requirements of section 182(a)(2)(A) of the CAAA. The recodification meets the requirements of section 110 and part D of the CAAA.

Under the Regulatory Flexibility Act, 5 U.S.C. 600 *et seq.*, the EPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities (5 U.S.C.603 and 604). Alternatively, the EPA may certify that the rule will not have a significant impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

SIP approvals under section 110 and subchapter I, part D, of the CAAA do not create any new requirements, but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP-approval does not impose any new requirements, I certify that it does not have a significant impact on any small entities affected. Moreover, due to the nature of the Federal-State relationship under the CAAA, preparation of a regulatory flexibility analysis would constitute Federal inquiry into the economic reasonableness of State action. The CAAA forbids the EPA to base its actions concerning SIPs on such grounds (*Union Electric Co.* v. *U.S. E.P.A*, 427 U.S. 246, 256–66 (S.Ct. 1976); 42 U.S.C. 7410(a)(2)).

Nothing in this action should be construed as allowing or establishing a precedent for any future request for revision to any SIP. Each request for revision to any SIP shall be considered separately in light of specific technical, economical, and environmental factors and in relation to relevant statutory and regulatory requirements.

This action makes final the action proposed on September 30, 1992, at 57 FR 45012. As noted elsewhere in this document, the EPA received no adverse public comment on the proposed action. As a direct result, the Regional Administrator has reclassified this action from Table One to Table Two under the processing procedures established at 54 FR 2214, January 19, 1989.

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by July 5, 1994. This action may not be challenged later in proceedings to enforce its requirements. See section 307(b)(2).

This action has been classified as a Table Two action by the Regional Administrator under the procedures published in the **Federal Register** on January 19, 1989 (54 FR 2214–2225). A revision to the SIP processing review tables was approved by the Acting Assistant Administrator for Office of Air and Radiation on October 4, 1993 (Michael Shapiro's memorandum to Regional Administrators). A future

[5] Among other things, the pre-amendment guidance consists of those portions of the Post–1987 ozone and carbon monoxide policy that concern RACT, 52 FR 45044 (November 24, 1987); the Bluebook, "Issues Relating to VOC Regulation Cutpoints, Deficiencies and Deviations, Clarification to Appendix D of November 24, 1987 **Federal Register** Notice" (for which notice of availability was published in the **Federal Register** on May 25, 1988); and the existing CTGs.

[6] EPA has already taken action on a portion of Louisiana's June 13, 1990, submittal. Those portions, Subchapter B, Organic Solvents, Section 2123, paragraphs C.6 and D.3, were approved on September 7, 1990 (55 FR 36811). Louisiana revised these sections pursuant to an Order of the United States District Court for the Western District of Louisiana in the case of United States v. General Motors Corporation, Civil Action No. CV87–1890S.

document will inform the general public of these tables. Under the revised tables, this action remains classified as a Table Two. On January 6, 1989, the Office of Management and Budget (OMB) waived Table Two and Table Three SIP revisions (54 FR 2222) from the requirements of section 3 of Executive Order 12291 for two years. The EPA has submitted a request for a permanent waiver for Table Two and Table Three SIP revisions. The OMB has agreed to continue the waiver until such time as it rules on the EPA's request. This request continues in effect under Executive Order 12866 which superseded Executive Order 12291 on September 30, 1993.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Hydrocarbons, Incorporation by reference, Intergovernmentalregulations, Reporting and recordkeeping, Ozone,Volatile organic compounds.

Dated: Februrary 7, 1994.

Joe D. Winkle,

Acting Regional Administrator.

40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart T—Louisiana

2. Section 52.970 is amended by adding paragraph (c)(60) to read as follows:

§ 52.970 Identification of plan.

* * * * *

(c) * * *

(60) A revision to the Louisiana State Implementation plan (SIP) to include revisions to Louisiana Administrative Code (LAC), Title 33, Environmental Quality, Part III. Air, Chapter 1, Chapter 21, and Chapter 61 as submitted by the Governor on June 13, 1990, October 26, 1990, May 24, 1991, and March 24, 1992.

(i) Incorporation by reference.

(A) LAC, Title 33, Environmental Quality, Part III. Air, Chapter 21 (December 1987). Control of Emission of Organic Compounds, except section 2105. Storage of Volatile Organic Components (Small Tanks).

(B) Revisions to LAC, Title 33, Environmental Quality, Part III. Air, Chapter 1. General Provisions, section 111. Definitions–Administrator, Administrative Authority*, Attainment Areas, Nonattainment Areas, SIP, Volatile Organic Compound, and Chapter 21. Control of Emission of Organic Compounds, Subchapter A. General, section 2103. Storage of Volatile Organic Compounds paragraphs A., C., D.1., D.1.a. through D.1.d., D.2., D.2.a., D.2.b., D.3., E., F., H.1., H.2., I. effective January 20, 1990.

(C) Revisions to LAC, Title 33, Environmental Quality, Part III. Air, Chapter 21. Control of Emission of Organic Compounds Subchapter A. General, section 2107. Volatile Organic Compounds–Loading, section 2109. Oil/Water–Separation, paragraphs A.1. through A.4., B. through D., section 2113. Housekeeping, paragraphs A.1 through A.3., A.5., section 2117. Exemptions, section 2119. Variances B., and Subchapter D. Cutback Paving Asphalt section 2127. Cutback Paving Asphalt, paragraphs A., B., C.1., C.2., C.3., D., D.1., D.1.b., D.1.c., D.1.d., and D.2., effective February 20, 1990.

(D) Revisions to LAC, Title 33, Environmental Quality, Part III. Air, Chapter 21. Control of Emission of Organic Compounds, Subchapter B. Organic Solvents, section 2123. Organic Solvents, paragraphs C., C.1. through C.5., C.7. through C.9., effective February 20, 1990.

(E) Revisions to LAC, Title 33, Environmental Quality, Part III. Air, Chapter 21. Control of Emission of Organic Compounds, Subchapter F. Gasoline Handling, section 2131. Filling of Gasoline Storage Vessels, paragraphs A., B., B.1., B.3., D., D.1., D.4., D.5., E., F., and G., section 2133. Gasoline Bulk Plants paragraphs A., A.1., A.3. through A.6., B., B.3., B.4., C. and D., section 2135. Bulk Gasoline Terminals paragraphs A., B., B.1.a., B.1.a.i., B.1.a.iii., B.1.d., B.2. through B.5., and C. through E., E.1. through E.4., and section 2137. Gasoline Terminal Vapor-Tight Control Procedure. effective July 20, 1990.

(F) Revisions to LAC, Title 33, Environmental Quality, Part III. Air, Chapter 21. Control of Emission of Organic Compounds Subchapter A. General, section 2101. Compliance Schedules, section 2115. Waste Gas Disposal paragraphs A., B., C., D., F., G., H., I.1. through I.5., J. through K., section 2121. Fugitive Emission Control paragraphs B., B.1, B.2., C., C.1.b., C.1.b.i., C.1.b.ii., C.1.b.iii., C.1.c, C.2., C.2.b., C.2.b.i., C.4., C.4.c., C.4.d., C.5. and G., Subchapter C. Vapor Degreasers, section 2125. Vapor Degreasers paragraphs A., A.1., A.2., A.2.i. through A.2.m., A.3., A.3.a. through A.3.d., B., B.1., B.7., B.8., C., C.1., C.1.a. through C.1.c., C.1.i., C.1.j., and D. through G., Subchapter E. Perchloroethylene Dry Cleaning Systems, section 2129. Perchloroethylene Dry Cleaning Systems paragraphs A., A.1., A.2., A.2.a. through A.2.c., C., and D., Subchapter H. Graphic Arts, section 2143. Graphic Arts (Printing) by Rotogravure and Flexographic Processes paragraphs A., A.1., A.3., A.5., B., C. and D., Subchapter I. Pharmaceutical Manufacturing Facilities, section 2145. Pharmaceutical Manufacturing Facilities, paragraphs A., A.1., A.1.c., and E. through G. effective November 20, 1990.

(G) Revisions to LAC, Title 33, Environmental Quality, Part III. Air, Chapter 21. Control of Emissions of Organic Compounds Subchapter A. General, section 2103. Storage of Volatile Organic Compounds paragraphs B.,D., D.2.c. through D.2.e., G., H.3., I.2.c., I.4. and I.5., section 2107. Volatile Organic Compounds–Loading paragraphs D.3. and D.4., section 2109. Oil/Water Separation paragraphs A., B.4., and B.5., section 2111. Pumps and Compressors, section 2113. Housekeeping paragraph A.4., section 2119. Variances paragraph A.; Subchapter D. Cutback Paving Asphalt, section 2127. Cutback Paving Asphalt paragraphs C. and D.1.a. effective April 20, 1991.

(H) Revisions to LAC, Title 33, Environmental Quality, Part III. Air, Chapter 21. Control of Emission of Organic Compounds, section 2115. Waste Gas Disposal paragraphs I., K., and K.4., section 2121. Fugitive Emission Control paragraphs A., C.1., C.1.b.iv. through C.1.b.vi., C.4.a., C.4.b., C.4.h., D., D.1., D.1.b. through D.1.f., and D.2., seciton 2123. Organic Solvents paragraphs A., A.1. through A.3., B., B.1., B.1.a. through B.1.c., C.11., D., D.1. through D.9., E., E.1. through E.7., F., and F.1. through F.4., Subchapter F. Gasoline Handling, section 2131. Filling of Gasoline Storage Vessels paragraphs D.2. and D.3., section 2135. Bulk Gasoline Terminals paragraph E.5., Subchapter G–Petroleum Refinery Operations, section 2139. Refinery Vacuum Producing Systems paragraphs A. and B. and section 2141. Refinery Process Unit Turnarounds effective July 20, 1991.

(I) Revisions to LAC, Title 33, Environmental Quality, Part III. Air, Chapter 61. Division's Sources Test Manual, Subchapter A. Method 43–Capture Efficiency Test Procedures section 6121 through section 6131 effective July 20, 1991.

(J) Revisions to LAC, Title 33, Environmental Quality, Part III. Air Chapter 1. General Provisions, section 111. Definitions–Coating, Department, Distance from Source to Property Line, Exceedance, Hydrocarbon, Leak, Miscellaneous Metal Parts and Products

Coating, Nonattainment Area, Ozone Exceedance, SIP effective August 20, 1991.

[FR Doc. 94–10773 Filed 5–4–94; 8:45 am]

BILLING CODE 6560–50–F

---

40 CFR Part 52

[NM–20–1–6216; FRL–4879–5]

Approval and Promulgation of Air Quality Implementation Plans; New Mexico; Albuquerque/Bernalillo County Carbon Monoxide Contingency Measures

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action approves a revision to the New Mexico State Implementation Plan (SIP) addressing carbon monoxide (CO) contingency measures and a proposed clean fuel vehicle fleet demonstration project for Albuquerque/Bernalillo County, outside the boundaries of Indian lands. The CO contingency measures constitute one of the required elements of the complete Albuquerque/Bernalillo County CO SIP.

DATES: This final rule will become effective on July 5, 1994 unless notice is received by June 6, 1994 that someone wishes to submit adverse or critical comments. If the effective date is delayed, timely notice will be published in the **Federal Register** (FR).

ADDRESSES: Written comments on this action should be addressed to Mr. Thomas H. Diggs, Chief, Planning Section, at the EPA Regional Office listed below. Copies of the documents relevant to this action are available for public inspection during normal business hours at the following locations. The interested persons wanting to examine these documents should make an appointment with the appropriate office at least twenty-four hours before the visiting day.

U.S. Environmental Protection Agency, Region 6, Air Programs Branch (6T-A), 1445 Ross Avenue, suite 700, Dallas, Texas 75202.

U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center, 401 M Street, SW., Washington, DC 20460.

Albuquerque Environmental Health Department, The City of Albuquerque, One Civic Plaza Northwest, P.O. Box 1293,Albuquerque, New Mexico 87103.

FOR FURTHER INFORMATION CONTACT: Mr. Mark Sather, Planning Section (6T-AP), Air Programs Branch, USEPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733, telephone (214) 655–7258.

SUPPLEMENTARY INFORMATION:

Background

Albuquerque/Bernalillo County, New Mexico, was designated nonattainment for CO and classified as moderate with a design value below 12.7 parts per million (ppm.) (specifically 11.1 ppm.), under sections 107(d)(4)(A) and 186(a) of the Clean Air Act (CAA), upon enactment of the Clean Air Act Amendments (CAAA) of 1990.[1] Please reference 56 FR 56694 (November 6, 1991) and 57 FR 13498 and 13529 (April 16, 1992). The air quality planning requirements for moderate CO nonattainment areas with a design value less than or equal to 12.7 ppm. are set out in subparts one and three of part D, title I of the CAA. Subpart one contains provisions generally applicable to all nonattainment areas, and subpart three contains provisions specifically applicable to CO nonattainment areas.

On November 5, 1992, the Governor of New Mexico submitted to the EPA a SIP revision for CO concerning Albuquerque/Bernalillo County that was intended to satisfy CAA requirements due on November 15, 1992. This submittal included the 1990 base year CO emissions inventory, the oxygenated fuels program, and the winter woodburning program. On November 29, 1993, the EPA published the final approval of the emissions inventory, oxygenated fuels program, and the winter woodburning program (58 FR 62535).

This action approves CO contingency measures for Albuquerque/Bernalillo County, submitted to the EPA by the Governor of New Mexico by cover letter dated November 12, 1993. This submittal satisfies the requirement, as per section 172(c)(9) of the CAA, that all nonattainment area SIPs must contain contingency measures (due November 15, 1993) that are to be implemented if the area fails to make reasonable further progress (RFP) or to attain the applicable National Ambient Air Quality Standards (NAAQS) by the applicable date. The contingency measures are to be implemented immediately after the EPA determines failure of RFP or attainment of the applicable NAAQS, without further action by the State or the EPA.

[1] The CAAA of 1990 made significant changes to the air quality planning requirements for areas that do not meet (or that significantly contribute to ambient air quality in a nearby area that does not meet) the CO National Ambient Air Quality Standards (NAAQS) (see Public Law No. 101–549, 104 Stat. 2399). References herein are to the CAA as amended in 1990, 42 U.S.C. 7401 *et seq.*

Analysis of City/County Submission

A. Procedural Background

The CAA requires States to observe certain procedural requirements in developing implementation plans for submission to the EPA. Section 110(a)(2) of the CAA provides that each implementation plan submitted by a State must be adopted after reasonable notice and public hearing (see also section 110(l) of the CAA). Also, the EPA must determine whether a submittal is complete, and therefore warrants further EPA review and action (see section 110(k)(1) and 57 FR 13565). The EPA's completeness criteria for SIP submittals are set out at 40 CFR part 51, appendix V. The EPA attempts to make completeness determinations within 60 days of receiving a submission. However, a submittal is deemed complete by operation of law if a completeness determination is not made by the EPA six months after receipt of the submission.

After providing adequate notice, the City of Albuquerque held a public hearing on October 13, 1993, to entertain public comment on proposed revisions to the CO SIP narrative, and on proposed revisions to Regulation 35 addressing CO contingency measures, entitled Alternative Fuels. Public comments were received and adequately addressed by the City/County. Following the public hearings, the revisions to the CO SIP narrative and to Regulation 35 were adopted by the Albuquerque/Bernalillo County Air Quality Control Board, and submitted as a SIP revision to the EPA by cover letter from the Governor dated November 12, 1993.

The SIP revision was reviewed by the EPA to determine completeness shortly after its submittal, in accordance with the completeness criteria referenced above. A letter datedDecember 27, 1993, was forwarded to the Governor indicating the completeness of the submittal and the next steps to be taken in the review process.

B. Review of CO Contingency Measures

Albuquerque/Bernalillo County filed revisions to Regulation 35 with the State of New Mexico Records and Archives Center on November 10, 1993. Regulation 35 contains the oxygenated fuel provisions for Albuquerque/Bernalillo County. The revisions being approved in this action consist of the implementation of a more stringent oxygenated fuels program in Bernalillo County beginning November 1, 1996, if the County does not achieve attainment of the CO NAAQS by December 31, 1995 (i.e., one or more quality assured

violations of the CO NAAQS are recorded in calendar years 1994 and/or 1995). Specifically, the revisions would require gasoline sold in Bernalillo County during the winter control period (November 1 to the end of February) to contain not less than 3.0% oxygen by weight for ethanol blends. The current program requires not less than 2.7% oxygen by weight for all blends. In addition, the revisions mandate that as a contingency measure, all oxygenated fuel would be blended prior to removal by tank truck from primary supply points (such as refineries and terminals).

C. Review of Proposed Clean Fuel Vehicle Fleet Demonstration Project

The City/County also included in the November 12, 1993, submittal, a proposed demonstration project to convert certain fleet vehicles (select medium and heavy duty passenger vans) to alternative fuel use (e.g., compressed natural gas, electricity). The City/County included a description of this proposed demonstration project in the revisions to the CO SIP narrative. The proposed project is expected to show air quality benefits (e.g., CO tailpipe emission reductions) and fuel cost savings for natural gas conversions. The EPA in this action is approving the revisions to the Albuquerque/Bernalillo County CO SIP narrative to include the proposed clean fuel vehicle fleet demonstration project discussed above. It is important to note that the proposed clean fuel vehicle fleet demonstration project is not required by the EPA, and is not being approved as a contingency measure in the Albuquerque/Bernalillo County, New Mexico, SIP. The approval of the revised CO SIP narrative acknowledges that the City/County is taking its own initiative in exploring means of obtaining additional, but undefined, CO emission reductions.

Final Action

This action approves a revision to the New Mexico SIP to include for Albuquerque/Bernalillo County, outside the boundaries of Indian lands: (1) CO contingency measures; and (2) a proposed clean fuel vehicle fleet demonstration project. The CO contingency measures constitute one of the required elements of the complete Albuquerque/Bernalillo County CO SIP.

The EPA has reviewed these revisions to the New Mexico SIP and is approving them as submitted. The EPA is publishing this action without prior proposal because the Agency views this as a noncontroversial amendment and anticipates no adverse comments. This action will be effective July 5, 1994 unless, by June 6, 1994, notice is received that adverse or critical comments will be submitted.

If such notice is received, this action will be withdrawn before the effective date by publishing two subsequent documents. One document will withdraw the final action, and another will begin a new rulemaking by announcing a proposal of the action and establishing a comment period. If no such comments are received, the public is advised that this action will be effective July 5, 1994.

Miscellaneous

Under the Regulatory Flexibility Act, 5 U.S.C. 600 *et seq.*, the EPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities (5 U.S.C. 603 and 604). Alternatively, the EPA may certify that the rule will not have a significant impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

SIP approvals under section 110 and subchapter I, part D, of the CAA do not create any new requirements, but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP approval does not impose any new requirements, I certify that it does not have a significant impact on any small entities affected. Moreover, due to the nature of the Federal-State relationship under the CAA, preparation of a regulatory flexibility analysis would constitute Federal inquiry into the economic reasonableness of State action. The CAA forbids the EPA to base its actions concerning SIPs on such grounds (*Union Electric Co.* v. *U.S. E.P.A.*, 427 U.S. 246, 256–66 (1976); 42 U.S.C. 7410(a)(2)).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by July 5, 1994. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

Executive Order

This action has been classified as a table two action by the Regional Administrator under the procedures published in the **Federal Register** on January 19, 1989 (54 FR 2214–2225), as revised by an October 4, 1993, memorandum from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation. A future document will inform the general public of these revised tables. On January 6, 1989, the Office of Management and Budget (OMB) waived table two and three SIP revisions (54 FR 2222) from the requirements of section 3 of Executive Order 12291 for a period of two years. The EPA has submitted a request for a permanent waiver for table two and three SIP revisions. The OMB has agreed to continue the waiver until such time as it rules on the EPA's request. This request continues in effect under Executive Order 12866 which superseded Executive Order 12291 on September 30, 1993.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations.

Note: Incorporation by reference of the SIP for the State of New Mexico was approved by the Director of the **Federal Register** on July 1, 1982.

Dated: April 20, 1994.

A. Stanley Meiburg,

Acting Regional Administrator (6A).

40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart GG—New Mexico

2. Section 52.1620 is amended by adding paragraph (c)(57) to read as follows:

§ 52.1620 Identification of plan.

* * * * *

(c) * * *

(57) A revision to the New Mexico SIP addressing CO contingency measures and a proposed clean fuel vehicle fleet demonstration project for Albuquerque/Bernalillo County, outside the boundaries of Indian lands, was submitted by the Governor of New Mexico by cover letter dated November 12, 1993.

(i) Incorporation by reference.

(A) Albuquerque/Bernalillo County Regulation Number 35–*Alternative Fuels*, Section 35.02, "Oxygenated Fuels," Subsection 35.02(A)(1); Section 35.03, "Oxygenated Fuels Procedures Manual;" and Section 35.06,

"Contingency Measures," as filed with the State Records and Archives Center on November 10, 1993.

(ii) Additional material.

(A) November 12, 1993, narrative plan addressing the Albuquerque/Bernalillo County CO nonattainment area, including the proposed clean fuel vehicle fleet demonstration project.

[FR Doc. 94–10757 Filed 5–4–94; 8:45 am]

BILLING CODE 6560–50–F

DEPARTMENT OF DEFENSE

48 CFR Part 225

Defense Federal Acquisition Regulation Supplement; Petroleum Products

AGENCY: Department of Defense (DoD).

ACTION: Final rule.

SUMMARY: The Department of Defense has amended the Defense Federal Acquisition Regulation Supplement to require that qualified offers of petroleum products from eligible countries under the Caribbean Basin Economic Recovery Act be treated as if they were offers from designated countries under the Trade Agreements Act.

EFFECTIVE DATE: April 26, 1994.

FOR FURTHER INFORMATION CONTACT: Mrs. Alyce Sullivan, (703) 697–7266.

SUPPLEMENTARY INFORMATION:

A. Background

Section 8094 of the Fiscal Year 1994 Defense Appropriations Act (Pub. L. 103–139) requires that in connection with procurements of petroleum products made by the Department of Defense with appropriated funds, the Secretary shall consider all qualified bids from any eligible country under the Caribbean Basin Economic Recovery Act which is deemed a designated country pursuant to 19 U.S.C. 2511(b).

The Director, Defense Procurement, issued Departmental Letter 94–08, April 26, 1994, to implement section 8094 (DFARS Case 93–D312).

B. Regulatory Flexibility Act

The Regulatory Flexibility Act does not apply because this rule is not a significant revision within the meaning of Public Law 98–577. However, comments from small entities will be considered in accordance with section 810 of the Act. Such comments shall cite DFARS Case 94–610 in correspondence.

C. Paperwork Reduction Act

The Paperwork Reduction Act does not apply because the revisions in this rulemaking notice do not contain and/or affect information collection requirements which require the approval of OMB under 44 U.S.C. 3501 *et seq.*

List of Subjects in 48 CFR Part 225

Government procurement.

Claudia L. Naugle,

Deputy Director, Defense Acquisition Regulations Council.

Therefore, 48 CFR part 225 is amended as follows:

1. The authority for 48 CFR part 225 continues to read as follows:

Authority: 41 U.S.C. 421 and 48 CFR part 1.

PART 225—FOREIGN ACQUISITION

2. A new definition is added to section 225.401 to read as follows:

225.401 Definitions.

"Caribbean Basin country end product" includes petroleum or any product derived from petroleum.

* * * * *

3. Section 225.403 is amended by adding paragraph (m)(4) to read as follows:

225.403 Exceptions.

* * * * *

(m)(4) In accordance with Section 8094 of the Fiscal Year 1994 Defense Appropriations Act, (Pub. L. 103–139), for contracts awarded during fiscal year 1994, the exception for petroleum and any product derived from petroleum does not apply.

4. Section 225.403–70 is amended by revising the entry FSG # 91 to read as follows:

225.403–70 Products subject to Trade Agreements Act.

* * * * *

FSG	Category/Description
*	* * * *
91	Fuels, oils and waxes
*	* * * *

[FR Doc. 94–10790 Filed 5–4–94; 8:45 am]

BILLING CODE 3810–01–M

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 217 and 227

[Docket No. 940418–4118; I.D. 031894B]

Sea Turtle Conservation; Restrictions Applicable to Fishery Activities

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; request for comments.

SUMMARY: NMFS establishes all inshore and offshore waters from Cape Canaveral, Florida (28°24.6′ N latitude), to the North Carolina-Virginia border (36°30.5′ N latitude) as the leatherback conservation zone and notifies owners and operators of shrimp trawlers operating in that zone that short-term area closures may be required if high abundance levels of leatherback turtles are documented. NMFS will close those areas to any shrimp trawler required to have a turtle excluder device (TED) installed in each net that is rigged for fishing unless the TED installed is a NMFS-approved Taylor TED or a Morrison TED with either of the two NMFS-approved modifications made in May 1993. This temporary rule is necessary to reduce mortality of endangered leatherback sea turtles incidentally captured in shrimp trawls.

Specific area closures will be announced in the **Federal Register**, on the NOAA weather channel and in newspapers and other media. Shrimp trawlers in the leatherback conservation zone are responsible for monitoring the NOAA weather channel for closure announcements. Shrimp fishermen may also call (813) 893–3163 for updated closure information.

Owners and operators of shrimp trawlers operating in closed areas with modified TEDs must register with the Director, Southeast Region, NMFS, and may be required to carry an observer and provide information on trawling hours, gear modifications and turtle captures if requested by the Regional Director.

DATES: This rule is effective from April 29, 1994 through May 31, 1994. Comments on this rule and consideration of any extension of this rule must be submitted by May 31, 1994.

ADDRESSES: Requests for a copy of the environmental assessment for this action and comments on this action should be addressed to Dr. William W.

Fox, Jr., Director, Office of Protected Resources, NMFS, 1335 East-West Highway, room 8268, Silver Spring, MD 20910. Comments on the collection-of-information requirement subject to the Paperwork Reduction Act should be directed to the Office of Protected Resources, NMFS, 1335 East-West Highway, Silver Spring, MD 20910, Attention: Phil Williams, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, Attention: Desk Officer for NOAA.

FOR FURTHER INFORMATION CONTACT: Phil Williams, Acting Chief, Endangered Species Division (301) 713–2322, or Charles A. Oravetz, Chief, Protected Species Program, NMFS, Southeast Region, (813) 893–3366.

SUPPLEMENTARY INFORMATION:

Background

All sea turtles that occur in U.S. waters are listed as either endangered or threatened under the Endangered Species Act (ESA) of 1973. The Kemp's ridley (*Lepidochelys kempii*), leatherback (*Dermochelys coriacea*), and hawksbill (*Eretmochelys imbricata*) are listed as endangered. Loggerhead (*Caretta*) and green (*Chelonia mydas*) turtles are listed as threatened, except for breeding populations of green turtles in Florida and on the Pacific coast of Mexico, which are listed as endangered. The incidental take and mortality of these species, as a result of fishing activities, have been documented in the Gulf of Mexico and along the Atlantic seaboard.

Under the ESA and its implementing regulations, it is prohibited to take sea turtles. The incidental taking of turtles during fishing in the Atlantic Ocean off the coast of the southeastern United States and in the Gulf of Mexico is excepted from the taking prohibition if specified sea turtle conservation measures are used.

Existing sea turtle conservation regulations (50 CFR part 227) require most shrimp trawlers to have a NMFS-approved TED installed in each net rigged for fishing throughout the year. The use of TEDs significantly reduces mortalities of loggerhead, green, Kemp's ridley, and hawksbill sea turtles. Because leatherback turtles are larger than the escape openings of most NMFS-approved TEDs, use of these TEDs is not an effective means of protecting leatherback turtles.

The existing sea turtle conservation regulations allow the Assistant Administrator for Fisheries (AA), NOAA, to restrict fishing activities in order to conserve a species listed under the ESA (50 CFR 227.72(e)(6)(ii)). This action may be taken if the AA determines that restrictions are necessary to avoid unauthorized takings that may likely jeopardize the continued existence of a listed species. The provision is particularly applicable to leatherback turtles, where despite the use of TEDs, taking by shrimp trawlers can occur. In accordance with the endangered status of leatherback turtles, NMFS considers preventable take of leatherbacks to be inappropriate. If the leatherbacks are relatively abundant in areas where shrimp trawlers are fishing, restrictions to minimize the take of leatherbacks must be imposed.

Because of their primarily pelagic existence, leatherbacks normally occur outside of areas where they would be subject to take by shrimp trawlers. During most months of the year, leatherbacks are not considered abundant in shrimping areas, and only isolated incidents of take by trawlers are expected. However, the coastal waters of northern Florida, Georgia, South Carolina and North Carolina experience relatively high abundance levels of leatherbacks as a periodic spring phenomenon. When leatherback abundance is high and shrimp trawlers are fishing, leatherback stranding pulses have been documented on adjacent beaches. A NMFS Biological Opinion prepared for a revision to the sea turtle conservation regulations made on December 4, 1992, (52 FR 24244) episodic stranding events from Florida through North Carolina and required NMFS to develop and implement a contingency plan to solve this problem.

A contingency plan for protection of leatherback turtles on the Atlantic seaboard that can be implemented, if necessary, was prepared in cooperation with State officials from Florida, Georgia, and North Carolina. The necessity for implementation of protective measures for leatherback turtles is expected to be short-term and apply to specific areas. The plan considers several options to provide protection, and any or all of them may be implemented, if necessary, pursuant to 50 CFR 227.72(e)(6). These options include, closure of areas to all fishing, use of restricted tow-times in lieu of TEDs, mandatory observers, and use of modified TEDs designed to exclude leatherback turtles.

Presence of Leatherback Turtles

During December of 1993 and January and February 1994, NMFS received regular reports of leatherback sightings in northern Florida. These sightings occurred during aerial surveys for right whales, conducted by the state of Florida from St. Marys, Georgia, to Sebastian Inlet, Florida. During December, sighting rates ranged from 12 to 49 leatherbacks per survey. During the first week of January, 15 sightings were reported. The level of leatherback turtle sightings at this time of the year is consistent with data from previous years. The turtles normally migrate northward during the months of March through June from Florida waters to those off North Carolina.

Sea Turtle Conservation Measures

Based on the information presented and evidence indicating that shrimp trawlers may incidentally take endangered leatherback sea turtles, the AA has determined that immediate action may be necessary to conserve sea turtles. The AA has determined that incidental takings of leatherback sea turtles during shrimp trawl fishing in the leatherback conservation zone are unauthorized unless these takings are consistent with the applicable biological opinions and associated incidental take statements.

A biological opinion addressing the potential adverse effects of shrimp trawling to endangered and threatened species was conducted in 1992 for final sea turtle conservation regulations. The opinion concluded that, "episodic take of leatherback turtles by shrimp trawlers during periods of high jellyfish abundance must be eliminated." A biological opinion on this action analyzed the impact of shrimp trawl fishing in the leatherback conservation zone on endangered leatherback turtles. The opinion emphasizes the need for additional protective measures such as requiring the use of TEDs with escape openings large enough for leatherback sea turtles to escape in areas where high abundance levels of leatherbacks are observed. The incidental take statement issued with this opinion allows for the documented take of 20 leatherback turtles and mortality of four leatherback turtles. If observer reports or other information indicate that this incidental take is met or exceeded, consultation must be reinitiated, and the AA may require additional or more stringent conservation measures.

Requirements

The definitions in 50 CFR 217.12 are applicable to this action, as are all relevant provisions in 50 CFR parts 217, 222 and 227.

The term "leatherback conservation zone" means all inshore and offshore waters of the Atlantic area from Cape Canaveral, Florida (28° 24.6′ N latitude), to the North Carolina-Virginia border (36° 30.5′ N latitude).

NMFS hereby notifies owners and operators of shrimp trawlers in the leatherback conservation zone that short-term closures in specific areas may be required to protect endangered leatherback turtles. Weekly aerial surveys will be conducted from northern Florida through the North Carolina-Virginia border. If sightings of leatherback turtles during such surveys exceed 10 animals per 50 nautical miles (nm) of trackline, the survey will be replicated within 12 hours, or as soon as practicable, to ensure that leatherback turtle presence is persistent in the area. If surveys demonstrate the continued presence of large concentrations of leatherbacks NMFS will temporarily close these specific areas to any shrimp trawler required to have a NMFS-approved TED installed in each net rigged for fishing, unless the TED installed is one of the NMFS-approved TEDs as described below. In addition, owners and operators of vessels operating in closed areas with an allowed TED, described below, must register with the Director, Southeast Region, NMFS, in accordance with 50 CFR 227.72(e)(6)(v) (A) through (F). If requested, they must carry a NMFS-approved observer on board such vessel(s). A shrimp trawler in the leatherback conservation zone must comply with the terms and conditions accompanied by any such request as well as provide information on trawling hours, gear modifications and turtle captures.

Specific area closures will be announced in the **Federal Register**, on the NOAA weather channel, and in newspapers and other media. Shrimp trawlers in the leatherback conservation zone are responsible for monitoring the NOAA weather channel for closure announcements. Shrimp trawlers may also call (813) 893–3163 for updated area closure information. Closure will take effect upon public filing with the **Federal Register**.

NMFS-Approved TEDs With Escape Openings Large Enough for Leatherback Sea Turtles

NMFS previously approved the Taylor TED and two modifications to the Morrison TED that will allow leatherback turtles to escape the trawl. Descriptions of the Taylor TED and the Morrison modifications were published on May 17, 1993 (58 FR 28795).

Additional Sea Turtle Conservation Measures

NMFS anticipates that shrimp trawlers may continue to interact with leatherback turtles throughout the summer. As necessary, the AA may extend, for additional 30-day periods, the restrictions described in this temporary rule through notification in the **Federal Register**.

In addition, the AA may modify, at any time, the requirements of this action through notification in the **Federal Register**, to ensure adequate protection of endangered and threatened sea turtles. Under this procedure, the AA will impose any necessary additional or more stringent measures if NMFS determines that shrimp trawlers are having a significant adverse effect on sea turtles. For example, if monitoring to assess turtle mortality indicates that the incidental take level is approaching the level established by the biological opinion for this action issued under section 7 of the ESA, the AA may modify or add conservation measures to protect leatherback sea turtles. That level is 20 documented takes, including four by mortality of leatherback turtles. If the incidental take level is met or exceeded, if significant or unanticipated levels of lethal or nonlethal takings or strandings occur that are associated with fishing activities in the leatherback conservation zone, or if there is significant non-compliance with this action, additional measures may be imposed. Additional restrictions may include closing the entire leatherback conservation zone to all shrimping.

Classification

The AA has determined that this action is necessary to respond to an emergency situation to conserve and provide adequate protection for leatherback turtles. This action is consistent with the ESA and other applicable law.

Because neither section 553 of the Administrative Procedures Act (APA) or any other law requires that a general notice of proposed rulemaking be published for this action, under section 503(b) of the Regulatory Flexibility Act, an initial regulatory flexibility analysis is not required.

It has been determined that this rule is not significant for purposes of E.O. 12866.

This action allows the AA to establish a registration program as authorized by the final rule (57 FR 57348, December 4, 1992), codified at 50 CFR 227.72(e)(6)(iv). Such a program contains a collection-of-information requirement subject to the Paperwork Reduction Act (PRA), namely, registration by vessels fishing in the leatherback conservation zone from Cape Canaveral, FL, to the Virginia-North Carolina border. This collection has been approved by OMB under control number 0648–0267. The public reporting burden for this collection of information is estimated to average 7 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, should be sent to NMFS and OMB (see ADDRESSES).

Pursuant to section 553(b)(B) of the APA, the AA finds that there is good cause to take this action without notice and opportunity for comment. It is impracticable and contrary to the public interest because relatively high levels of leatherback turtle abundance have been reported recently in Florida, and closures and/or restrictions may need to be imposed quickly. The action announced by this notice is needed at this time so that shrimp trawlers will monitor NOAA weather radio and prepare for closures and/or restrictions in specific areas where relatively high leatherback sea turtle concentrations are identified. Furthermore, comments were solicited on the temporary rule establishing a leatherback conservation zone last year (58 FR 28790, May 17, 1993). In addition, comments were solicited on potential leatherback conservation measures (57 FR 57348, December 4, 1992), and a summary of the comments received and a response was published (57 FR 40859, September 8, 1992). NMFS also solicited comments in meetings with fishing groups and state officials concerning this problem.

Pursuant to section 553(d) of the APA, the AA finds there is good cause to waive the required 30-day delay in effective date for this action. Advance preparation is not necessary to monitor the NOAA weather radio. While time may be needed to procure a Taylor TED or make the appropriate modifications to the Morrison TED, restricted areas will be relatively small in size and shrimp trawlers should be able to operate in other areas with existing gear.

The AA prepared an EA for the final rule (57 FR 57348, December 4, 1992). A supplemental EA prepared specifically for this action concludes that, with specified mitigation measures, this action will have no significant impact on the human environment.

List of Subjects

50 CFR Part 217

Endangered and threatened species, Exports, Fish, Imports, Marine mammals, Transportation.

50 CFR Part 227

Endangered and threatened species, Exports, Imports, Marine mammals, Transportation.

Dated: April 29, 1994.

John T. Everett,

Acting Assistant Administrator, National Marine Fisheries Service.

[FR Doc. 94–10754 Filed 4–29–94; 4:35 pm]

BILLING CODE 3510–22–P

---

50 CFR Part 675

[Docket No. 931100–4043; I.D. 042594A]

Groundfish of the Bering Sea and Aleutian Islands Area

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Closure.

SUMMARY: NMFS is closing the directed fishery for Greenland turbot in the Bering Sea subarea (BS) of the Bering Sea and Aleutian Islands management area (BSAI). This action is necessary to prevent exceeding the Greenland turbot total allowable catch (TAC) in that subarea.

EFFECTIVE DATE: 12 noon, Alaska local time (A.l.t.), May 8, 1994, until 12 midnight, A.l.t., December 31, 1994.

FOR FURTHER INFORMATION CONTACT: Andrew N. Smoker, Senior Inseason Manager, Fisheries Management Division, NMFS, 907–586–7228.

SUPPLEMENTARY INFORMATION: The groundfish fishery in the BSAI exclusive economic zone is managed by the Secretary of Commerce according to the Fishery Management Plan for the Groundfish Fishery of the BSAI (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson Fishery Conservation and Management Act. Fishing by U.S. vessels is governed by regulations implementing the FMP at 50 CFR parts 620 and 675.

In accordance with § 675.20(a)(7)(ii), the Greenland turbot TAC for the BS was established by the final 1994 initial specifications of groundfish (59 FR 7656, February 16, 1994) and subsequent apportionment of reserve (59 FR 21673, April 26, 1994) as 4,667 metric tons (mt).

In accordance with § 675.20(a)(8), the Director of the Alaska Region, NMFS, has established a directed fishing allowance of 3,967 mt, with consideration that 700 mt will be taken as incidental catch in directed fishing for other species in the BS. This fishery begins at 12 noon, A.l.t., May 1, 1994. Because of the low directed fishing allowance and high interest in the fishery, there will be insufficient time to collect and analyze catch data and take appropriate action to ensure the directed fishing allowance is not exceeded. Therefore, based on the best available data, the Director of the Alaska Region, NMFS, has determined that the Greenland turbot directed fishing allowance in the BS will be reached by 12 noon A.l.t., May 8, 1994. Consequently, NMFS is prohibiting directed fishing for Greenland turbot in the BS, effective from 12 noon, A.l.t., May 8, 1994, until 12 midnight, A.l.t., December 31, 1994.

Directed fishing standards for applicable gear types may be found in the regulations at § 675.20(h).

Classification

This action is taken under § 675.20 and is exempt from OMB review under E.O. 12866.

List of Subjects in 50 CFR Part 675

Fisheries, Reporting and recordkeeping requirements.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: May 2, 1994.

David S. Crestin,

Acting Director, Office of Fisheries Conservation and Management, National Marine Fisheries Service.

[FR Doc. 94–10826 Filed 5–2–94; 12:32 pm]

BILLING CODE 3510–22–P

Proposed Rules

Federal Register
Vol. 59, No. 86
Thursday, May 5, 1994

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Farmers Home Administration

7 CFR Part 1980

RIN 0575–AB29

Guaranteed Loan Programs

AGENCY: Farmers Home Administration, USDA.

ACTION: Proposed rule.

SUMMARY: Farmers Home Administration (FmHA) proposes to amend its regulations on the monitoring of lender's collection activity after a final loss is paid, when a guaranteed borrower's account remains unsatisfied. This action is taken to further define criteria, by which FmHA will monitor the lender's future recovery from unsatisfied guaranteed borrower accounts. There is no formal procedure at present for monitoring these accounts. The intended effect is to maximize collections from unsatisfied guaranteed borrower accounts and to minimize the financial loss to the Government.

DATES: Written comments must be submitted by July 5, 1994.

ADDRESSES: Submit written comments in duplicate, to the Office of the Chief, Regulations, Analysis and Control Branch (RACB), Farmers Home Administration, U.S. Department of Agriculture, Room 6348, South Agriculture Building, 14th and Independence Avenue, SW., Washington, DC 20250. All written comments made pursuant to this publication will be available for public inspection during regular work hours at the above address.

FOR FURTHER INFORMATION CONTACT: James C. Root, Senior Loan Officer, Guaranteed Servicing Branch, Farmer Programs Loan Servicing and Property Management Division, Farmers Home Administration, U.S. Department of Agriculture, Room 5444, South Agricultural Building, 14th and Independence Avenue, SW., Washington, DC 20250, at (202) 720–4572.

SUPPLEMENTARY INFORMATION:

Paperwork Reduction Act

The Collection of information requirements contained in this regulation have been submitted to the Office of Management and Budget for review under Section 504(h) of the Paperwork Reduction Act of 1980. Public reporting burden for this collection of information is estimated to vary from 15 minutes to 28 hours per response, with an average of 2 hours per response including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, Room 404–W, Washington, D.C. 20250; and to the Office of Management and Budget, Attention: Desk Officer for the Farmers Home Administration, Washington, DC 20503.

Classification

We are issuing this proposed rule in conformance with Executive Order 12866, and we have determined that it is not a "significant regulatory action." Based on information compiled by the Department, we have determined that this proposed rule: (1) Would have an effect on the economy of less than $100 million; (2) would not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (3) would not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (4) would not alter the budgetary impact of entitlements, grants, user fees, or loan programs or rights and obligations of recipients thereof; and (5) would not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or principles set forth in Executive Order 12866.

Environmental Impact Statement

This document has been reviewed in accordance with 7 CFR Part 1940, Subpart G, "Environmental Program." It is the determination of FmHA that this action does not constitute a major Federal action significantly affecting the quality of the human environment, and in accordance with the National Environmental Policy Act of 1969, Public Law 91–190, an Environmental Impact Statement is not required.

Programs Affected

This Action affects the following FmHA programs as listed in the catalog of Federal Domestic Assistance:

10.404	Guaranteed Emergency Loans
10.406	Guaranteed Farm Operating Loans
10.407	Guaranteed Farm Ownership Loans
10.415	Rural Rental Housing Loans
10.416	Soil and Water Loans
10.768	Business and Industrial Loans
10.766	Community Facilities Loans
10.428	Economic Emergency Loans
10.434	Non-Profit National Corporations Loan and Grant Program

Intergovernmental Consultation

For the reasons set forth in the final rule related Notice(s) to 7 CFR 3015, subpart V (48 FR 29115, June 24, 1983; and 48 FR 54317, December 1, 1983), numbers 10.415, 10.416, 10.766, and 10.768 are subject to the provisions of Executive Order 12372 which requires intergovernmental consultation with State and local officials. The remaining numbered programs are excluded from the scope of Executive Order 12372.

Discussion of Proposed Rule

The FmHA, in a response to an audit conducted by the Office of Inspector General, agreed to strengthen FmHA Instructions regarding the monitoring of loan accounts for 3 years following the year in which final losses were paid in order to maximize potential future recoveries.

List of Subjects in 7 CFR Part 1980

Agriculture, Loan programs—Agriculture, Loan programs—Business and Industry—Rural development assistance, Loan programs—Housing and community development, Loan programs—Community programs—Rural development assistance.

Therefore, as proposed, Chapter XVIII, Title 7, Code of Federal Regulations, is amended as follows:

PART 1980—GENERAL

1. The authority citation for Part 1980 continues to read as follows:

Authority: 7 U.S.C. 1989; 42 U.S.C. 1480; 5 U.S.C. 301; 7 CFR 2.23 and 2.70.

Subpart A—General

2. Section 1980.69 is added to read as follows:

§ 1980.69 Future collections.

After a loan or an account has been liquidated, and the final loss claim has been paid, FmHA will continue to maintain the borrower account in an active status for 3 fiscal years, following the fiscal year in which liquidation was completed or until the account is paid in full, the borrower and all guarantors have been released from liability, and/or the account is otherwise satisfied. A lender may, with FmHA's concurrence, release a borrower and/or cosigner from liability only when adequate compensation/consideration is received. The servicing official will continue to monitor the collection efforts of the lender during the 3 fiscal years following the fiscal year in which the final loss claim was paid. The servicing official will send FmHA Form Letter 1980–A–1 along with Form FmHA 1980–26, "Report on Collection Activities on Liquidated Accounts," by October 31st of each year, to each lender that has an FmHA guaranteed loan account which remains unsatisfied after the payment of the final loss claim. The loan servicing official will establish a follow-up system to assure each lender returns the appropriately completed Form FmHA 1980–26, by November 30th. Appropriate follow-up will be initiated for those lenders not providing adequate information as a result of the servicing official's request. The servicing official will forward these reports by program to the State Director by December 15th. The State Director will consolidate the reports by program and report the results to the Administrator by December 31st of each year. The FmHA servicing official will ensure that any funds received by the lender after the payment of the final loss claim will be prorated between FmHA and the lender in accordance with the Lender's Agreement. The lender will promptly transmit to FmHA such amounts recovered in proportion to the percentage of the guaranteed portion of the loan by using Form FmHA 1980–43, "Lender's Guaranteed Loan Payment to FmHA," and the lender will retain such amount in proportion to the percentage of the unguaranteed portion of the loan.

Subpart B—Farmer Programs Loans

3. Section 1980.146, paragraph (e)(3) is revised to read as follows:

§ 1980.146 Liquidation.

* * * * *

(e) * * *

(3) *Future Recovery.* The County Supervisor will monitor collection activities of lenders on unsatisfied liquidated accounts, which have had final loss claims paid, for 3 fiscal years following the fiscal year in which the loss claims were paid, beginning with loans which had final loss claims paid during fiscal year 1990. On October 31st of each year, the County Supervisor will provide FmHA Form Letter 1980–A–1 and Form FmHA 1980–26, "Report on Collection Activities on Liquidated Accounts," to each guaranteed lender for each guaranteed loan on which a final loss has been paid, but the account remains unsatisfied (the account is not paid in full, the borrower or any guarantors have not been released of liability, or the account has not been otherwise satisfied). A lender may, with FmHA's concurrence, release a borrower and/or cosigner from liability only when adequate compensation/consideration is received. The County Supervisor will establish a follow-up on each respective borrower management system card to send FmHA Form Letter 1980–A–1 and Form FmHA 1980–26 on October 31st and follow-up on November 30th for lenders who have not completed and returned to FmHA, Form FmHA 1980–26. The County Supervisor will forward these reports to the State Director by December 15th in accordance with § 1980.69 of subpart A of this part.

* * * * *

Dated: February 23, 1994.

Bob Nash,

Under Secretary for Small Community and Rural Development.

[FR Doc. 94–10756 Filed 5–4–94; 8:45 am]

BILLING CODE 3410–07–U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 94–NM–39–AD]

Airworthiness Directives; Israel Aircraft Industries (IAI) Model 1125 Westwind Astra Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain IAI Model 1125 Westwind Astra airplanes. This proposal would require relocation of the ground cable in the slat power drive unit. This proposal is prompted by a report that the drive system for the leading edge slat stopped in transit during flight on a Model 1125 Westwind Astra airplane. This incident was caused by an improper ground connection for the electric motor of the slat drive system, which resulted in arcing and an open electrical circuit. The actions specified by the proposed AD are intended to prevent possible fuel vapor fire due to electrical arcing in an area where fuel vapors might be present and the inability to move the slats during flight due to an open electrical circuit.

DATES: Comments must be received by June 29, 1994.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 94–NM–39–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Astra Jet Corporation, Technical Publications, 77 McCullough Drive, suite 11, New Castle, Delaware 19720–9813. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Tim Dulin, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington 98055–4056; telephone (206) 227–2141; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 94–NM–39–AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 94–NM–39–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

The Civil Aviation Administration of Israel (CAAI), which is the airworthiness authority for Israel, recently notified the FAA that an unsafe condition may exist on certain Israel Aircraft Industries (IAI) Model 1125 Westwind Astra airplanes. The CAAI advises that it has received a report that the drive system for the leading edge slat stopped in transit during flight on a Model 1125 Westwind Astra airplane. The cause of this incident has been attributed to an improper ground connection for the electric motor of the leading edge slat drive system, which resulted in arcing and an open electrical circuit. The ground connection for the electric motor is located in the area just forward of the wing spar. Since the fuel system is integrated into the structure of the wing, the area is subject to fuel leakage. An improper ground connection for the subject motor, if not corrected, could result in possible fuel vapor fire due to electrical arcing in an area where fuel vapors might be present, and the inability to move the slats during flight due to an open electrical circuit.

Astra Jet Corporation has issued Service Bulletin SB 1125–27–110, Revision 1, dated February 16, 1994, that describes procedures for relocation of the ground cable in the slat power drive unit (Modification 6350). Accomplishment of this modification involves routing the ground cable for the slat power drive located in the aircraft secondary structure to the aircraft primary structure. Relocating the ground cable will improve electrical grounding for the slat power drive unit. The CAAI classified this service bulletin as mandatory and issued Airworthiness Directive No. 93–02, dated December 2, 1993, in order to assure the continued airworthiness of these airplanes in Israel.

This airplane model is manufactured in Israel and is type certificated for operation in the United States under the provisions of § 21.29 of the Federal Aviation Regulations and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the CAAI has kept the FAA informed of the situation described above. The FAA has examined the findings of the CAAI, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would require relocation of the ground cable in the slat power drive unit. The actions would be required to be accomplished in accordance with the service bulletin described previously.

The FAA estimates that 52 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 3 work hours per airplane to accomplish the proposed actions, and that the average labor rate is $55 per work hour. Required parts would cost approximately $53 per airplane. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be $11,336, or $218 per airplane.

The total cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

Israel Aircraft Industries Limited: Docket 94–NM–39–AD.

Applicability: Model 1125 Westwind Astra airplanes; serial numbers 004 through 066 inclusive, and 068; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent possible fuel vapor fire due to electrical arcing in an area where fuel vapors might be present and the inability to move the slats during flight due to an open electrical circuit, accomplish the following:

(a) Within 50 hours time-in-service after the effective date of this AD, relocate the ground cable in the slat power drive unit in accordance with Astra Jet Service Bulletin SB 1125–27–110, Revision 1, dated February 16, 1994.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(c) Special flight permits may be issued in accordance with Federal Aviation Regulations (FAR) 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on April 29, 1994.

James V. Devany,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 94–10777 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–13–U

DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

30 CFR Part 914

Indiana Regulatory Program Amendment

AGENCY: Office of Surface Mining Reclamation and Enforcement (OSM), Interior.

ACTION: Proposed rule.

SUMMARY: OSM is announcing receipt of a proposed amendment to the Indiana regulatory program (hereinafter referred to as the "Indiana program") under the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The proposed amendment consists of revisions to the Indiana statutes as made by the Indiana General Assembly and contained in Senate Enrolled Act (SEA) 179. The amendment is intended to revise the Indiana program concerning disturbances in a floodway on a mine site.

DATES: Written comments must be received by 4 p.m., e.s.t. June 6, 1994. If requested, a public hearing on the proposed amendment will be held on May 31, 1994. Requests to speak at the hearing must be received by 4 p.m., e.s.t. on May 20, 1994. Any disabled individual who has need for a special accommodation to attend a public hearing should contact the individual listed under **FOR FURTHER INFORMATION CONTACT.**

ADDRESSES: Written comments and requests to speak at the hearing should be mailed or hand delivered to Roger W. Calhoun, Director, Indianapolis Field Office at the first address listed below.

Copies of the Indiana program, the proposed amendment, a listing of any scheduled public hearings, and all written comments received in response to this document will be available for public review at the addresses listed below during normal business hours, Monday through Friday, excluding holidays. Each requester may receive one free copy of the proposed amendment by contacting OSM's Indianapolis Field Office.

Roger W. Calhoun, Director, Indianapolis Field Office, Office of Surface Mining Reclamation and Enforcement, Minton-Capehart Federal Building, Room 301, Indianapolis, Indiana 46204, Telephone: (317) 226–6166.

Indiana Department of Natural Resources, 402 West Washington Street, Room C256, Indianapolis, Indiana 46204, Telephone: (317) 232–1547.

FOR FURTHER INFORMATION CONTACT: Roger W. Calhoun, Director, Indianapolis Field Office, Telephone: (317) 226–6166.

SUPPLEMENTARY INFORMATION:

I. Background on the Indiana Program
II. Discussion of the Proposed Amendment
III. Public Comment Procedures
IV. Procedural Determinations

I. Background on the Indiana Program

On July 29, 1982, the Secretary of the Interior conditionally approved the Indiana program. Background information on the Indiana program, including the Secretary's findings, the disposition of comments, and the conditions of approval can be found in the July 26, 1982, **Federal Register** (47 FR 32071). Subsequent actions concerning the conditions of approval and program amendments can be found at 30 CFR 914.10, 914.15, and 914.16.

II. Discussion of the Proposed Amendment

By letter dated October 1, 1993, (Administrative Record No. IND–1325) Indiana submitted a proposed amendment to its program pursuant to SMCRA. The amendment consists of statute changes made by the Indiana General Assembly and contained in the 1993 SEA 179. SEA 179 contains numerous amendments to Indiana statutes, but only those which pertain to the Indiana program are discussed below.

IC 13–4.1–4 Permit Approval or Denial

Indiana has amended subsection IC 13–4.1–4–3(a) concerning the findings required to be made by the director of the Indiana Department of Natural Resources (IDNR) prior to issuing a permit. New subdivision 3(a)(10) is added to provide as follows:

(10) if any part of the operation would take place in a floodway (as defined in IC 13–2–22–3), the operation will not:

(A) result in unreasonably detrimental effects upon the fish, wildlife, or botanical resources;

(B) adversely affect the efficiency; or

(C) unduly restrict the capacity of the floodway.

In its submittal of this amendment, Indiana explained that the proposed language quoted above is being added to the Indiana program as a consequence of an amendment to IC 13–2–22–13. New subdivision 13(c)(3) is added to IC 13–2–22–13 to provide that operations conducted under IC 13–4.1 (Indiana SMCRA) are exempted from the need for a "construction in a floodway" permit issued by the IDNR, Division of Water. Instead, any activity in a floodway which is to be conducted as part of an operation regulated under IC 13–4.1 must be identified in the permit application to the Division of Reclamation. A determination must then be made by the Division of Reclamation that the environmental standards identified in the proposed language are met. This determination will then become part of the "Findings Document" which accompanies each of the Division's final permit recommendation.

III. Public Comment Procedures

In accordance with the provisions of 30 CFR 732.17(h), OSM is seeking comments on whether the proposed amendment satisfies the applicable program approval criteria of 30 CFR 732.15. If the amendment is deemed adequate, it will become part of the Indiana program.

Written Comments

Written comments should be specific, pertain only to the issues proposed in this rulemaking, and include explanations in support of the commenter's recommendations. Comments received after the time indicated under **DATES** or at locations other than the Indianapolis Field Office will not necessarily be considered in the final rulemaking or included in the Administrative Record.

Public Hearing

Persons wishing to speak at the public hearing should contact the person listed under **FOR FURTHER INFORMATION CONTACT** by 4 p.m., e.s.t. on May 20, 1994. The location and time of the hearing will be arranged with those persons requesting the hearing. If no one requests an opportunity to testify at the public hearing, the hearing will not be held.

Filing of a written statement at the time of the hearing is requested as it will greatly assist the transcriber. Submission of written statements in advance of the hearing will allow OSM officials to prepare adequate responses and appropriate questions.

The public hearing will continue on the specified date until all persons scheduled to speak have been heard. Persons in the audience who have not been scheduled to speak, and who wish to do so, will be heard following those who have been scheduled. The hearing will end after all persons scheduled to speak and persons present in the audience who wish to speak have been heard.

Public Meeting

If only one person requests an opportunity to speak at a hearing, a public meeting, rather than a public hearing, may be held. Persons wishing to meet with OSM representatives to discuss the proposed amendment may request a meeting by contacting the person listed under **FOR FURTHER INFORMATION CONTACT.** All such meetings will be open to the public and, if possible, notices of meetings will be posted in advance at the locations listed under **ADDRESSES.** A written summary of each meeting will be made a part of the Administrative Record.

IV. Procedural Determinations

Executive Order 12866

This proposed rule is exempted from review by the Office of Management and Budget (OMB) under Executive Order 12866 (Regulatory Planning and Review).

Executive Order 12778

The Department of the Interior has conducted the reviews required by section 2 of Executive Order 12778 (Civil Justice Reform) and has determined that, to the extent allowed by law, this rule meets the applicable standards of subsections (a) and (b) of that section. However, these standards are not applicable to the actual language of State regulatory programs and program amendments since each such program is drafted and promulgated by a specific State, not by OSM. Under sections 503 and 505 of SMCRA (30 U.S.C. 1253 and 1255) and 30 CFR 730.11, 732.15, and 732.17(h)(10), decisions on proposed State regulatory programs and program amendments submitted by the States must be based solely on a determination of whether the submittal is consistent with SMCRA and its implementing Federal regulations and whether the other requirements of 30 CFR parts 730, 731, and 732 have been met.

National Environmental Policy Act

No environmental impact statement is required for this rule since section 702(d) of SMCRA (30 U.S.C. 1292(d)) provides that agency decisions on proposed State regulatory program provisions do not constitute major Federal actions within the meaning of section 102(2)(C) of the National Environmental Policy Act (42 U.S.C. 4332(2)(C)).

Paperwork Reduction Act

This rule does not contain information collection requirements that require approval by OMB under the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

Regulatory Flexibility Act

The Department of the Interior has determined that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). The State submittal which is the subject of this rule is based upon counterpart Federal regulations for which an economic analysis was prepared and certification made that such regulations would not have significant economic effect upon a substantial number of small entities. Accordingly, this rule will ensure that existing requirements previously promulgated by OSM will be implemented by the State. In making the determination as to whether this rule would have a significant economic impact, the Department relied upon the data and assumptions for the counterpart Federal regulations.

List of Subjects in 30 CFR Part 914

Intergovernmental relations, Surface mining, Underground mining.

Dated: April 28, 1994.

Ronald C. Recker,

Acting Assistant Director, Eastern Support Center.

[FR Doc. 94–10783 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–05–M

---

30 CFR Part 915

Iowa Permanent Regulatory Program

AGENCY: Office of Surface Mining Reclamation and Enforcement (OSM), Interior.

ACTION: Proposed rule; public comment period and opportunity for public hearing on proposed amendment.

SUMMARY: OSM is announcing the receipt of a proposed amendment to the Iowa permanent regulatory program (hereinafter, the "Iowa program") under the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The proposed amendment consists of changes to provisions of the Iowa regulations pertaining to rulemaking petitions, definitions, permit processing, revisions, bonding, backfilling and grading, civil penalties, and individual civil penalties. The amendment is intended to revise the Iowa program to be consistent with the corresponding Federal standards, to clarify ambiguities, to and improve operational efficiency.

DATES: Written comments must be received by 4 p.m., c.d.t. June 6, 1994. If requested, a public hearing on the proposed amendment will be held on May 31, 1994. Requests to present oral testimony at the hearing must be received by 4 p.m., c.d.t. on May 20, 1994. Any disabled individual who has need for a special accommodation to attend a public hearing should contact the individual listed under **FOR FURTHER INFORMATION CONTACT.**

ADDRESSES: Written comments should be mailed or hand delivered to Michael C. Wolfrom at the address listed below.

Copies of the Iowa program, the proposed amendment, and all written comments received in response to this document will be available for public review at the addresses listed below during normal business hours, Monday through Friday, excluding holidays. Each requester may receive one free copy of the proposed amendment by contacting OSM's Kansas City Field Office.

Michael C. Wolfrom, Acting Director, Kansas City Field Office; Office of Surface Mining Reclamation and Enforcement; 934 Wyandotte, room 500; Kansas City, MO 64105, Telephone: (816) 374–6405.

Department of Agriculture and Land Stewardship, Division of Soil Conservation; Wallace State Office Building; East 9th and Grand Streets; Des Moines, Iowa 50319, Telephone: (515) 281–6147.

FOR FURTHER INFORMATION CONTACT: Michael C. Wolfrom, Telephone: (816) 374–6405.

SUPPLEMENTARY INFORMATION:

I. Background on the Iowa Program

On January 21, 1981, the Secretary of Interior conditionally approved the Iowa program. General background information on the Iowa program, including the Secretary's findings, the disposition of comments, and the conditions of approval of the Iowa program can be found in the January 21,

1981, **Federal Register** (46 FR 5885). Subsequent actions concerning Iowa's program and program amendments can be found at 30 CFR 915.15 and 915.16.

II. Proposed Amendment

By letter dated April 13, 1994, (Administrative Record No. IA–397) Iowa submitted a proposed amendment to its program pursuant to SMCRA. Iowa submitted the proposed amendment with the intent of satisfying the required program amendments at 30 CFR 915.16 (a) and (b) and at the State's own initiative to improve its program.

The substantive changes proposed by Iowa are discussed briefly below:

(1) IAC 27–40.3(207), General

Iowa proposes to add a statement that in lieu of the regulations previously deleted at 30 CFR 700.12 concerning "Petitions to initiate rulemaking," rules of the Iowa Department of Agriculture and Land Stewardship at 21 IAC Chapter 3, "Petitions for Rulemaking" shall serve as the basis for submitting petitions to initiate rulemaking.

(2) IAC 27–40.4(9), Definitions

Iowa proposes to delete its definition of "previously mined area" as incorporated by reference and replace it such that "[p]reviously mined area" means the land affected by surface coal mining operations prior to August 3, 1977, that has not been reclaimed to the standards of 30 CFR chapter VII.

(3) IAC 27–40.31(14), Requirements for Permits and Permit Processing

Iowa proposes to remove and reserve this subrule concerning willful suppressing or falsifying of facts or data that OSM previously reviewed but did not approve.

(4) IAC 27–40.32(207), Revision or Amendment, Renewal, Transfer, Assignment, or Sale of Permit Rights

Iowa proposes to replace its regulations concerning requirements for defining and processing significant permit revisions and nonsignificant permit revisions. Iowa uses the term "permit revision" to mean significant permit revision and the term "amendment" to mean nonsignificant permit revision.

(5) IAC 27–40.51(7), Bond and Insurance Requirements for Surface Coal Mining and Reclamation Operations Under Regulatory Programs

Iowa proposes to delete its existing subrule and replace it with the requirement that an application for bond release shall not be considered filed until a written determination of completeness for the bond release application has been provided to the applicant by the division.

(6) IAC 27–40.63(2), Backfilling and Grading: Time and Distance Requirements

Iowa proposes to delete its incorporation by reference of 30 CFR 816.101 [Backfilling and grading: Time and distance requirements] and replace it with the requirement that (a) except as provided in paragraph "b" of the subrule, rough backfilling and grading for surface mining activities shall be completed within 180 days following coal removal, and not more than four spoil ridges behind the pit being worked, the spoil from the active pit constituting the first ridge; (b) the division may extend the time allowed for rough backfilling and grading for the entire permit area or for a specified portion of the permit area if the permittee demonstrates in accordance with 27 IAC 40.36/30 CFR 780.18(b)"3" of these rules that additional time is necessary.

(7) IAC 27–40.74(3), Civil Penalties

Iowa proposes to adopt specific State counterpart rule cites for those Federal rule cites at 30 CFR 845.15(b)(2) that were previously incorporated by reference by the State.

(8) IAC 27–40.75(2), Individual Civil Penalties

Iowa proposes to adopt a specific State Code reference (Iowa Code 207.15(3)) counterpart to section 518(b) of the Surface Coal Mining and Reclamation Act in its definition of "Violation, failure, or refusal."

III. Public Comment Procedures

In accordance with the provisions of 30 CFR 732.17(h), OSM is seeking comments on whether the proposed amendment satisfies the applicable program approval criteria of 30 CFR 732.15. If the amendment is deemed adequate, it will become part of the Iowa program.

Written Comments

Written comments should be specific, pertain only to the issue proposed in this rulemaking, and include explanations in support of the commenter's recommendations. Comments received after the time indicated under **DATES** or at locations other than the Kansas City Field Office will not necessarily be considered in the final rulemaking or included in the administrative record.

Public Hearing

Persons wishing to testify at the public hearing should contact the person listed under **FOR FURTHER INFORMATION CONTACT** by 4 p.m., c.d.t. May 20, 1994. The location and time of the hearing will be arranged with those persons requesting the hearing. If no one requests an opportunity to testify at the public hearing, the hearing will not be held.

Filing of a written statement at the time of the hearing is requested as it will greatly assist the transcriber. Submission of written statements in advance of the hearing will allow OSM officials to prepare adequate responses and appropriate questions.

The public hearing will continue on the specified date until all persons scheduled to comment having been heard. Persons in the audience who have not been scheduled to testify, and who wish to do so, will be heard following those who have been scheduled. The hearing will end after all persons scheduled to testify and persons present in the audience who wish to testify have been heard.

Public Meeting

If only one person requests an opportunity to testify at a hearing, a public meeting, rather than a public hearing, may be held. Persons wishing to meet with OSM representatives to discuss the proposed amendment may request a meeting at the OSM office listed under **FOR FURTHER INFORMATION CONTACT**. All such meetings will be open to the public and, if possible, notices of meetings will be posted at the locations listed under **ADDRESSES**. A written summary of each meeting will be made a part of the administrative record.

IV. Procedural Determinations

Compliance With Executive Order 12866

This proposed rule is exempted from review by the Office of Management and Budget (OMB) under Executive Order 12866 (Reduction of Regulatory Burden).

Compliance With the National Environmental Policy Act

No environmental impact statement is required for this rule since section 702(d) of SMCRA [30 U.S.C. 1292(d)] provides that agency decisions on proposed State regulatory program provisions do not constitute major Federal actions within the meaning of section 102(2)(C) of the National Environmental Policy Act, 42 U.S.C. 4332(2)(C).

Compliance With the Regulatory Flexibility Act

The Department of the Interior has determined that this rule will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). The State submittal which is the subject of this rule is based upon counterpart Federal regulations for which an economic analysis was prepared and certification made that such regulations would not have a significant economic effect upon a substantial number of small entities. Hence, this rule will ensure that existing requirements previously promulgated by OSM will be implemented by the State. In making the determination as to whether this rule would have a significant economic impact, the Department relied upon the data and assumptions for the counterpart Federal regulations.

Compliance With Executive Order 12778

The Department of the Interior has conducted the reviews required by section 2 of Executive Order 12778 (Civil Justice Reform) and has determined that this rule meets the applicable standards of subsection (a) and (b) of that section. However, these standards are not applicable to the actual language of State regulatory programs and program amendments since each such program is drafted and promulgated by a specific State, not by OSM. Under sections 503 and 505 of SMCRA (30 U.S.C. 1253 and 1255) and 30 CFR 730.11, 732.15, and 732.17(h)(10), decisions on proposed State regulatory programs and program amendments submitted by the States must be based solely on a determination of whether the submittal is consistent with SMCRA and its implementing Federal regulations and whether the requirements of 30 CFR Parts 730, 731, and 732 have been met.

Compliance With the Paperwork Reduction Act

This rule does not contain information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act, 44 U.S.C. 3507 *et seq.*

List of Subjects in 30 CFR Part 915

Intergovernmental relations, Surface mining, Underground mining.

Dated: April 26, 1994.

Raymond L. Lowrie,

Assistant Director, Western Support Center.

[FR Doc. 94–10784 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–05–M

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 165

[COTP Jacksonville Regulation 94–027]

RIN 2115–AA97

Safety Zone Regulations; St. Johns River, Jacksonville, FL

AGENCY: Coast Guard, DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to establish a permanent safety zone in the St. Johns River around barges launching fireworks located between the Hart and Acosta Bridges. The permanent safety zone will relieve the need to establish temporary safety zones for the purpose of regularly scheduled fireworks displays. The zone will be placed into effect during fireworks displays to protect vessels in the vicinity from safety hazards associated with the storage, preparation and launching of fireworks. It will automatically terminate at the conclusion of the fireworks display unless terminated earlier by the Captain of the Port of District Commander.

DATES: Comments must be received on or before June 20, 1994.

ADDRESSES: Comments should be mailed to Commanding Officer, Coast Guard Marine Safety Office, 2831 Talleyrand Avenue, Jacksonville, FL 32206–3497. The comments will be available for inspection and copying at MSO Jacksonville, Room 222. Normal office hours are between 7:30 a.m. and 4 p.m., Monday through Friday, except holidays.

Comments may also be hand delivered to this address.

FOR FURTHER INFORMATION CONTACT: Lieutenant A. Varamo, Tel: (904) 232–2648.

SUPPLEMENTARY INFORMATION: Interested persons are invited to participate in this rulemaking by submitting written views, data or arguments. Persons submitting comments should include their names and addresses, identify this notice (94–027) and the specific section of the proposal to which their comments apply, and give reasons for each comment.

The regulations may be changed in light of comments received. All comments received before the expiration of the comment period will be considered before final action is taken on this proposal. No public hearing is planned, but one may be held if written requests for a hearing are received and it is determined that the opportunity to make oral presentations will aid the rulemaking process.

Drafting Information

The drafters of this notice are Lieutenant A. Varamo, project officer for the Captain of the Port Jacksonville, and Lieutenant J. Losego, project attorney, Seventh Coast Guard District Legal Office

Discussion of Proposed Regulations

The events requiring this regulation are fireworks displays which necessitates that an area within 500 yards of fireworks barges remain clear of all vessels. The safety zone will be in effect around the barges when fireworks are prepared and launched. Vessels are prohibited from anchoring, mooring, or transiting the St. Johns River within the prescribed area while the safety zone is in effect to avoid potential hazards associated with the fireworks display. The need to establish this permanent safety zone is based on the number of safety zones issued for fireworks displays in this area over the last year. Between April 1993 and April 1994, 15 safety zones were established in this area of the St. Johns River. The creation, review, and submission of the large number of individual field regulations for these safety zones presents a significant administrative burden. The permanent safety zone would alleviate this burden.

This regulation is issued pursuant to 33 U.S.C. 1231 as set out in the authority citation for all of part 165.

Federalism

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 12612, and it has been determined that the proposed rulemaking does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Environmental Assessment

The Coast Guard has considered the environmental impact of this proposal consistent with section 2.B.2.C of Commandant Instruction M16475.1B and the establishment of safety zones has been determined to be categorically excluded from further environmental documentation.

Economic Assessment and Certification

This proposal is not a significant regulatory action under Executive Order 12866 on Federal Regulation and is nonsignificant under the Department of Transportation regulatory policies and procedures (44 FR 11034, February 26, 1979). The economic impact of this proposal is expected to be so minimal that a full regulatory evaluation is unnecessary. The safety zone will only be in effect during the preparation and launching of fireworks. The Coast Guard will notify the public of the activation of the safety zone by transmitting a Broadcast Notice to Mariners on appropriate VHF–FM radio frequencies in advance of each fireworks display. The exact time of each safety zone will be included in the Broadcast Notice to Mariners. Each safety zone is expected to last for approximately one hour, which includes the time immediately prior to, during, and after the fireworks display.

Since the impact of this proposal is expected to be minimal, the Coast Guard certifies that, if adopted, it will not have significant impact on a substantial number of small entities.

List of Subjects in 33 CFR part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Safety measures, Waterways.

Proposed Regulations

In consideration of the foregoing, subpart C of title 33, Code of Federal Regulations, is proposed to be amended as follows:

PART 165—[AMENDED]

1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; 50 U.S.C. 191; 49 CFR 1.46 and 33 CFR 1.05–1(g), 6.04–1, 6.04–6, and 160.5.

2. A new § 165.721 is added to read as follows:

§ 165.721 Safety Zone: St. Johns River, Jacksonville, Florida.

(a) *Location.* The following area is established as a safety zone during the specified conditions: The waters within a 500 yard radius of the fireworks barge or barges during the storage, preparation, and launching of fireworks in the St. Johns River between the Hart and Acosta Bridges.

(b) *Effective dates.* This section becomes effective upon activation by the Captain of the Port by the broadcasting of a local Notice to Mariners on appropriate VHF–FM radio frequencies. It terminates at the conclusion of the fireworks display unless terminated earlier by the Captain of the Port.

(c) *Regulations*—(1) In accordance with the general regulations in 165.23 of this part, anchoring, mooring or transiting in this zone is prohibited unless authorized by the District Commander or Captain of the Port.

(2) This section does not apply to authorized law enforcement agencies operating within the Safety Zone.

Dated: April 12, 1994.

A. Regalbuto,

Captain, U.S. Coast Guard, Captain of the Port, Jacksonville, Florida.

[FR Doc. 94–10857 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–14–M

Saint Lawrence Seaway Development Corporation

33 CFR Part 402

Tariff of Tolls: Proposed Revision

AGENCY: Saint Lawrence Seaway Development Corporation, DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Saint Lawrence Seaway Development Corporation and the St. Lawrence Seaway Authority of Canada have jointly established and presently administer the St. Lawrence Seaway Tariff of Tolls. This Tariff sets forth the level of tolls assessed on all commodities and vessels transiting the facilities operated by the Corporation and the Authority. To improve the competitiveness of the Seaway, the Corporation and the Authority are proposing that the Tariff be amended to provide that the charges for the 1994 season under the Tariff Schedule be the same as for the 1993 season, except the toll for steel slab. In an effort to increase steel slab shipments, the Corporation and the Authority are proposing a separate, lower toll for this commodity, which is now included under the general cargo rate. In addition, the Corporation and the Authority are proposing for competitive purposes that the Incentive Tolls Program be continued and be revised by increasing the amounts of the discounts and rebates and their applicability.

DATES: Any party wishing to present views or data on the proposed revision may file comments with the Corporation on or before June 6, 1994.

ADDRESSES: Send comments to Marc C. Owen, Chief Counsel, Saint Lawrence Seaway Development Corporation, 400 Seventh Street, S.W., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Marc C. Owen, Chief Counsel, Saint Lawrence Seaway Development Corporation, 400 Seventh Street, SW, Washington, DC 20590, (202) 366–0091.

SUPPLEMENTARY INFORMATION: In and effort to improve the Seaway's competitiveness, it is proposed to amend § 402.8, the Schedule of Tolls, to provide the charges for the 1994 season under the Tariff Schedule be the same as for the 1993 season, except the toll for steel slab. In an effort to increase steel slab shipments, the Corporation and the Authority are proposing a separate, lower toll for this commodity, which is now included under the general cargo rate. This separate toll would be a 25 cents per metric ton reduction for each of the two Seaway segments, a net reduction of 50 cents per metric ton for vessels transiting both segments. As a conforming amendment, paragraph (i) of § 402.3, the definition of "general cargo" would be amended to reflect that steel slab is no longer included in this category. The Corporation and the Authority also are proposing, for competitive purposes, that the Incentive Tolls Program be continued and be revised. Section 402.9 would be amended to provide that a new business incentive of a 50% discount would be granted to a carrier immediately upon application before transit or upon arrival at its destination. In addition, North American origins and destinations will be grouped into five geographic regions to discourage cargo diversions. It is additionally proposed to amend § 402.11 to provide that volume rebates of 50% would be available to both shippers and receivers of cargoes with a satisfactory three year traffic history for the commodity involved. When a particular shipper's or receiver's shipments of a specific commodity exceed their highest single season tonnage amount of that commodity of the previous three seasons by at least 25,000 metric tons, the rebate would be applied to all tons exceeding that previous high. This change will target to rebates more directly to shippers and receivers. The alternate use of bulkers program (section 402.13) would be continued, but amended to include steel slab as a separate commodity. That section would also be amended to make clarifying, editorial changes that have proved necessary from experience, but the manner in which the provisions is interpreted and administered would not change. Finally, a new section 402.15 would be added to clarify that carriers, shippers, or receivers would be eligible to receive only one of the incentives, *i.e.*, new business, discount, bulk trade

discount, or volume rebate, for any one shipment.

Regulatory Evaluation

This proposed regulation involves a foreign affairs function of the United States, and therefore, Executive Order 12866 does not apply. This proposed regulation has also been evaluated under the Department of Transportation's Regulatory Policies and Procedures and the proposed regulation is not considered significant under those procedures and its economic impact is expected to be so minimal that a full economic evaluation is not warranted.

Regulatory Flexibility Act Determination

The Saint Lawrence Seaway Development Corporation certifies that this proposed regulation, if adopted, would not have a significant economic impact on a substantial number of small entities. The St. Lawrence Seaway Tariff of Tolls relates to the activities of commercial users of the Seaway, the vast majority of whom are foreign vessel operators. Therefore, any resulting costs will be borne mostly by foreign vessels.

Environmental Impact

This proposed regulation does not require an environmental impact statement under the National Environmental Policy Act (49 U.S.C. 4321, *et seq.*) because it is not a major federal action significantly affecting the quality of human environment.

Federalism

The Corporation has analyzed this proposal under the principles and criteria in Executive Order 12612 and has determined that this proposal does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

List of Subjects in 33 CFR Part 402

Vessels, Waterways.

Accordingly, the Saint Lawrence Seaway Development Corporation proposes to amend 33 CFR Part 402 as follows:

PART 402—TARIFF OF TOLLS

1. The authority citation for 33 CFR part 402 continues to read as follows:

Authority: 68 Stat. 93, 33 U.S.C. 981–990.

2. Section 402.3 would be amended by revising paragraph (i) to read as follows:

§ 402.3 Interpretation.

* * * * *

(i) *General cargo* means all goods not included in the definitions under paragraphs (b), (g), (h), and (j) of this section, but excluding steel slab;

* * * * *

3. Section 402.8 would be revised to read as follows:

§ 402.8 Schedule of Tolls.

	Tolls (Effective 1994)	
	Montreal to or from Lake Ontario (MLO)	Lake Ontario to or from Lake Erie (Welland Canal)
(a) For transit of the Seaway, a composite toll, comprising:		
(1) A charge in dollars per gross registered ton, according to national registry of the vessel, applicable whether the vessel is wholly or partially laden, or is in ballast. (All vessels shall have an option to calculate gross registered tonnage according to prescribed rules for measurement in either Canada or the United States.)	0.11	0.13
(2) A charge in dollars per metric tons of cargo as certified on ship's manifest or other document, as follows:.		
Bulk Cargo	1.10	0.55
Food Grains	0.68	0.55
Feed Grains	0.68	0.55
Coal	0.65	0.55
General Cargo	2.66	0.88
Steel Slab	2.41	0.63
Containerized Cargo	1.10	0.55
Government Aid	0.00	0.00
(3) a charge in dollars per passenger per lock	1.18	1.18
(4) a charge in dollars per lock for complete or partial transit of the Welland Canal in either direction by cargo vessels, which may be shared by cargo vessels in tandem:.		
(i) loaded per: lock	N/A	440.00
(ii) in ballast: per lock	N/A	325.00
(b) For partial transit of the Seaway:		
(1) between Montreal and Lake Ontario, in either direction, 15 percent per lock, of the applicable toll..		
(2) between Lake Ontario and Lake Erie, in either direction, (Welland Canal), 13 percent per lock of the applicable toll..		
(c) Minimum charge in dollars per vessel per lock transited for full or partial transit of the Seaway:		
Pleasure craft [1]	10.00	10.00
Other vessels	15.00	15.00

[1] Includes Federal Taxes where applicable.

4. Section 402.9 would be revised to read as follows:

§ 402.9 Incentive tolls.

(a) Notwithstanding anything contained in this Tariff, the portion of the composite toll related to charges per metric ton of cargo charged on new business shall be reduced by fifty percent for a Seaway transit beginning and ending during the 1994 navigation year.

(b) The discount mentioned in paragraph (a) of this section shall be granted for the remainder of the navigation season if:

(1) A vessel carries, for each transit, 1,000 metric tons or more of new business or a minimum of 1,000 cubic meters of new business project cargo; and

(2) A complete and accurate application for a new business discount is submitted to the Authority or the Corporation, on the form provided by the Authority or the Corporation, for evaluation and audit by the Authority or the Corporation prior to the beginning of a Seaway transit.

(c) For the purposes of this section, "new business" means cargo that has not moved through a Seaway lock between an origin and a destination as defined in this paragraph (c) during the navigation seasons of 1991, 1992, and 1993 or cargo that has moved through a Seaway lock in quantities representing less than five percent of the average of Seaway traffic between an origin and a destination during the navigation seasons of 1991, 1992, and 1993. For the purposes of this paragraph (c), "origin" and "destination" mean the country in which the cargo is loaded or unloaded, but if the cargo is unloaded in North America, "origin" and "destination" mean the geographic region in which the cargo is unloaded, those geographic regions being as follows:

(1) The Gulf of St. Lawrence and St. Lambert Lock;

(2) St. Lambert Lock to Cape Vincent on the St. Lawrence River, Lake Ontario and the Welland Canal;

(3) Lake Erie, Lake Huron, and connecting waters;

(4) Lake Michigan;

(5) Lake Superior and St. Mary's River; and

(6) Ports elsewhere in North America in regions not specifically described in paragraphs (c) (1) through (5) of this section.

5. Section 402.11 would be revised to read as follows:

§ 402.11 Volume discount.

(a) A volume rebate shall be granted to a shipper of downbound cargo or to a receiver of upbound cargo at the end of the 1994 navigation season after payment of the full toll specified in the schedule under the tariff in section 402.8 if shipments of a particular commodity during 1994 exceed by a minimum of 25,000 tons the shipper's or receiver's highest tonnage for that particular commodity during 1991, 1992, or 1993 in the Seaway. Shippers will be qualified based upon the particular commodity loaded at their port of origin and receivers will be qualified based on the particular commodity unloaded at their port of destination. Shippers and receivers located within the Seaway will be qualified based on the total of their upbound and downbound shipments or receipts of the particular commodity. Should a shipper or receiver of the same commodity qualify for a volume rebate, the rebate will be divided equally between the shipper and receiver.

(b) Volume rebates shall be granted only with respect to commodities whose shipper and receiver have shipped or received the subject commodity in the years 1991, 1992, and 1993 and have not been subject of a merger or take-over during 1991, 1992, 1993, or 1994.

(c) The volume rebate shall be equal to a 50 percent reduction of the portion of the composite toll related to charges per metric ton of cargo paid for the shipments that surpass the shippers or receiver's highest tonnage for that commodity during 1991, 1992, or 1993. Payment of rebates will be made directly to the qualified shipper or receiver.

(d) The Seaway traffic history describing the shipper's or receiver's tonnage shall be submitted by the shipper or receiver prior to the end of 1994 and shall be subject to audit by the Authority.

(e) Cargoes having been the subject of a new business discount or an alternate use of bulker discount described in section 402.13 of this Part shall be excluded from the statistics used for calculation of volume rebates.

6. Section 402.13 would be revised to read as follows:

§ 402.13 Vessels engaged primarily in the bulk trade.

Notwithstanding anything contained in this Tariff, the toll for steel slab, general, or containerized cargo for any vessel documented under the laws of the United States or registered in Canada in accordance with the laws of Canada that has been engaged primarily in the bulk trade within the St. Lawrence Seaway/Great Lakes system during the three navigation seasons immediately preceding the applicable season shall, upon written application to the Authority or the Corporation prior to the beginning of a Seaway transit, be the toll charged for food grains specified in the schedule under the Tariff in § 402.8 of this part.

7. A new § 402.15 would be added to read as follows:

§ 402.15 Single season discounts or rebate for same shipment.

Notwithstanding anything in the Tariff, a carrier, shipper, or receiver shall obtain during a single navigation season, with respect to the same shipment, only one of the following three: A new business discount, as described in § 402.9; a bulk trade discount, as described in § 402.13; or a volume rebate, as described in § 402.11.

Issued at Washington, DC on April 25, 1994.

Saint Lawrence Seaway Development Corporation.

Marc C. Owen,

Chief Counsel.

[FR Doc. 94-10568 Filed 5-4-94; 8:45 am]

BILLING CODE 4910-61-M

FEDERAL MARITIME COMMISSION

46 CFR Part 540

[Docket No. 94-06]

Financial Responsibility Requirements for Nonperformance of Transportation

AGENCY: Federal Maritime Commission.

ACTION: Proposed Rule; Extension of Comment Period.

SUMMARY: By Notice of Proposed Rulemaking published March 31, 1994 (59 FR 15149), as corrected by a document published April 18, 1994 (59 FR 18443), the Federal Maritime Commission proposed to remove the $15 million unearned passenger revenue ("UPR") ceiling now applicable to passenger vessel financial responsibility requirements for nonperformance of transportation, because some vessel operators now have UPRs significantly exceeding $15 million. The Commission also proposed to revise the current UPR sliding scale accordingly—and to require coverage of 110 percent of UPR up to $25 million per operator, with coverage of 90 percent of UPR for amounts exceeding $25 million. Comment was also sought on an alternative proposal to require coverage of 110 percent of UPR up to $25 million per operator; 75 percent of UPR between $25 million and $50 million per operator; and 50 percent coverage for UPR over $50 million per operator. Additionally, the Commission proposed to remove self-insurance as an option for section 3 coverage (except for state or federal entities). Existing self-insured commercial operations would be provided one year following the effective date of any final rule in this matter to obtain other evidence of financial responsibility. These changes are deemed necessary to ensure that cruise passengers are adequately protected in the event of nonperformance of transportation. The Delta Queen Steamboat Co. now has requested a ninety day extension of the comment period and the International Council of Cruise Lines has requested that the comment period be extended to June. 15, 1994. The Commission has

determined to extend the comment period to June 10, 1994.

DATES: Comments due on or before June 10, 1994.

ADDRESSES: Send comments (original and 20 copies) to: Joseph C. Polking, Secretary, Federal Maritime Commission, 800 North Capitol St., NW., Washington, DC 20573, (202) 523-5725.

FOR FURTHER INFORMATION CONTACT: Bryant L. VanBrakle, Director, Bureau of Tariffs, Certification and Licensing, Federal Maritime Commission, 800 North Capitol St., NW., Washington, DC 20573, (202) 523-5796.

By the Commission.

Ronald D. Murphy,

Assistant Secretary.

[FR Doc. 94-10742 Filed 5-4-94; 8:45 am]

BILLING CODE 6730-01-M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1, 73 and 76

[MM Docket No. 94-34, FCC 94-103]

Notice of Inquiry Regarding Broadcast and Cable Television EEO Rules and Policies

AGENCY: Federal Communications Commission.

ACTION: Proposed rule; notice of inquiry.

SUMMARY: This Notice of Inquiry in MM Docket No. 94-34 seeks comment on the Commission's current equal employment opportunity (EEO) rules and policies, and proposals for changes in promoting equality of employment opportunity and promotion opportunity in the cable, broadcast, and other telecommunications industries. This proceeding is initiated in order to assist the Commission in complying with section 22(g) of the Cable Television Consumer Protection and Competition Act of 1992, which requires the Commission to file a report to Congress on the effectiveness of its EEO policies.

DATES: Initial comments due May 23, 1994; reply comments due June 7, 1994.

ADDRESSES: Federal Communications Commission, Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Hope G. Cooper, Mass Media Bureau, Enforcement Division. (202) 632-7069.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Notice of Inquiry in MM Docket No. 94-34, FCC 94-103, adopted April 20, 1994, and released April 21, 1994. The complete text of this Notice of Inquiry is available for inspection and copying during normal business hours in the FCC Reference Center (room 239), 19919 M Street, NW., Washington, DC, and may also be purchased from the Commission's copy contractor, International Transcription Service, at (202) 857-3800, 2100 M Street, NW., suite 140, Washington, DC 20037.

Synopsis of Notice of Inquiry

1. To assist the Commission in implementing section 22(g) of the Cable Television Consumer Protection and Competition Act of 1992, which requires the Commission to file a report to Congress on the effectiveness of its EEO policies, the Commission adopted a notice of inquiry. This notice of inquiry outlines the Commission's broadcast and cable EEO rules, policies and procedures; suggests proposals for changes to these rules; and invites comments on ways that the Commission can more efficiently enforce these rules. To focus the comments the Commission has set forth a number of areas where changes might be considered.

2. The Commission asks how its EEO policies can reflect the concerns of broadcasters who indicate difficulties in meeting EEO requirements due to their location in small markets. The Commission seeks information concerning how "small market broadcasters" should be defined and what process should be implemented to identify such broadcasters.

3. The Commission asks if there is a way to decrease any administrative burdens placed on broadcasters by the Commission without decreasing the effectiveness of the Commission's broadcast EEO enforcement. The Commission's primary focus is on full-time hires and employment. The Commission seeks comment as to whether the requirement for efforts documentation of part-time hires should be eliminated for all broadcasters. The Commission seeks comment as to whether its inquiry letters should be revised to request information for the entire license term or for some other period to time instead of the three years of information that is presently asked for. It also seeks comment as to whether to supplement its renewal inquiry procedures by conducting on-site audits. The Commission seeks comment on possible revisions to the Broadcast Renewal Application which presently asks for examples of recruitment sources contacted, the number of female and minority referrals received from recruitment sources and the number of overall as well as upper-level hires occurring during the 12-month period prior to filing the application. These revisions include requesting information for only full-time hires, requesting that the information required by the form be divided by full and part-time hires and requesting more detailed recruitment and hiring information. The Commission also requests comment on revising the Broadcast Station Annual Employment Report to request information be collected for the same 15 job categories as is now required for cable operators and multichannel video programming distributors (MVPDs).

4. The Commission requests comment as to whether broadcasters should be required to encourage minority and female entrepreneurs to conduct business with all parts of their operation given that the Commission already requires cable operators and MVPDs to do so. Given that the Commission now gives credit to broadcasters and cable operators for using minority/female sources and/or obtaining minority/female referrals with other licensees and cable operators, respectively, the Commission seeks comment as to what it can do to encourage joint recruitment efforts by licensees and joint recruitment efforts by licensees and joint recruitment efforts by cable operators.

5. The Commission asks if its broadcast and cable EEO enforcement is adequate regarding the promotion and retention of minority and female employees and, if not, to what extent should changes be made.

6. The Commission asks if there is a way to decrease any administrative burdens placed on a cable operators by the Commission without decreasing the effectiveness of the Commission's cable EEO enforcement. It asks for comment on the job title information and information regarding 15 job categories required in the Cable Television Annual Employment Reports. It also seeks comment on whether it should require cable operators to maintain certain types of records about their recruitment efforts for a specified period of time. It seeks comment on its present method for selection cable audit locations. This method is to select a region of the country based on such factors as the concentration of minorities in the available labor force and the number of employment units in the area and then review Cable Television Annual Employment Reports of units in that area that fall below the processing guidelines and/or have employment discrepancies. The Commission also seeks comment on whether the remedies and sanctions available to redress violations of the cable EEO rules, which include admonishment, reporting conditions, forfeitures and suspension of the cable antenna real service license, are adequate. If not, the Commission

asks what other remedies and sanctions Congress might provide in order to enforce the cable EEO rules, particularly with respect to furthering the congressional goal of increased opportunities for minorities and women in managerial positions.

7. The Commission seeks comment as to how it can better enable cable operators and MVPDs to meet their EEO goals and as to how it can better inform cable operators, MVPDs and the public about their EEO obligations.

8. The Commission seeks comment on all of the foregoing as well as the appropriate application and enforcement of its EEO policies in connection with new and Emerging communication technologies.

Administrative Matters

Ex Parte: This is a non-restricted proceeding subject to 47 CFR § 1.1206(b)(2).

Comments. Interested parties may file comments on or before May 23, 1994, and reply comments on or before June 7, 1994.

List of Subjects

47 CFR Part 1

Non-restricted proceedings, Radio.

47 CFR Part 73

Television and radio broadcasting, Equal employment opportunity, Reporting and recordkeeping requirements.

47 CFR Part 76

Equal employment opportunity, Reporting and recordkeeping requirements.

Federal Communications Commission.

William F. Caton,

Acting Secretary.

[FR Doc. 94–10792 Filed 5–4–94; 8:45 am]

BILLING CODE 6712–01–M

---

47 CFR Part 73

[MM Docket No. 93–214, RM–8287, RM–8350]

Radio Broadcasting Services; Ocracoke, Edenton, Columbia, Pine Knoll Shores, NC

AGENCY: Federal Communications Commission.

ACTION: Proposed rule, dismissal of.

SUMMARY: The Commission denies the petition for rulemaking filed by Ocracoke Broadcasters requesting the substitution of Channel 224C1 for Channel 225A at Ocracoke, NC, and the modification of its construction permit for a new Class A station to specify operation on the higher class channel. See 59 FR 40401, July 28, 1993. The Commission found that the proposed site would not permit compliance with Section 73.315 of the Commission's Rules regarding 70 dBu city-grade coverage. The Commission also denies the counterproposal filed by Lawrence F. and Margaret A. Loesch to substitute Channel 273C1 for Channel 273C2 at Edenton, NC, reallot Channel 273C1 to Columbia, NC, substitute Channel 224A for unoccupied but applied-for Channel 272A at Pine Knoll Shores, NC, and modify Station WERX–FM's license to specify Columbia as its community of license. The Commission found that the proposed transmitter site is located in a swamp and no showing that a suitable transmitter site exists was provided. With this action, this proceeding is terminated.

FOR FURTHER INFORMATION CONTACT: Leslie K. Shapiro, Mass Media Bureau, (202) 634–6530.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Report and Order, MM Docket No. 93–214, adopted April 14, 1994, and released May 2, 1994. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Reference Center (Room 239), 1919 M Street, NW, Washington, DC. The complete text of this decision may also be purchased from the Commission's copy contractor, International Transcription Services, Inc., (202) 857–3800, 2100 M Street, NW., Suite 140, Washington, DC 20037.

Federal Communications Commission.

Victoria M. McCauley,

Acting Chief, Allocations Branch, Policy and Rules Division, Mass Media Bureau.

[FR Doc. 94–10791 Filed 5–4–94; 8:45 am]

BILLING CODE 6712–01–M

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

Denial of Petition for Rulemaking Federal Motor Vehicle Safety Standard No. 105

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.

ACTION: Denial of petition for rulemaking.

SUMMARY: This notice denies a petition for rulemaking by Volkswagen of America, Inc. (VW) to amend Standard No. 105 by reducing the required height for lettering on antilock brake failure indicator lights. VW wants the reduction to facilitate its efforts to develop a single indicator light design that complies with both U.S. and Canadian requirements. Standard 105 provides that if a separate indicator light is provided for antilock brake failure, the indicator must bear one of the following: "Antilock," "Anti-lock" or "ABS." Canada requires use of the ISO brake failure symbol. VW's single design would consist of the letters "ABS" placed inside the ISO symbol. A letter size reduction would enable VW to avoid having to use what it regards as an overly large ISO symbol.

NHTSA is denying this petition for two reasons. First, NHTSA believes that reducing the minimum letter height would make it impossible for many drivers, particularly elderly ones, to read the words and thus discern when there is a brake system failure. Second, the agency is not convinced that the international symbol, by itself, is sufficiently recognizable to be understood as an indication of brake failure by persons unfamiliar with that symbol.

FOR FURTHER INFORMATION CONTACT: Mr. Larry Cook, Office of Vehicle Safety Standards, National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, DC 20590, (202) 366–4803.

SUPPLEMENTARY INFORMATION: Federal Motor Vehicle Safety Standards (FMVSS) 101 and 105, promulgated in 1978 and 1976, respectively, establish requirements for vehicle panel displays, including indicators warning of brake failure. The two FMVSS's prescribe the wording of the failure warning displays, as well as their dimensions and colors.

S5.3.5(a) of FMVSS 105 (Hydraulic Brake Systems) requires that each indicator lamp shall have letters which are not less than ⅛-inch high, and which must be visible and legible to a vehicle's driver in daylight. In the case of brake warning displays, FMVSS 105 prescribes that the word "Brake" be used. (S5.3.5(c)(1)). If a separate indicator lamp is provided for an anti-lock brake system (ABS), the word "Antilock," "Anti-lock" or the abbreviation "ABS" must be used (S5.3.5(c)(1)(C)). Table 2 of FMVSS 101 (Controls and Displays), echoes FMVSS 105, permitting use of the words "antilock," "anti-lock" or "ABS."

On July 6, 1993, Volkswagen of America, Inc. (VW) petitioned the agency to modify FMVSS 105 to require the letters in the word or acronym on the ABS warning indicator to have a minimum height of 2.4 mm (3/32-inch)

instead of the current ⅛ inch (3.2 mm). VW apparently desires the reduction to facilitate its efforts to develop a single dashboard indicator light design that complies with both U.S. and Canadian requirements. VW stated that Transport Canada had amended Canadian Motor Vehicle Safety Standard (CMVSS) 101 to require use of the ISO symbol for brake failure. CMVSS 101 requires the ISO symbol to be at least ⅛-inch high. The amendment to CMVSS 101 becomes effective on September 1, 1994.

VW's single design would consist of the letters "ABS" placed inside the ISO symbol. VW wants the letter size reduction in order to avoid having to use what it regards as an overly large ISO symbol. It states that in order to put the currently required ⅛-inch high letters inside the ISO symbol, the latter would have to be 10.18 mm (⅖ inch). VW states that such a size would be three times larger than required for all other warning indicators. In the alternative, a manufacturer would need two different designs: One for installation in vehicles sold in Canada, and one for installation in vehicles sold in the United States.

VW requested the agency to reduce the required minimum dimensions for "ABS," when used inside the ISO brake failure symbol, from 3.2 mm (⅛-inch) high to 2.4 mm (3/32-inch) high. It admitted that letters inside the symbol would be "extremely small." VW suggested that an ISO symbol 7 mm (¼-inch) high could accommodate letters 2.2 mm (0.0866 inches) high. VW did not state how much larger the ISO symbol would have to be to include letters 2.4 mm high, as requested in its petition.

The agency has addressed the issue of the ISO symbol previously. For instance, in a supplemental notice of proposed rulemaking (SNPRM) for proposed Standard No. 135, which provides for harmonization of international standards for passenger car hydraulic brake systems (see 56 FR 30528, July 3, 1991), the agency stated that it had denied several petitions for inconsequential noncompliance based on the use of ISO symbols in place of words or symbols required by Standard No. 101. In those cases, the agency stated in the SNPRM, it had believed the meaning of the ISO symbols would be unclear or ambiguous to drivers.

Additionally, the agency conducted a rulemaking proceeding between 1982 and 1987 in which the agency amended Standard No. 101 by permitting various words and symbols to be used, while rejecting others. In a NPRM (47 FR 49994, November 4, 1982), the agency discussed allowing the ISO symbol for brake failure, and sought comment. It noted that the symbol for brakes was of "particular safety importance" to drivers, and stated the agency's concern that "the symbol may not be immediately recognizable." Two years later, in a final rule (49 FR 30191, July 27, 1984), the agency expressed its concern that "too many symbols, or symbols that are not easily recognizable, are not in the public's or industry's interest." The agency delayed a decision on brake failure warning indicators in that final rule, addressing them instead in another final rule issued a year later (50 FR 23426, June 4, 1985). The agency rejected use of the ISO symbol in the 1985 rule based on a study published by the Society of Automotive Engineers (SAE). That study found the percentage recognition or understanding of the ISO brake symbol among a survey sample of people unfamiliar with that symbol to be very low (i.e., about one-quarter of the survey sample). By comparison, 87 percent of the survey sample recognized the meaning of the word "brake" when it was illuminated. In addition, a comment from General Motors stated that the ISO was adopting new symbols by consensus and without resort to its prior practice of extensive international testing as to the symbol's recognizability and suitability. In a final rule published on May 28, 1987 (52 FR 19872), the agency declined to adopt the ISO symbol as an alternative to the words "Antilock" or "ABS", once again citing the SAE study discussed above. In all of the above final rules, the agency discussed the desirability of increased harmonization of symbols and words as a way to eliminate language barriers and decrease manufacturer costs. However, notwithstanding its general wish to increase harmonization, NHTSA has consistently deemed it prudent to reject symbols and words that could have a negative safety impact, whether in the short run during a transitional period of familiarization or in the long run.

In its petition, VW stated it was not aware of any definitive studies showing the need for a ⅛-inch minimum height requirement for lettering on indicator lamps. VW maintained that the slightly smaller letters it requested in its petition, combined with the slightly larger ISO symbol, would be sufficient to convey the intended meaning (i.e., brake failure) to the driver of a vehicle.

VW points to FMVSS 208 (Occupant Crash Protection), S4.5.1, which requires occupant crash protection maintenance schedules to be permanently affixed on a label inside the vehicle, as permitting letters of 3/32-inch high. 3/32-inch (or 2.4 mm) is insignificantly larger than the 2.2 mm letter height that VW says would fit inside the 7 mm ISO symbol.

NHTSA disagrees with VW's statement that decreasing the minimum letter height would have no effect on a driver's ability to understand the warning indicator. Contrary to VW's assertion that there is no definitive study showing the need for a ⅛-inch minimum height requirement, NHTSA research report, "Specification of Control Illumination Limits" (DOT–HS–4–00864, 1974) found that instrument-panel labels consisting of .09 inch letters (2.3 mm, or 0.1 mm smaller than that requested by VW) could not be read by older drivers, regardless of letter brightness or background contrast. VW has provided no data supporting its contention that a letter height of 2.4 mm would be readable by all drivers, including older drivers.

The agency also takes issue with the comparison of the letter height requirements of FMVSS 105 and those of FMVSS 208. The words required under FMVSS 105 warn of an impending or actual failure in the brake system of the vehicle. The indicator light in this situation must be seen and understood by all drivers in all lighting conditions as quickly as possible. In an emergency situation involving brake failure, the agency believes that it would be the word, "antilock" or the letters "ABS" that would convey the desired message. If the minimum height of the letters were reduced to the point of illegibility, the successful communication of the message would rest solely on the accompanying ISO symbol. NHTSA believes that the symbol would not be adequate by itself to alert many drivers to the occurrence of brake failure.

The wording required by FMVSS 208 is a standard and permanent notice of maintenance. It is a reminder to the vehicle owner when to have the occupant crash protection system serviced. It need not be seen and immediately understood, as with a warning indicator. The two requirements are obviously for different purposes and to be read at different times. Therefore, they need not have identical letter height requirements.

NHTSA has no objection to use of the ISO symbol, *per se*. However, the ISO symbol may only be used as an addition to the words or acronym required by FMVSS's 101 and 105 and not as a substitute. VW may, if it so chooses, meet the requirements of FMVSS 105 by including "ABS" inside the ISO symbol for brake failure, provided that the letters "ABS" are ⅛-inch in height. Alternatively, it may place the word "antilock" or letters "ABS", in

compliance with the requirements of FMVSS's 101 and 105, next to a ⅛-inch ISO symbol brake failure indicator. Both options would meet the requirements of CMVSS 101 and the FMVSS's 101 and 105, obviating the need for VW to install different components in vehicles sold in the U.S. or Canada.

Based on the foregoing, NHTSA concludes that there is no reasonable possibility that the requested amendment would be issued at the conclusion of a rulemaking proceeding and therefore denies VW's petition.

Authority: 15 U.S.C. 1410a, delegation of authority at 49 CFR 1.50 and 501.8.

Issued on: May 2, 1994.

Barry Felrice,

Associate Administrator for Rulemaking.

[FR Doc. 94–10862 Filed 5–4–94; 8:45 am]

BILLING CODE: 4910–59–P

---

49 CFR Part 580

[Docket No. 92–20; Notice 3]

Petition for Rulemaking; American Car Rental Association

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.

ACTION: Denial of petition for rulemaking.

SUMMARY: This notice denies a petition filed by the American Car Rental Association, requesting that the National Highway Traffic Safety Administration amend its regulation concerning odometer disclosure requirements to accommodate the needs of car rental companies purchasing fleets of new vehicles. The petition is denied, because the agency concludes that its authority to grant relief extends only to vehicles for which the odometer reading is not relied upon as an indicator of mileage or condition.

FOR FURTHER INFORMATION CONTACT: John Donaldson, Attorney Adviser, Office of the Chief Counsel, NHTSA, 400 Seventh Street, S.W., Washington, D.C. 20590; (202) 366–1834.

SUPPLEMENTARY INFORMATION:

Background

Title IV of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 1981–1991) ("the Act") sets forth certain requirements concerning odometers in motor vehicles. Among other things, the Act prohibits disconnecting, resetting, or altering motor vehicle odometers and requires the execution of an odometer disclosure statement incident to the transfer of ownership of a motor vehicle. The Act also subjects violators to civil and criminal penalties, and provides for Federal injunction, State enforcement, and a private right of civil action. The provisions requiring odometer disclosure statements on titles were added by the Truth in Mileage Act of 1986 (Pub. L. 99–579), and reflect Congress' intent to address the growing national problem of odometer tampering in motor vehicles.

Section 408 of the Act (15 U.S.C. 1988) directs the Secretary of Transportation to promulgate rules governing the making of odometer disclosure statements. In accordance with that mandate, NHTSA published a regulation (49 CFR part 580) which requires, in connection with the transfer of ownership of a motor vehicle, that each transferor must disclose the mileage to the transferee in writing on the title (or in some cases on the document being used to reassign the title). The regulation details the minimum contents of the disclosure, requires the disclosure to be signed by both the transferor and the transferee, and provides that no person shall sign an odometer disclosure statement as both the transferor and transferee in the same transaction, except in limited situations (described below).

The regulation allows a number of exemptions of relevance to the instant petition. Section 580.6(b) provides that "[a] transferor of a new vehicle prior to its first transfer for purposes other than resale need not disclose the vehicle's odometer mileage." In practice, this provision exempts a motor vehicle manufacturer from the odometer disclosure requirement with respect to a vehicle transferred to a dealer for purposes of resale as a new vehicle. Section 580.5(h), which prohibits a person from signing an odometer disclosure statement as both transferor and transferee, allows an exemption in situations where the exercise of a power of attorney is authorized under §§ 580.13 or 580.14. The power of attorney allows a transferee to make an odometer disclosure on behalf of his transferor only in cases where the transferor's title is held by a lienholder or where the transferor to whom the title was issued by the State has lost his title and the transferee obtains a duplicate title on behalf of the transferor.

The Petition

The American Car Rental Association (ACRA) filed a petition dated November 29, 1993, seeking an amendment to NHTSA's regulation, under which its member car rental companies would be relieved of certain odometer disclosure requirements when purchasing new vehicles. ACRA describes a process, referred to as "drop-shipment," by which many nationwide car rental companies purchase fleets. According to ACRA, the companies receive vehicle deliveries directly from the manufacturers but, due to franchising agreements between manufacturers and dealers, the purchase must be handled through a dealer. In some cases, the manufacturer ships both the vehicles and the title documents directly to the car rental company, while in other cases, it ships the vehicles to the car rental company and the ownership documents to the dealer. In either of these cases, ACRA asserts, car rental companies experience significant logistical problems in complying with the odometer disclosure regulations, because they must secure odometer disclosure statements from dealers that never take possession of the vehicles or, in some cases, the title documents.

ACRA explains that the required odometer disclosure is currently accomplished through the grant of a power-of-attorney from the dealer to a third party (not related to the limited power of attorney between transferor and transferee authorized under §§ 580.13 and 580.14). The third party certifies the vehicle's odometer reading on behalf of the dealer, conveys the manufacturer's certificate of origin (MCO), and performs other services incidental to titling and registering the vehicle. ACRA acknowledges that this system works, but claims that it imposes a significant cost on the car rental industry, because the dealers pass on the costs associated with third party services to the car rental companies. ACRA estimates the cost to the average nationwide car rental company to be in the tens of thousands of dollars per year, and asserts that the process delays the introduction of vehicles into a car rental fleet without a legitimate law enforcement purpose, given the extremely low mileage on these new vehicles.

In early 1993, following informal discussions with NHTSA, ACRA submitted a written request for a legal interpretation of a proposal to list both the dealer and the car rental company as joint transferees on a vehicle's MCO. ACRA sought assurances that, under this arrangement, it would be permissible for only one of these entities to sign the odometer disclosure statement as transferee in the initial transfer and as transferor in a subsequent transaction. It was ACRA's hope that this procedure would alleviate the burdens associated with the use of third party agents. NHTSA confirmed that only one of several listed transferors or transferees need execute

an odometer disclosure statement in the course of a vehicle transfer. However, NHTSA also noted that, in this case, the listing of joint transferees on the MCO would defeat the vehicle manufacturer's exemption from the odometer disclosure requirements (under Section 580.6(b)), as one of the listed transferees would be using the vehicle for purposes other than resale. It is ACRA's position that vehicle manufacturers would be unwilling to undertake the burden of executing odometer disclosure statements, and it now seeks other avenues of relief.

ACRA proposes three alternative regulatory approaches to alleviate the burden imposed on the car rental industry. First, it proposes to exempt the transferor of a new vehicle that is dropped-shipped to a car rental company from the requirement to make an odometer disclosure. It would accomplish this by adding a definition of "new vehicle" to § 580.3 ("any vehicle driven no more than the limited use necessary in moving or road testing a vehicle prior to delivery by a manufacturer and/or a dealer") and a new exemption to § 580.6 ("a transferor of new vehicle to a business engaged in the leasing of automobiles for a period of thirty (30) days or less need not disclose the vehicle's odometer mileage"). Under this approach, with the dealer and the car rental firm listed as joint transferees on the MCO, the car rental firm would make any required odometer disclosure without involving the dealer.

Alternatively, ACRA proposes to extend the circumstances under which a transferor could give its transferee power of attorney to make the odometer disclosure ordinarily required of the transferor. ACRA would also extend the power of attorney from the transferee to the transferor. To accomplish this objective, ACRA proposes to amend § 580.13 as follows:

(a) If the transferor's title is physically held by a lienholder, or if the transferor transfers the title of a new vehicle to a transferee engaged in the business of leasing new vehicles for a period of thirty (30) days or less, or if the transferor to whom the title was issued by the State has lost his title and the transferee obtains a duplicate title on behalf of the transferor, and if otherwise permitted by State law, the transferor may give a power of attorney to his transferee, or the transferee may give a power of attorney to his transferor, for the purpose of mileage disclosure only. The power * * *.

As a final option, ACRA proposes to exempt the initial transfer on all fleet purchases of new vehicles from the odometer disclosure requirements. To implement this approach, ACRA suggests including the definition of "new vehicle" set forth in the first suggested approach, and adding a definition of "fleet purchases" ("the annual aggregate transfer of new vehicles in quantities over 500 vehicles from a manufacturer to a transferee for use in the transferee's rental, lease, or corporate fleet.") Section 580.6 would then be amended to read as follows:

"Notwithstanding the requirements of §§ 580.5 and 580.7:

(a) A transferor or a lessee of any of the following motor vehicles need not disclose the vehicle's odometer mileage:

* * * * *

(5) A new vehicle transferred by a manufacturer as part of a fleet purchase.

This approach would exempt the manufacturer from the odometer disclosure requirements, even though the car rental company and the dealer are listed on the MCO as joint transferees.

ACRA asserts that under any of the three approaches, the opportunity for odometer fraud is minimal. It notes that, under the first two approaches, the universe of vehicles potentially qualifying for exemption is carefully limited to new vehicles (registering very low mileage), and only those new vehicles transferred to a business engaged in "short-term leasing." Under the third approach, ACRA views the combination of factors (i.e., new vehicle, fleet purchase) to pose a similarly low risk of fraud, while eliminating the need for manufacturer disclosures in cases involving joint dealer and car rental company transferees.

Discussion

The central purpose of the Truth in Mileage Act was to make the title document the sole vehicle for odometer disclosure. Congress sought to institute a uniform system of disclosure that would be readily available to assist the consumer in making motor vehicle purchasing decisions. Prior to that time, the use of separate documents for odometer disclosure was not uncommon, and was found to be vulnerable to abuse.

Subsequent statutory amendments in 1988 and 1990 have deviated from the absolute requirement to use the title document, by authorizing the use of powers of attorney in strictly limited circumstances when titles are physically held by lienholders. Additionally, Congress has authorized the approval of alternate odometer disclosure procedures, provided they are determined to be consistent with the Act, but only when these procedures are submitted by a State. However, there is no indication that Congress intended to extend the opportunity to seek alternate procedures to any other entities. Indeed, such a course of action would seem anomalous, considering that it is the States that are charged with institutionalizing the odometer disclosure procedures. The limited circumstances articulated for deviation from the primary intent of the Act reflect Congress' reluctance to stray from the overriding goal of achieving comprehensive odometer disclosure procedures to protect the public.

It is significant that several States have voiced concern regarding the granting of additional exemptions to the disclosure requirements, arguing that new exemptions would introduce serious burdens to an already complex titling review process. Even under the current procedures, NHTSA is aware that some States have administratively rejected certain exemptions provided for in NHTSA's regulation. The differing practices among States with respect to the existing exemptions have resulted in a disruption of interstate vehicle transfers, as title transfer documents from some States have been rejected by other States. Favorable action on this petition would likely compound the problem, in apparent contradiction to the intent of Congress that the interests of the States be accommodated, where consistent with the Act.

Apart from issues of Congressional intent evident in the legislation, the agency's authority to deviate from the Act has, over the years, been thrown into question by court decisions rejecting one of NHTSA's regulatory exemptions under Section 580.6. Several courts have ruled that NHTSA does not have the authority to exempt vehicles with a Gross Vehicle Weight Rating in excess of 16,000 pounds from the odometer disclosure requirement. See *W. W. Wallwork, Inc.* v. *Duchscherer*, 501 N.W.2d 751 (N.D. 1993); *Davis* v. *Dils Motor Co.*, 566 F. Supp. 1360 (S.D.W.Va. 1983); *Lair* v. *Lewis Service Center*, 428 F. Supp. 778 (D. Neb. 1977). It is significant that these courts reached such a conclusion despite NHTSA's administrative determination that, in transfers of the subject vehicles (heavy trucks), maintenance records are of key importance but the odometer reading is not generally relied upon in determining value or condition. NHTSA continues to believe that it has the requisite authority to consider exemptions in cases where odometer readings are not relied upon in the course of vehicle transfers. However, the vehicles that are the subject of this petition do not enjoy such a distinction,

and so it is especially doubtful that the courts would support the requested broadening of exemptions.

In view of these limitations, the agency's discretion to allow exemptions to the odometer disclosure requirements is highly circumscribed. This is especially true in the instant case, where the proposed changes have been requested by an entity other than a State (whose right to seek approval of alternate requirements is the only one specifically recognized by the Act) and, moreover, would target a large vehicle population (the top ten companies had over one million vehicles in their fleets in 1992, according to ACRA's figures). Each of the proposed solutions advanced by ACRA raises serious problems. The first and third proposed solutions would introduce a new exemption, in the face of court decisions increasingly rejecting NHTSA's authority to grant such exemptions. Moreover, they would do so for vehicles with respect to which mileage is relied upon as an indicator of value or condition. The second proposed solution would expand the use of the power of attorney, in the face of Congressional intent that it be strictly limited. All of the proposed solutions would compromise the States' implementation procedures. Under the circumstances, and mindful of the fact that the petitioner is not a State, NHTSA concludes that it does not possess the authority to implement any of the proposed amendments.

NHTSA is aware of ACRA's assertions that the current procedures are causing hardship to the car rental industry, and that its proposed solutions would not compromise the integrity of the system. Although the denial of this petition rests on the agency's lack of authority, the agency offers the following comments on ACRA's assertions.

ACRA acknowledges that its existing procedures achieve compliance with odometer disclosure requirements, but cites costs to the average nationwide car rental company of tens of thousands of dollars per year and the time-consuming nature of the process. Given the large number of vehicles at issue, this compliance cost does not appear unreasonable, and certainly does not compel a conclusion of hardship. Nor is such a conclusion compelled by concerns about the time expended in achieving compliance.

In the world of motor vehicle transfers, NHTSA is aware of other situations in which companies incur similar costs and time burdens associated with the employment of personnel that provide titling and registration services and act as agents for the purpose of odometer disclosure. For example, companies that lease vehicles for long terms also rely on "drop shipments" or "courtesy deliveries" when obtaining new vehicles. In these situations, the leasing companies typically pay set fees to dealers to prepare the new vehicles for operation and process the paperwork associated with the transfer of both the new and the old vehicles. In many instances, the services performed include executing mileage disclosures. These firms also experience similar, normal delays incident to obtaining the proper disclosures. NHTSA cannot conclude that the costs or burdens to the car rental industry are excessive or beyond those reasonably contemplated by the Congress in enacting the disclosure requirements.

It is impossible to downplay the large number of vehicles proposed for exemption or alternate treatment under this petition. The total rental fleet put into service in 1992 numbered 1,532,000 passenger cars and light trucks,[1] or almost 13 percent of the 12 million new passenger cars and light trucks sold in the country during that year.[2] Moreover, NHTSA cannot distinguish the merits of ACRA's arguments from those that might be advanced by the leasing industry, as discussed above. If a similar exemption were granted to the leasing industry, which placed a total of 1,543,000 passenger cars and light trucks into service in 1992,[3] it would encompass an additional 13 percent of the new vehicles sold that year. While the risk to the integrity of the system may not appear great in the rental industry situation, the same cannot be said with respect to the leasing industry. Prior to the passage of the Act, odometer tampering in leased vehicles was rampant, and served as a major impetus for Congressional action.

In conclusion, NHTSA does not believe that it possesses the authority to grant the relief requested by the petitioner, based on the intent of Congress and recent court decisions. Moreover, granting the relief requested would be against the expressed interest of the States, the very entities charged with enforcing the odometer disclosure procedures.

For the foregoing reasons, the petition is denied.

Issued on April 29, 1994.

John Womack,

Acting Chief Counsel, National Highway Traffic Safety Administration.

[FR Doc. 94–10759 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–59–P

---

[1] Automotive Fleet, 1993 Fact Book, Vol. 32 Supp. 1993, p. 20.

[2] American Automobile Manufacturers Association, Motor Vehicle Facts and Figures '93, pp. 18, 20.

[3] Automotive Fleet, p. 20.

Notices

Federal Register
Vol. 59, No. 86
Thursday, May 5, 1994

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Forms Under Review by Office of Management and Budget

April 29, 1994.

The Department of Agriculture has submitted to OMB for review the following proposal for the collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35) since the last list was published. This list is grouped into new proposals, revisions, extension, or reinstatements. Each entry contains the following information:

(1) Agency proposing the information collection; (2) Title the information collection; (3) Form number(s), if applicable; (4) How often the information is requested; (5) Who will be required or asked to report; (6) An estimate of the number of responses; (7) An estimate of the total number of hours needed to provide the information; (8) Name and telephone number of the agency contact person.

Questions about the items in the listing should be directed to the agency person named at the end of each entry. Copies of the proposed forms and supporting documents may be obtained from: Department Clearance Officer, USDA, OIRM, room 404–W Admin. Bldg., Washington, DC 20250, (202) 690–2118.

Revision

• Agricultural Marketing Service.
7 CFR Part 51—Regulations Governing Inspection, Certification and Standards for Fresh Fruits, Vegetables, and Other Products FV–202, FV–237, FV 292.
On occasion.
State or local governments; Businesses or other for-profit; 212,256 responses; 6,366 hours.
Shane Brown (202) 690–0604.

• Agricultural Marketing Service.
Recordkeeping Requirements for Certified Applicators of Federally Restricted Use Pesticides (7 CFR part 110).
SD–8.
Recordkeeping; On occasion.
State or local governments; Farms; Federal agencies or employees; 184,802,265 responses; 1,623,625 hours.
Bonnie Poli (703) 330–7826.

Extension

• Soil Conservation Service.
Agricultural and Urban Damage Surveys and Public Law 83–566, Project Application.
SCS ECN 1 through 6.
On occasion.
Individuals or households; State or local governments; Farms; Businesses or other for-profit; Small businesses or organizations; 1,750 responses; 2,850 hours.
Doug Lawrence (202) 720–1510.

New Collection

• Food Safety and Inspection Service.
Official Marketing Device, Labeling and Packaging Material—Addendum 1.
FSIS Form 7234–1.
On occasion.
Businesses or other for-profit; 5,979 responses; 1,495 hours.
Lee Puricelli (202) 720–7163.

Larry K. Roberson,
Deputy Department Clearance Officer.

[FR Doc. 94–10755 Filed 5–4–94; 8:45 am]
BILLING CODE 3410–01–M

Agricultural Marketing Service

[Docket No. TB–94–28]

National Advisory Committee for Tobacco Inspection Services; Meeting

In accordance with the Federal Advisory Committee Act (5 U.S.C. App.) announcement is made of the following committee meeting:

Name: National Advisory Committee for Tobacco Inspection Services.

Dates: May 19, 1994.

Time: 1:30 p.m.

Place: Agricultural Marketing Service, U.S. Department of Agriculture, Conference Room, room 3501 South Building, 14th Street and Independence Avenue, SW., Washington, DC 20250.

Purpose: To elect officers, review various regulations issued pursuant to the Tobacco Inspection Act (7 U.S.C. 511 et seq.) and to discuss the level of tobacco inspection and related services. In particular, the Committee will analyze the financial status of the inspection program and recommend the rate of the user fee for the 1994–95 selling season.

The meeting is open to the public. Persons, other than members, who wish to address the Committee at the meeting should contact the Director, Tobacco Division, AMS, U.S. Department of Agriculture, room 502 Annex Building, P.O. Box 96456, Washington, D.C. 20090–6456, (202) 205–0567, prior to the meeting. Written statements may be submitted to the Committee before, at, or after the meeting.

Dated: May 2, 1994.

Lon Hatamiya,
Administrator.

[FR Doc. 94–10825 Filed 5–4–94; 8:45 am]
BILLING CODE 3410–02–P

Forest Service

Crane Mountain Salvage, Flathead National Forest, Swan Lake Ranger District, Lake County, Montana

AGENCY: Forest Service, USDA.

ACTION: Notice of intent to prepare an environmental impact statement.

SUMMARY: The Forest Service will prepare an Environmental Impact Statement (EIS) to analyze and disclose the environment impacts of a proposal to harvest timber, use prescribed fire, and implement travel management changes on Crane Mountain, on the Swan Lake Ranger District. This EIS will tier to the Flathead National Forest Land and Resource Management Plan (LRMP) and EIS of January 1986, which provides overall guidance in achieving the desired future condition for the area.

The Proposed Action is designed to implement the Flathead Forest Plan within the context of Ecosystem Management principles. The primary purpose for development of the Proposed Action is to address an on-going Mountain Pine Beetle epidemic which is causing extensive mortality in lodgepole pine on Crane Mountain. The Proposed Action is designed to address the short- and long-term consequences of the epidemic. The Proposed Action will reduce the likelihood of a large intense fire by reducing the accumulation of dry fuels through salvage of dead lodgepole pine and treatment of residual slash, accelerate re-establishment of a variety of tree species in area of high mortality, contribute to the current demands for timber and provide for long-term

sustainability of wood products and other resource elements.

A portion of the Proposed Action is designed to address the effects of past fire suppression in fire-dependent forest communities where ponderosa pine was once a major tree species. Use of prescribed fire is proposed to begin to reverse the destabilizing effect of post-settlement fire suppression on dry sites, moving towards the relatively open stands dominated by ponderosa pine and western larch which historically existed in these areas.

A third aspect of the Proposed Action is designed to improve on existing levels of grizzly bear habitat security. Changes in Travel Management would bring the area into compliance with LRMP standards for open road density in grizzly bear habitat, and take further steps to provide more effective road closures and increase, over time, the proportion of unroaded secure habitat on Crane Mountain.

Preliminary scoping for this project began in the fall of 1992. At this time the Forest Service is seeking information and comments from Federal, State, and local agencies and other individuals or organizations who may now be interested in or affected by the Proposed Action. This input will be used in preparing the Draft EIS. This process will include:

1. Identification of potential issues.
2. Identification of issues to be analyzed in depth.
3. Elimination of insignificant issues or those which have been covered by a relevant previous environmental analysis.
4. Identification of additional reasonable alternatives.
5. Identification of potential environmental effects of the alternatives.
6. Determination of potential cooperating agencies and task assignments.

The agency invites written comments and suggestions on the issues and proposed management activities in the area being analyzed. More detailed information on the Proposed Action, public comments to date, and preliminary issues and alternatives is available upon request.

DATES: Comments should be received by May 31, 1994, to receive timely consideration in the preparation of the Draft EIS.

ADDRESSES: Send written comments or requests to be placed on the project mailing list to Charles E. Harris, District Ranger, Swan Lake Ranger District, P.O. Box 370, Bigfork, MT 59911.

FOR FURTHER INFORMATION CONTACT: Cathy Calloway, Planning Team Leader, or Chuck Harris, District Ranger. Phone (406) 837–5081.

SUPPLEMENTARY INFORMATION: The Proposed Action has been developed to respond to existing conditions in the Crane Mountain area, ecosystem management principles, and Forest Plan direction for the area. For the past several years, Crane Mountain has been experiencing a Mountain Pine Beetle (MPB) epidemic. The Mountain Pine Beetle is a wood boring insect which affects primarily mature lodgepole pine trees. When beetle populations are high, as is the case on Crane Mountain, they can cause widespread mortality. Approximately 3500 acres (20%) of the Crane Mountain landscape is occupied by trees which are susceptible to MPB mortality. At present, extensive mortality has occurred on approximately 2000 acres where lodgepole pine is the primary tree species. An additional 1000 acres of mixed species stands have also been impacted by more scattered lodgepole pine mortality. Additional mortality is predicted.

Without management action, MPB activity will result in considerable change on the landscape over time. During the next decade or two, most dead trees will blow over. Areas which used to have dense lodgepole pine forests will become open, dominated by grasses, herbs, and shrubs. Dead trees will result in an increased fuel loading and increased possibility of stand replacement wildfire. Extensive mortality will change the habitat conditions for many wildlife species over time. Areas of hiding cover and thermal cover for large mammals will be lost in the short-term. The changes in vegetation will also affect water yield and water quality, and the visual quality of the area. With or without fire, trees will gradually become re-established, but without management action it may take an additional 10 to 20 years for openings to become fully re-stocked with trees.

Proposed management activities have been designed to address both long- and short-term consequences of the current Mountain Pine Beetle epidemic on Crane Mountain. Specifically, the proposal includes the following components:

1. Reduce the likelihood of a large intense fire, by reducing the accumulation of dry fuels through salvage of dead lodgepole pine and treatment of residual slash.

2. Accelerate re-establishment of a variety of tree species in areas with high levels of MPB mortality. Timely reforestation of harvested areas will help ameliorate the affects of wide-spread mortality more rapidly than if nature is allowed to take its course in the area. Proposed actions will provide for more rapid stabilization of exposed soils in riparian areas, more rapid return to wildlife cover conditions, and provide for more insect and disease resistant conditions across the landscape.

3. Contribute to the short-term demands for timber and provide for utilization of a variety of wood products.

4. Accomplish other resource objectives in conjunction with proposed harvest activities, including:

—Planting of shrubs in riparian areas
—Improve moist site habitat for a variety of wildlife species via impoundment of surface water in several sites

A portion of the Proposed Action is designed to reverse the destabilizing effect of post-settlement fire suppression on dry sites, historically dominated by open grown stands of ponderosa pine and western larch. The objective is to create stand conditions more characteristic of those found on these sites under the pre-settlement fire regime. This stand type and structure provides an important, and quickly disappearing, niche for a variety of plant and animal species, including flammulated owl and old growth management indicator species. Treatment would be accomplished through a combination of slashing and prescribed fire. This would reduce the stocking in understory Douglas-fir, moving towards the relatively open stands dominated by ponderosa pine and western larch which historically existed in these areas.

The Proposed Action is designed to incorporate a variety of Travel Management changes to reduce open road densities to within current LRMP standards and to balance public access with measure to provide improved grizzly bear habitat security in areas of high quality spring and summer habitats.

Management activities under consideration would occur in an area encompassing approximately 40,000 acres of National Forest lands in the East Shore and Lower Swan Geographic Units, on the Swan Lake Ranger District, as delineated in the LRMP. Proposed harvest or burning activities would occur in portions of the following: Sections 21, 22, and 26–35, T26N, R19W, and Sections 2–4, 9–11, 13–16, and 21–36, T25N, R19W, Principal Montana Meridian. Proposed changes in

Travel Management would be distributed across a larger area, including portions of T26N, R19W; T25N, R19W; T26N, R18W; T25N, R18W; and T24N, R18W.

The Proposed Action includes harvest treatment on approximately 960 acres and use of prescribed fire in three areas, totalling 400 acres. Harvested areas would be treated to reduce fuels accumulations and to prepare sites for reforestation. Tree planting is proposed on approximately 800 acres to ensure rapid reforestation. No new road construction is proposed, but approximately 3 miles of temporary road would be required to access harvested areas. A portion of the proposed treatments would require helicopter logging. A variety of changes to travel management are also proposed, including road closures via rocks or berms and reclamation measures designed to remove some roads from the long-term transportation system. The Proposed Action would close approximately 51 miles or road which are currently open to motorized use.

The Proposed Action would require a site-specific amendment to the LRMP to vary from the grizzly bear distance to cover guideline and the duration of activity/re-entry period criteria for grizzly bear habitat. These deviations are proposed in order to address the on-going MPB epidemic and meet the Purpose and Need for Action on a timely basis.

The Land and Resource Management Plan for the Flathead National Forest provides the overall guidance for management activities in the potentially affected area through its goals, objectives, standards and guidelines, and management area direction. Most of the proposed activities would occur in Management Areas 15 and 7. Forest plan direction states that Management Area 15 consists of lands where timber management with roads is economical and feasible. The management goal is to manage those lands suitable for timber production for the long-term growth and production of commercially valuable wood products, as well as provide for soil and water protection, wildlife habitat, and roaded recreation opportunities. Management Area 7 is identified as roaded timberlands in visually sensitive areas. The goal in these areas is to manage timber resources in a manner that complements and protects high scenic values, maintaining a pleasing, natural-appearing landscape.

In addition, prescribed burning, road re-construction, and some timber harvest and reforestation may occur within Management Area 12 (riparian areas along perennial streams), Management Area 17 (riparian areas with typically intermittent streams), Management Area 3 (amenity resource values), or Management Area 1 (nonforested lands).

Proposed Actions would occur in Management Situation 2 grizzly bear habitat. Management Situation 2 includes areas which do not have distinct bear populations or do not contain year-round high quality bear habitats. The area is a part of the Northern Continental Divide Recovery Area, but categorized as unnecessary for the survival and recovery of the bear. Management considerations include minimizing potential bear mortality and human-grizzly conflicts, and maintaining habitat components. The grizzly bear is an important, but not the primary use in this area.

Public involvement conducted during 1993 has resulted in identification of numerous important issues to be addressed in the Draft EIS. Five alternatives to the Proposed Action have been developed to address the following issues: Water quality, fisheries and riparian values, visuals, forest health, grizzly bear, elk, gray wolf, fire risk, and road and travel management. Many other issues will be addressed as features common to all alternatives, or through effects analysis included in the Draft EIS.

The analysis will consider a range of alternatives. One of these will be the "no-action" alternative, in which none of the Proposed Actions would be implemented. Other alternatives will examine various levels and locations of proposed activities to achieve the proposal's purpose, as well as respond to the issues and resource values important to Crane Mountain.

The analysis will disclose the environmental effects of alternative ways of implementing the Forest Plan. The EIS will disclose the analysis of the direct, indirect, and cumulative environmental effects of the alternatives. Effects analysis will address past, present, and projected activities. In addition, the EIS will disclose the analysis of site specific mitigation measures and their effectiveness.

Public participation is especially important at several points of the analysis. People may visit with Forest Service officials at any time during the analysis and prior to the decision. However, two periods of time are identified for the receipt of comments on the analysis. The two public comment periods are during the scoping process (now through May 31, 1994) and in the review of the Draft EIS (anticipated between June and September 1994). The Forest Service has not yet determined whether any public meetings will be held.

The U.S. Fish and Wildlife Service, Department of the Interior, will be informally consulted throughout the analysis. To meet the requirements of the Endangered Species Act, the U.S. Fish and Wildlife Service will review the EIS and biological evaluation and, if necessary, render a formal Biological Opinion of the effects on the Threatened and Endangered Species including grizzly bear, gray wolf, and bald eagle.

The Draft EIS is expected to be filed with the Environmental Protection Agency (EPA) and available for public review in June or July 1994. At that time the EPA will publish a notice of availability of the Draft EIS in the **Federal Register**. The public comment period on the Draft EIS will be 45 days from the date when the EPA's notice of availability appears in the **Federal Register**.

The Forest Service believes it is important to give reviewers notice at this early stage of several court rulings related to public participation in the environmental review process. First, reviewers of Draft EISs must structure their participation in the environmental review of the proposal so that it is meaningful and alerts an agency to the reviewer's position and contentions. *Vermont Yankee Nuclear Power Corp.* v. *NRDC*, 435 U.S. 519, 553 (1978). Also, environmental objections that could be raised at the Draft EIS stage but that are not raised until after completion of the final EIS may be waived or dismissed by the courts. *Wisconsin Heritages, Inc.* v. *Harris*, 490 F.Supp. 1334, 1338 (E.D. Wis. 1980). Because of these court rulings, it is very important that those interested in this Proposed Action participate by the close of the 45-day comment period so that substantive comments and objections are made available to the Forest Service at a time when it can meaningfully consider them and respond to them in the Final Environmental Impact Statement.

To assist the Forest Service in identifying and considering issues and concerns on the Proposed Action, comments on the Draft Environmental Impact Statement should be as specific as possible. It is also helpful if comments refer to specific pages or chapters of the Draft statement. Comments may also address the adequacy of the Draft Environmental Impact Statement or the merits of the alternatives formulated and discussed in the statement. (Reviewers may wish to refer to the Council on Environmental Quality Regulations for implementing

the procedural provisions of the National Environmental Policy Act at 40 CFR 1503.3 in addressing these points.)

Following this comment period, the comments received will be analyzed, considered and responded to by the Forest Service in the Final Environmental Impact Statement (FEIS). The FEIS is scheduled to be completed by October 1994. The Forest Supervisor for the Flathead National Forest is the responsible official for the preparation of this EIS and will make a decision regarding this proposal considering the comments and responses, environmental consequences discussed in the FEIS, and applicable laws, regulations, and policies. The decision and rationale for the decision will be documented in a Record of Decision. That decision will be subject to appeal under applicable Forest Service regulations.

Dated: April 25, 1994.

Joel D. Holtrop,

Forest Supervisor, Flathead National Forest.

[FR Doc. 94–10798 Filed 5–4–94; 8:45 am]

BILLING CODE 3410–11–M

Newberry National Volcanic Monument Advisory Council Meeting; Notice

AGENCY: Forest Service, USDA.

ACTION: Newberry National Volcanic Monument Advisory Council Meeting.

SUMMARY: The Newberry National Volcanic Monument Advisory Council will meet on May 26, 1994 at the Bend/Fort Rock Ranger District, 1230 NE 3rd Street in Bend, Oregon. The meeting will begin at 9 a.m. and continue until 4 p.m. Agenda items to be covered include: reviewing the Draft Environmental Impact Statement for the Monument, staff reports on recreation and other issues, preview of the summer season, and confirmation of direction for vegetation management in the Monument.

Interested members of the public are encouraged to attend.

FOR FURTHER INFORMATION CONTACT: Direct questions regarding this meeting to Carolyn Wisdom, Project Coordinator, Fort Rock Ranger District USFS, 1230 NE 3rd, Bend, OR 97701, (503) 383–4702 or 383–4704.

Dated: April 19, 1994.

Ranotta McNair,

Acting Deputy Supervisor, Deschutes National Forest.

[FR Doc. 94–10799 Filed 5–4–94; 8:45 am]

BILLING CODE 3410–11–M

DEPARTMENT OF COMMERCE

Bureau of the Census

Census Advisory Committee on Agriculture Statistics; Public Meeting

Pursuant to the Federal Advisory Committee Act (Pub. L. 92–463 as amended by Pub. L. 94–409), we are giving notice of a meeting of the Census Advisory Committee on Agriculture Statistics. The meeting will convene on June 7, 1994 at the Bureau of the Census, Conference Center, Federal Building 3, Suitland, Maryland.

The Committee advises the Director, Bureau of the Census, on the conduct of the periodic censuses and surveys of agriculture and related surveys and the kind of information that should be obtained from respondents associated with agriculture production, prepares recommendations regarding the contents of agriculture reports, and presents the views and needs for data of major suppliers and users of agriculture statistics.

The Committee is composed of 21 members. Twenty members are appointed by the presidents of the nonprofit organizations having representatives on the Committee, and one member is a representative from the Department of Agriculture.

The agenda for the June 7 meeting that will begin at 9 a.m. and adjourn at 5 p.m. is: (1) Call to order and introduction; (2) introductory remarks by the Acting Director, Bureau of the Census; (3) update on 1992 Agriculture and Economic Censuses; (4) review of recommendations from previous advisory committee meeting; (5) options for 1997 Census of Agriculture; (6) marketing strategies for the Bureau of the Census; (7) public questions and comments; (8) Committee recommendations; and (9) election of chairperson for 1996.

This meeting should be of significant interest to those organizations that use data from the census of agriculture. Significant redesign of the census of both scope and methodology will be discussed and recommendations made during this meeting. Those with specific needs should contact their representatives or may wish to attend.

This meeting is open to the public and a brief period is set aside for public comment and questions. Those persons with extensive questions or statements must submit them in writing to the Census Bureau official named below at least three days before the meeting.

These meetings are physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should also be directed to the Census Bureau official named below.

Persons wishing additional information regarding this meeting or who wish to submit written statements may contact Mr. George Pierce, Agriculture Division, Bureau of the Census, room 437, Iverson Mall, Suitland, Maryland. (Mailing address: Washington, DC 20233) Telephone (301) 763–8556–TDD (301) 763–4056.

Dated: April 28, 1994.

Harry A. Scarr,

Acting Director, Bureau of the Census.

[FR Doc. 94–10793 Filed 5–4–94; 8:45 am]

BILLING CODE 3510–07–P

International Trade Administration

Environmental Technologies Trade Advisory Committee; Establishment

In accordance with the provisions of the Federal Advisory Committee Act, 5 U.S.C. app. 2, and the General Services Administration (GSA) rule on Federal Advisory Committee Management, 41 CFR part 101–6, and after consultation with GSA and the Office of Management and Budget, the Secretary of Commerce has determined that the establishment of the Environmental Technologies Trade Advisory Committee is in the public interest in connection with the performance of duties imposed on the Department by law.

The Committee will advise the Federal Government in all aspects of the development and conduct of programs, activities, and strategies to expand U.S. exports of environmental products and services. The Committee will advise on promotional activities and communications and on building business-government partnerships. The Committee shall provide advice on such specific issues as: Determining how both U.S. and foreign Government policies, regulations and programs affect the export of U.S. environmental products and services; assessing the competitiveness of the U.S. industry and its ability to respond to international opportunities; identifying priority export markets and technologies; and evaluating the progress of the U.S. Government in implementing the National Environmental Technologies Export Strategy.

The Committee will consist of approximately 35 members to be appointed by the Secretary of Commerce. In appointing members to the Committee, the Secretary will seek a balanced representation among industry and service sectors, company

size, geographic location and demographics.

The Committee will function solely as an advisory body, and in compliance with provisions of the Federal Advisory Committee Act. The charter will be filed under the Act fifteen (15) days from the date of publication of this notice.

Interested persons are invited to submit comments regarding the establishment of this Committee to Tiffany Smith, International Trade Administration, room 2015B, U.S. Department of Commerce, 14th & Constitution, NW., 20230. Telephone: (202) 482–1369.

Dated: April 28, 1994.

Raymond Vickery, Jr.,

Assistant Secretary for Trade Development.

[FR Doc. 94–10788 Filed 5–4–94; 8:45 am]

BILLING CODE 3510–DR–F

National Oceanic and Atmospheric Administration

[I.D. 042994E]

New England Fishery Management Council; Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of public meeting.

SUMMARY: The New England Fishery Management Council (Council) will hold a two-day public meeting on May 11–12, 1994, at the Seacrest Oceanfront Resort and Conference Center, 350 Quaker Road, North Falmouth, MA; telephone: (508) 540–9400.

The meeting will begin at 10 a.m. on May 11 with a report from the Interspecies Committee. This will be followed by an update from the Marine Mammal Committee on the status of the framework adjustment to the Northeast Multispecies Fishery Management Plan (FMP) to reduce takes of harbor porpoise in the Gulf of Maine. There also will be review on the status of Amendment #5 to the Lobster FMP. The meeting will adjourn at approximately 5:30 p.m.

During the afternoon session, the Scallop Committee will give a report. This will be followed by reports from the Council Chairman, the Executive Director, the NMFS Regional Director, the Northeast Fisheries Science Center liaison, the Mid-Atlantic Council liaison, the U.S. Coast Guard and the Atlantic States Marine Fisheries Commission.

On May 12 the meeting will open at 8:30 a.m. with the Groundfish Committee report. The report will cover the following issues:

(1) A joint meeting with the Enforcement Committee;

(2) A review of a silver hake (whiting) public hearing document; and

(3) The fishing industry's proposed measures for the Cultivator Shoal whiting fishery. Other groundfish issues may be discussed. This meeting will adjourn at approximately 5:00 p.m.

Abbreviated Rulemaking Actions—Northeast Multispecies FMP

The Council will consider two framework adjustments:

(1) To allow groundfish vessel transits to and from home ports without using up days at sea; and

(2) to modify the square mesh specifications according to vessel size in the Stellwagen Bank/Jeffreys Ledge juvenile protection area. The Council will determine whether the requested adjustments to the regulations for groundfish are necessary and will initiate a public comment period.

The Council staff will evaluate the proposals and announce the availability of these analyses prior to the next Council meeting (June 29–30, 1994). The public will have the opportunity to comment on the proposals prior to and at the June Council meeting. After developing management actions and receiving public testimony, the Council will make a recommendation to the Regional Director. The Regional Director may publish the action as a final rule or as a proposed rule, as described in § 651.40.

There will be a report on the federal financial assistance program for industry and ports during the afternoon session. The meeting will conclude with a continuation of the Groundfish Committee Report.

FOR FURTHER INFORMATION CONTACT: Douglas G. Marshall, Executive Director, New England Fishery Management Council, 5 Broadway, Saugus, MA 01906; telephone: (617) 231–0422.

SUPPLEMENTARY INFORMATION: This meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Douglas G. Marshall at (617) 231–0422 at least 5 days prior to the meeting date.

Dated: May 2, 1994.

David S. Crestin,

Acting Director, Office of Fisheries Conservation and Management, National Marine Fisheries Service.

[FR Doc. 94–10861 Filed 5–4–94; 8:45 am]

BILLING CODE 3510–22–P

CONSUMER PRODUCT SAFETY COMMISSION

[CPSC Docket No. 94–C0010]

Victor Reichenbach d/b/a Reichenbach Fireworks; Provisional Acceptance of a Consent Order Agreement

AGENCY: Consumer Product Safety Commission.

ACTION: Provisional acceptance of a consent order agreement under the Federal Hazardous Substances Act (FHSA).

SUMMARY: It is the policy of the Commission to publish settlements which it provisionally accepts in the **Federal Register** in accordance with the terms of 16 CFR 1605.13. Published below is a provisionally accepted Consent Order Agreement with Victor Reichenbach d/b/a Reichenbach Fireworks.

DATES: Any interested person may ask the Commission not to accept this agreement or otherwise comment on its contents by filing a written request with the Office of the Secretary by May 20, 1994.

ADDRESSES: Persons wishing to comment on this Settlement Agreement should send written comments to the Comment 94–C0010, Office of the Secretary, Consumer Product Safety Commission, Washington, DC 20207.

FOR FURTHER INFORMATION CONTACT: William J. Moore, Trial Attorney, Office of Compliance and Enforcement, Consumer Product Safety Commission, Washington, DC 20207; telephone (301) 504–0626.

SUPPLEMENTARY INFORMATION: (Attached)

Dated: April 28, 1994.

Sheldon D. Butts,

Deputy Secretary.

Victor Reichenbach, d/b/a Reichenbach Fireworks; Settlement Agreement and Order

1. Victor Reichenbach, owner of Reichenbach Fireworks (hereinafter, "Reichenbach"), a sole proprietorship, enters into this Settlement Agreement (hereinafter, "Agreement") with the staff of the Consumer Product Safety Commission, and agrees to the entry of the Order described herein. The purpose of the Agreement and Order is to settle the staff's allegations that Reichenbach knowingly caused delivery for introduction into, and/or the receipt in interstate commerce of, certain banned hazardous substances and/or misbranded hazardous substances, to wit, fireworks, in violation of sections 4 (a) and (c) of the Federal Hazardous

Substances Act, 15 U.S.C. 1263 (a) and (c).

I. Jurisdiction

2. The Commission has jurisdiction over Reichenbach and the subject matter of this Settlement Agreement pursuant to section 30(a) of the Consumer Product Safety Act (hereinafter, "CPSA"), 15 U.S.C. 2079(a), and sections 2(f)(1) (A) and (B), 4 (a) and (c), and 5(c) of the Federal Hazardous Substances Act (hereinafter, "FHSA"), 15 U.S.C. 1261(f)(1) (A) and (B), 1263 (a) and (c), and 1264(c).

II. The Parties

3. The "staff" is the staff of the Consumer Product Safety Commission, an independent regulatory commission of the United States established pursuant to section 4 of the CPSA 15 U.S.C. 2053.

4. Victor Reichenbach is the sole proprietor of Reichenbach Fireworks, located in the state of Montana, with its principal corporate offices located at 815 High Ridge Drive, Billings, Montana 59105. Reichenbach fireworks is engaged in the business of importing and selling fireworks in the United States.

III. Allegations of the Staff

5. Between April 2, 1991, and June 18, 1991, Reichenbach Fireworks caused the delivery for introduction into interstate commerce, and/or received in interstate commerce, banned hazardous substances and misbranded hazardous substances, to wit, fireworks, which are identified and described below:

CPSC collection date location	CPSC sample No./fireworks device	Violation(s)
April 16, 1991, Billings, MN	M–870–6319/Color Pearl flowers (mines/shells).	Excessive pyrotechnic leakage, 16 CFR 1507.5. Side ignition occurred, 16 CFR 1507.3(a)(1). Misbranded, 16 CFR 1500.14(b)(7).
April 16, 1991, Billings MN	M–870–6320/Kaleidoscope (flaming balls/report).	Excessive pyrotechnic leakage, 16 CFR 1507.5. Fuse burn time too short, 16 CFR 1507.3(a)(2). Failed blowout requirement, 16 CFR 1507.6.
	M–870–6713/Small festival balls (100 foot shells).	Excess pyrotechnic leakage, 16 CFR 1507.5. Fuse burn time too short, 16 CFR 1507.3(a)(2). Failed fuse weight support test, 16 CFR 1507.3(b).
	M–870–6316/White Orchid (flaming balls, 50 feet).	Fuse burn time too short, 16 CFR 1507.3(a)(2). Misbranded, 16 CFR 1500.14(b)(7).
	M–870–6315/Celebrating Fireworks w/Firecracker.	Excess pyrotechnic leakage, 16 CFR 1507.5. Fuse burn time too long, 16 CFR 1507.3(a)(2). Exceeded grain (2) grains=130 mg) report weight, 16 CFR 1500.17(a)(3). Misbranded, 16 CFR 1500.14(b)(7).
April 16, 1991, Billings, MN	M–870–6314/Blossom After Thunder (flaming balls, 30–70 feet).	Fuse burn time too short, 16 CFR 1507.3(b). Failed fuse weight support test, 16 CFR 1507.3(b). Excess report weight, 16 CFR 1500.17(a)(3). Misbranded, 16 CFR 1500.14(b)(7).
	M–870–6310/Flashing Thunder (Flaming balls, 25 feet with report).	Fuse burn time too long, 16 CFR 1507.3(a)(2). Excess report weight, 16 CFR 1500.17(a)(3).
	M–870–1281/96 Shot Color Peak Flames .	Fuse burn time too short, 16 CFR 1507.3(a)(2). Excess pyrotechnic leakage, 16 CFR 1507.5.
	M–870–1282/News Transmitter (flaming balls 5–50 Feet).	Exhibited blowout, 16 CFR 1507.6. Excess pyrotechnic leakage, 16 CFR 1507.5. Fuse burn time too short, 16 CFR 1507.3(a)(2).
April 30, 1991, Port of Portland, OR.	M–870–2722(A)/Sky Boom Rockets	Fuse burn time too short, 16 CFR 1507.3(a)(2). Failed stick rigidity test, 16 CFR 1507.10.
April 30, 1991, Port of Portland, OR.	M–870–2722(B)/Color Silk Rocket	Fuse burn time too short, 16 CFR 1507.3(a)(2). Failed stick rigidity test, 16 CFR 1507.10.
	M–870–2772(c)/Aerial Flash Rocket	Fuse burn time too short, 16 CFR 1507.3(a)(2). Failed stick rigidity test, 16 CFR 1501.10.
	M–870–2722(D)/Willow Rocket	Fuse burn time too short, 16 CFR 1507.3(a)(2). Failed stick rigidity test, 16 CFR 1507.10.
	M–870–2723/B–3 Bomber.	Exhibited blowout, 16 CFR 1507.6.
May 22, 1991, Port of Seattle, WA.	M–872–2809/Twitter Glitter.	Fuse burn time too long, 16 CFR 1507.3(a)(2). Excess pyrotechnic leakage, 16 CFR 1507.5. Failed blowout requirement, 16 CFR 1507.6. Excess report weight, 16 CFR 1500.17(a)(3). Failed fuse weight support test, 16 CFR 1507.3(b).
	M–872–2810/Lawman-Lawman-25 Shots (flaming balls with whistles and reports).	Fuse burn time too long, 16 CFR 1507.3(a)(2). Fuse missing.
June 9, 1992, Port of Denver, CO.	P–863–8074/Color Pearl Flowers (flaming balls 10–40 feet high with report).	Excessive pyrotechnic leakage, 16 CFR 1507.5.

CPSC collection date location	CPSC sample No./fireworks device	Violation(s)
		Burning debris fell to ground in 8 of 8 tested.
		Report discharged on ground.
	P–863–8075/Saturn Missile Battery	Exhibited side ignition in less than 5 seconds,16 CFR 1507.3(a)(1).
	P–863–8080/Artillery Shell.	Excess pyrotechnic leakage, 16 CFR 1507.5.
June 10, 1991, Port of Portland, OR.	M–870–2731/Fireworks for Celebration	Fuse burn time too short, 16 CFR 1507.3(a)(2).
		Excess pyrotechnic composition for report weight, 16 CFR 1500.17(a)(3).
		Misbranded, 16 CFR 1500.121.
	M–870–2733/Spring Prevails over Garden (shoots flaming balls 40–50 feet into air).	Fuse burn time too short, 16 CFR 1507.3(a)(2).
		Misbranded, 16 CFR 1500.121.
		Burning debris fell to earth on test analyst and ignited grass fires.
	M–870–2735/Celebration Crackers (Three different sizes of fire cracker sets).	All three sets exhibited excess report weight, 16 CFR 1500.17(a)(3).

With regard to samples M–870–6315 (Celebrating Fireworks with Firecrackers), M–870–6314 (Blossom after Thunder), and M–870–6310 (Flashing Thunder) noted above, these are "Class B" fireworks. Reichenbach Fireworks imported them in consumer packaging and sold them to retailers licensed to sell only "Class C" fireworks to consumers. "Class B" devices are defined by the U.S. Department of Transportation, 44 CFR 173.88(a) and (d) and 173.100 (a) and (r) and have significantly greater pyrotechnic composition than "Class C" fireworks. For this reason, they pose a greater risk of injury to consumers.

6. For the specific reasons set out in paragraph 5 above, the fireworks described therein failed to comply with the Commission's fireworks regulations.

7. Each of the fireworks devices named in paragraph 5 above, therefore, is a banned hazardous substance. 15 U.S.C. 1261(q)(1)(B), 16 CFR 1500.17(a)(3) and 16 CFR part 1507.

8. Certain fireworks identified in paragraph 5 above also fail to comply with the Commission's labeling requirements for fireworks and, therefore, are misbranded hazardous substances. 15 USC 1261(p) (1) and (2), 15 U.S.C. 1262(b); 16 CFR 1500.14(b)(7) and 16 CFR 1500.121.

9. Reichenback Fireworks knowingly received and caused the introduction into interstate commerce of the aforesaid banned and misbranded hazardous substances, in violation of section 4 (a) and (c) of the FHSA, 15 U.S.C. 1263 (a) and (c). The Commission may impose a civil penalty for these violations pursuant to section 5 (c) of the FHSA, 15 U.S.C. 1264(c).

IV. Response of Reichenbach Fireworks

10. Reichenbach Fireworks denies the allegations of the staff that it knowingly received or caused the introduction into commerce of the aforesaid banned or misbranded hazardous substances, or that it violated the FHSA as alleged by the staff.

V. Agreement of the Parties

11. The Consumer Product Safety Commission has jurisdiction over Reichenbach and the subject matter of this Settlement Agreement and Order under the following acts: Consumer Product Safety Act, 15 U.S.C. 2051 *et seq.*, and the Federal Hazardous Substances Act, 15 U.S.C. 1261 *et seq.*,

12. Reichenbach agrees to pay to the Commission a civil penalty in the amount of Fifteen Thousand and 00/100 Dollars ($15,000.00) within ten (10) days after service of the Final Order of the Commission accepting this Settlement Agreement.

13. The Commission does not make any determination that Reichenbach knowingly violated the FHSA. The Commission and Reichenbach agree that this Agreement is entered into for the purposes of settlement only.

14. Upon provisional acceptance of this Settlement Agreement and Order by the Commission, this Settlement Agreement and Order shall be placed on the public record and shall be published in the **Federal Register** in accordance with the procedures set forth in 16 CFR 1118.20(e)-(h). If the Commission does not receive any written request not to accept the Settlement Agreement and Order within 15 days, the Settlement Agreement and Order will be deemed finally accepted on the 16th day after the date it is published in the **Federal Register**.

15. Upon final acceptance of this Settlement Agreement by the Commission and issuance of the Final Order, Reichenbach knowingly, voluntarily and completely, waives any rights it may have in this matter (1) to an administrative or judicial hearing, (2) to judicial review or other challenge or contest of the validity of the Commission's actions, (3) to a determination by the Commission as to whether Reichenbach failed to comply with the FHSA as aforesaid, and (4) to a statement of findings of fact and conclusions of law.

16. For purposes of section 6(b)(5) of the CPSA, 15 U.S.C. 2055(b)(5), this matter shall be treated as if a complaint had been issued.

17. The parties further agree that the Commission shall issue the attached Order incorporated herein by reference; and that a violation of the Order shall subject Reichenbach to appropriate legal action.

18. No agreement, understanding, representation, or interpretation not contained in this Settlement Agreement and Order may be used to vary or to contradict its terms.

19. The provisions of the Settlement Agreement and Order shall apply to Reichenbach and each of his successors and assigns.

Dated: January 26, 1994.

Reichenbach Fireworks

Victor Reichenbach,

Owner, Reichenbach Fireworks, 815 High Ridge Drive, Billings, Montana 59105.

Commission Staff

David Schmeltzer,

Assistant Executive Director, Office of Compliance and Enforcement.

Alan H. Schoem,

Director, Division of Administrative Litigation, Office of Compliance and Enforcement.

Dated: February 2, 1994.

By: William J. Moore,
Trial Attorney, division of Administrative Litigation, Office of Compliance and Enforcement.

Victor Reichenbach, d/b/a Reichenbach Fireworks; Order

Upon consideration of the Settlement Agreement entered into between respondent Victor Reichenbach, d/b/a Reichenbach Fireworks, a sole proprietorship, and the staff of the Consumer Product Safety Commission; and the Commission having jurisdiction over the subject matter and Reichenbach Fireworks; and it appearing that the Settlement Agreement is in the public interest, it is, hereby

Ordered, That Victor Reichenbach shall pay, within 10 days of final acceptance of this Settlement Agreement and service of this Order, a civil penalty in the amount of $15,000.00 to the U.S. Consumer Product Safety Commission.

Provisionally accepted on the 28th day of April, 1994.

By Order of the Commission.

Sadye E. Dunn,
Secretary, Consumer Product Safety Commission.

[FR Doc. 94–10858 Filed 5–4–94; 8:45 am]

BILLING CODE 6355–01–M

DEPARTMENT OF DEFENSE

Department of the Air Force

Public Scoping Meeting, Griffiss AFB, NY

The United States Air Force (AF) will conduct a public scoping meeting to provide a forum for public officials and the community to provide information and comments concerning the disposal and reuse of portions of Griffiss AFB, NY. The meeting will be held May 19, 1994 beginning at 7 p.m. at the Common Council Chambers, Rome City Hall, 200 Liberty Plaza, Rome, New York.

The purpose of this meeting is to: (1) Identify the environmental issues and concerns that should be analyzed to support base disposal and reuse; (2) solicit comments on the proposed action; and (3) solicit potential disposal and reuse alternatives for consideration in developing the EIS. In soliciting disposal and reuse alternatives, the AF will consider all reasonable alternatives offered by any federal, state or local government agency, and any federally-sponsored or private entity or individual. The resulting EIS will be considered in making disposal decisions that will be documented in the Air Force's Final Disposal Plan and Record of Decision for Griffiss AFB.

To ensure sufficient time to adequately consider public comments concerning environmental issues and disposal alternatives to be included in the EIS, the AF recommends that comments and reuse proposals be presented at the upcoming meeting or forwarded to the address below by August 1, 1994. The AF will, however, accept additional comments at any time during the environmental impact analysis process.

Please direct written comments or requests for further information concerning the base disposal and reuse EIS to: Lt Col Gary P. Baumgartel, HQ AFCEE/EC, 8106 Chennault Road, Brooks AFB TX 78235–5318, (210) 536–3869.

Patsy J. Conner,
Air Force Federal Register Liaison Officer.

[FR Doc. 94–10730 Filed 5–4–94; 8:45 am]

BILLING CODE 3910–01–P

Public Scoping Meeting, K. I. Sawyer AFB, MI

The United States Air Force (AF) will conduct a public scoping meeting to provide a forum for public officials and the community to provide information and comments concerning the disposal and reuse of portions of K. I. Sawyer AFB, MI. The meeting will be held May 17, 1994 beginning at 7 p.m. at the Gwinn High School, 50 W M–35, Gwinn, Michigan.

The purpose of this meeting is to: (1) Identify the environmental issues and concerns that should be analyzed to support base disposal and reuse; (2) solicit comments on the proposed action; and (3) solicit potential disposal and reuse alternatives for consideration in developing the EIS. In soliciting disposal and reuse alternatives, the AF will consider all reasonable alternatives offered by any federal, state or local government agency, and any federally-sponsored or private entity or individual. The resulting EIS will be considered in making disposal decisions that will be documented in the Air Force's Final Disposal Plan and Record of Decision for K. I. Sawyer AFB.

To ensure sufficient time to adequately consider public comments concerning environmental issues and disposal alternatives to be included in the EIS, the AF recommends that comments and reuse proposals be presented at the upcoming meeting or forwarded to the address below by August 1, 1994. The AF will, however, accept additional comments at any time during the environmental impact analysis process.

Please direct written comments or requests for further information concerning the base disposal and reuse EIS to: Lt Col Gary P. Baumgartel, HQ AFCEE/EC, 8106 Chennault Road, Brooks AFB TX 78235–5318, (210) 536–3869.

Patsy J. Conner,
Air Force Federal Register Liaison Officer.

[FR Doc. 94–10732 Filed 5–4–94; 8:45 am]

BILLING CODE 3910–01–P

Public Scoping Meeting, Newark AFB, OH

The United States Air Force (AF) will conduct a public scoping meeting to provide a forum for public officials and the community to provide information and comments concerning the disposal and reuse of portions of Newark AFB, OH. The meeting will be held May 10, 1994 beginning at 7 p.m. at the Heath City Hall, 1287 Hebron Road, Heath, Ohio.

The purpose of this meeting is to: (1) Identify the environmental issues and concerns that should be analyzed to support base disposal and reuse; (2) solicit comments on the proposed action; and (3) solicit potential disposal and reuse alternatives for consideration in developing the EIS. In soliciting disposal and reuse alternatives, the AF will consider all reasonable alternatives offered by any federal, state or local government agency, and any federally-sponsored or private entity or individual. The resulting EIS will be considered in making disposal decisions that will be documented in the Air Force's Final Disposal Plan and Record of Decision for Newark AFB.

To ensure sufficient time to adequately consider public comments concerning environmental issues and disposal alternatives to be included in the EIS, the AF recommends that comments and reuse proposals be presented at the upcoming meeting or forwarded to the address below by August 1, 1994. The AF will, however, accept additional comments at any time during the environmental impact analysis process.

Please direct written comments or requests for further information concerning the base disposal and reuse EIS to: Lt Col Gary P. Baumgartel, HQ AFCEE/EC, 8106 Chennault Road, Brooks AFB TX 78235–5318, (210) 536–3869.

Patsy J. Conner,
Air Force Federal Register Liaison Officer.

[FR Doc. 94–10731 Filed 5–4–94; 8:45 am]

BILLING CODE 3910–01–P

Department of the Army

International Personal Property Rate Program; Proposed Changes

AGENCY: Military Traffic Management Command, DOD.

ACTION: Notice.

SUMMARY: MTMC is proposing use of Electronic Data Interchange (EDI) as the method for carriers to submit international personal property shipment rates. This system is the method by which international personal property shipment rates will be submitted for Department of Defense (DOD)-sponsored international household goods (HHG) and unaccompanied baggage (UB) shipments.

DATES: Comments must be received before July 5, 1994.

ADDRESSES: Comments should be mailed to Headquarters, Military Traffic Management Command, ATTN: MTOP-T-NI, room 621, 5611 Columbia Pike, Falls Church, VA 22041-5050.

FOR FURTHER INFORMATION CONTACT: Mr. Alex Moreno, (703) 756-2383.

SUPPLEMENTARY INFORMATION: MTMC's intention to institute an EDI program for acquisition of carrier rates is in furtherance of the following policy and directives:

a. Office of the Secretary of Defense Policy Memorandum directing use of American National Standards Institute EDI standards, dated May 1988.

b. 41 Code of Federal Regulations, § 101-41.007, permitting use of EDI to document and pay transportation bills, April 1989.

c. Defense Management Review Decision 941 directing use of EDI standards, dated November 1993.

MTMC proposes the use of EDI to receive, return, file, and use rates submitted by HHG and UB carriers.

The meetings listed below were held to discuss use of EDI for billing and rate filing purposes. The carrier industry was invited to attend these meetings and was briefed on MTMC's desire to convert from a magnetic tape media for rate submissions to an EDI process.

a. DOD/Industry EDI Personal Property Working Group meetings on June 14, 1991, and January 29-31, 1992, at Bethesda, Maryland.

b. DOD/Industry EDI Personal Property Working Group meeting on March 23-25, 1992, at Indianapolis, Indiana.

Under this proposed change, carriers will be able to electronically file their rates on a daily basis during filing windows, and will be electronically notified by the next business day of the results, i.e., total rates received and rates rejected with a rejection error code. For the initial filing (I/F) window, carriers will have a 3-week period, prior to the I/F deadline, in which they can add, delete, or change rates on a daily basis. Upon completion of the I/F window, MTMC will notify all interested parties via an electronic bulletin board of all rate levels filed by traffic channel, including which carrier established the rate. If two or more carriers establish this rate level, each carrier will be shown. MTMC will continue to verify all carriers filing rates in the I/F window have a letter of intent on file at each applicable installation. There will be approximately a 3-week period after notification of established low rates and the me-too (M/T) window to allow carriers an opportunity to determine their M/T rates. Carriers will have a 2-week period, prior to the M/T filing deadline, in which they can either add or change M/T rates on a daily basis. However, once both I/F and M/T filing deadlines have passed, no further modifications to those rates or other rates will be allowed. The mistake-in-rate filing (MMIRF) process will be included in the window period. The input rates will be edited for suspect rates and returned to the carriers so they may make "MIRF-like" changes. There will be two cancellation periods during each 6-month cycle in which carriers will be allowed to cancel rates.

The purpose of this proposed change is to convert the rate filing process from a magnetic tape media to electronic submission. Initially, MTMC will accept electronic mail capabilities or in the public standard format of ANSI X.12 Transportation Services Tender Transaction Set 602 using EDI technology. However, MTMC plans to transition over the next 18 months to ANSI X.12 602 public standard format as the sole method for submission of international personal property rates.

It is anticipated that many automated data processing (ADP) firms currently filing magnetic tape on behalf of carriers will continue to provide rate filing services under the electronic submission requirement. Carriers that elect to use the services of these ADP firms will only have to notify MTMC, in writing, of the firm representing them.

For interested parties who wish to file rates using EDI procedures, the first step will be to obtain the services of a Value Added Network (VAN) for either X.25 protocol for the EDI 602 format or X.400 protocol for the electronic mail proprietary format. The VAN will be the conduit for exchanging rate submissions with MTMC. The next step will be to complete a Trading Partner Agreement and submit to MTMC. A Trading Partner Agreement provides the terms and conditions governing the exchange of administrative information between carriers and MTMC, and legally binds both parties to those terms. The final step will be to complete three successful transmissions of rates without a communications or technical error.

All international personal property rates will be filed via electronic submission for the International Winter 1995 (IS95) cycle, rates effective October 1, 1995. It is anticipated that the I/F window will be in May 1995 for a 3-week period. Magnetic tapes will no longer be accepted.

DOD-approved international personal property carriers and current ADP rate tape filers will be provided instructions on filing electronic rate submissions after comments received as a result of this **Federal Register** notice have been reviewed. Instructions for filing rates electronically will also be provided on the AT&T Bulletin Board. The instructions for filing electronic international personal property rates will include procedures for filing a Trading Partner Agreement, and procedures for testing transmission of rates, along with MTMC points of contact for these procedures.

Kenneth L. Denton,

Army Federal Register Liaison Officer.

[FR Doc. 94-10800 Filed 5-4-94; 8:45 am]

BILLING CODE 3710-08-M

Patents Available for Licensing

AGENCY: U.S. Army Aviation and Troop Command, DOD.

ACTION: Notice.

SUMMARY: The Department of the Army announces the general availability of exclusive, partially exclusive, or nonexclusive licenses under the following patent: Any licenses granted shall comply with 35 U.S.C. 209 and 37 CFR part 404.

Issue patent	Title	Issue date
4,472,504	Hyperproducing Cellulase Microorganism.	09/18/84

ADDRESSES: Commander, U.S. Army Aviation and Troop Command, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798.

FOR FURTHER INFORMATION CONTACT:

John T. Stone or Ms. Jessica M. Niro, (508) 651–4510 or DSN 256–4510.

Kenneth L. Denton,

Army Federal Register Liaison Officer.

[FR Doc. 94–10801 Filed 5–4–94; 8:45 am]

BILLING CODE 3710–08–M

DEPARTMENT OF ENERGY

Office of Fossil Energy

[FE DOCKET NO. 94–32–NG]

Riata Resources Ltd.; Order Granting Blanket Authorization To Import Natural Gas From and Export Natural Gas to Canada

AGENCY: Office of Fossil Energy, DOE.

ACTION: Notice of order.

SUMMARY: The Office of Fossil Energy of the Department of Energy gives notice that it has issued an order granting Riata Resources Ltd. blanket authorization to import and export up to a combined maximum of 100 Bcf of natural gas from and to Canada over a two-year term beginning on the date of first import or export.

This order is available for inspection and copying in the Office of Fuels Programs docket room, 3F–056, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586–9478. The docket room is open between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

Issued in Washington, DC, April 18, 1994.

Clifford P. Tomaszewski,

Director, Office of Natural Gas, Office of Fuels Programs, Office of Fossil Energy.

[FR Doc. 94–10851 Filed 5–4–94; 8:45 am]

BILLING CODE 6450–01–P

[FE DOCKET NO. 94–22–NG]

Stampgas (U.S.) Inc.; Order Granting Blanket Authorization To Import and Export Natural Gas, Including Liquefied Natural Gas, From and to Canada and Mexico

AGENCY: Office of Fossil Energy, DOE.

ACTION: Notice of order.

SUMMARY: The Office of Fossil Energy of the Department of Energy gives notice that it has issued an order granting StampGas (U.S.) Inc. authorization to import up to a 100 Bcf and to export up to 100 Bcf of natural gas from and to Canada and Mexico, and to import up to 10 Bcf of liquefied natural gas over a two-year term beginning on the date of first import or export.

This order is available for inspection and copying in the Office of Fuels Programs docket room, 3F–056, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586–9478. The docket room is open between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

Issued in Washington, DC, April 20, 1994.

Clifford P. Tomaszewski,

Director, Office of Natural Gas, Office of Fuels Programs, Office of Fossil Energy.

[FR Doc. 94–10850 Filed 5–4–94; 8:45 am]

BILLING CODE 6450–01–P

[FE DOCKET NO 94–17–NG]

Westcoast Gas Services (U.S.A.) Inc.; Order Granting Blanket Authorization To Import and Export Natural Gas and Liquefied Natural Gas From and to Canada

AGENCY: Office of Fossil Energy, DOE.

ACTION: Notice of an order.

SUMMARY: The Office of Fossil Energy of the Department of Energy gives notice that it has issued an order granting Westcoast Gas Services (U.S.A.) Inc. blanket authorization to import up to 1,000 billion cubic feet (Bcf) of natural gas, including liquefied natural gas (LNG), from Canada, and to export up to 1,000 Bcf of natural gas to Canada, over a two-year term beginning on the date of first delivery.

This order is available for inspection and copying in the Office of Fuels Programs Docket Room, 3F–056, Forrestal Building, 1000 Independence Avenue, SW, Washington, DC 20585, (202) 586–9478. The docket room is open between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

Issued in Washington, DC, April 21, 1994.

Clifford P. Tomaszewski,

Director, Office of Natural Gas, Office of Fuels Programs, Office of Fossil Energy.

[FR Doc. 94–10849 Filed 5–4–94; 8:45 am]

BILLING CODE 6450–01–P

Federal Energy Regulatory Commission

[Project No. 2489–001 Vermont]

Central Vermont Public Service Corporation; Availability of Draft Environmental Assessment

April 29, 1994.

In accordance with the National Environmental Policy Act of 1969 and the Federal Energy Regulatory Commission's (Commission's) regulations, 18 CFR part 380 (Order No. 486, 52 FR 47897), the Office of Hydropower Licensing has reviewed the application for a subsequent, minor license for the Cavendish Hydroelectric Project, located on the Black River, in the Town of Cavendish, Windsor County, Vermont and has prepared a Draft Environmental Assessment (DEA) for the project. In the DEA, the Commission's staff has analyzed the potential environmental impacts of the project and has concluded that approval of the project, with appropriate mitigation or enhancement measures, would not constitute a major federal action significantly affecting the quality of the human environment.

Copies of the DEA are available for review in the Public Reference Branch, room 3104, of the Commission's offices at 941 North Capitol Street, NE., Washington, DC 20426.

Please submit any comments within 30 days from the date of this notice. Comments should be addressed to Lois D. Cashell, Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. Please affix Project No. 2489 to all comments. For further information, please contact Jim Haimes, Environmental Coordinator, at (202) 219–2489.

Lois D. Cashell,

Secretary.

[FR Doc. 94–10766 Filed 5–4–94; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. CP94–161–000]

Avoca Natural Gas Storage; Site Visit

April 29, 1994.

On May 4 and 5, 1994, the Office of Pipeline Regulation staff will conduct a site visit with representatives of Avoca Natural Gas Storage for the facilities proposed in the Avoca Gas Storage Field Project. The proposed facilities are near the towns of Avoca and Wallace in Steuben County, New York.

Parties to the proceeding may attend. Those planning to attend must provide their own transportation. For further information, call Steven G. Grape, (202) 208–0812.

Lois D. Cashell,

Secretary.

[FR Doc. 94–10771 Filed 5–4–94; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. ER94–1070–000]

Boston Edison Company; Filing

April 29, 1994.

Take notice that on April 15, 1994, Boston Edison Company, Blackstone Valley Electric Company and

Commonwealth Electric Company filed a Supplement in this docket agreeing to make a filing with the Commission before collecting any charges in the event that use rights under the Card Street line agreement filed in this docket are exceeded.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 18 CFR 385.214). All such motions or protests should be filed on or before May 13, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 94–10768 Filed 5–4–94; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. EL94–48–000]

Delmarva Power & Light Company; Filing

April 29, 1994.

Take notice that on April 26, 1994, Delmarva Power & Light Company (Delmarva) amended its original filing in this docket of a petition for waiver pursuant to section 207 of the Commission's Rules and the policy established by the Commission in an order issued November 29, 1993 in Western Resources, Inc., 65 FERC ¶61,271 (1993). The filing was made in order for the company to lock in the period over which "time value" refunds with respect to coal mine closing costs which the company collected through its wholesale fuel adjustment clause in 1989 to 1992 and which are the subject of a pending audit. The amendment was filed as an "Answer of Delmarva Power & Light Company to Motions to Intervene" previously filed in this proceeding.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 18 CFR 385.214). All such motions or protests should be filed on or before May 6, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 94–10767 Filed 5–4–94; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. ER94–974–000]

Indianapolis Power & Light Company; Filing

April 29, 1994.

Take notice that on April 5, 1994, Indianapolis Power & Light Company tendered for filing an amendment to its February 15, 1994 filing in this docket.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 18 CFR 385.214). All such motions or protests should be filed on or before May 12, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 94–10769 Filed 5–4–94; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. ER94–385–000]

Koch Gateway Pipeline Company, et al.; Request Under Blanket Authorization

April 29, 1994.

Take notice that on April 28, 1994, Koch Gateway Pipeline Company (Koch), P.o. Box 1478, Houston, Texas 77251–1478, and Florida Gas Transmission Company (Florida), P.O. Box 1188, Houston, Texas 77251–1188, filing in Docket No. CP94–385–000 a request pursuant to §§ 157.205 and 157.212 of the Commission's Regulations under the Natural Gas Act (18 CFR 157.205, 157.212) for authorization to reassign volumes of gas to be delivered pursuant to an exchange agreement between the two pipelines under the blanket certificates issued to Koch in Docket No. CP82–430–000 and issued to Florida in Docket No. CP82–553–000 pursuant to section 7 of the Natural Gas Act, all as more fully set forth in the request that is on file with the Commission and are available for public inspection.

Koch and Florida state that one of the three exchange points specified in the original exchange transaction is inactive and is no longer needed. Koch and Florida propose to reassign the gas volumes to the remaining two exchange points. They further state that the total volumes to be delivered after the requested reassignment will not exceed the total volumes authorized prior to the request; that they have adequate capacity to accomplish the reassigned deliveries without detriment or disadvantage to other customers; and the proposed change will not impact either of the pipelines' peak day and annual deliveries.

Any person or the Commission's staff may, within 45 days after issuance of the instant notice by the Commission, file pursuant to Rule 214 of the Commission's Procedural Rules (18 CFR 385.214) a motion to intervene or notice of intervention and pursuant to § 157.205 of the Regulations under the Natural Gas Act (18 CFR 157.205) a protest to the request. If no protest is filed within the time allowed therefor, the proposed activity shall be deemed to be authorized effective the day after the time allowed for filing a protest. If a protest is filed and not withdrawn within 30 days after the time allowed for filing a protest, the instant request shall be treated as an application for authorization pursuant to section 7 of the Natural Gas Act.

Lois D. Cashell,

Secretary.

[FR Doc. 94–10772 Filed 5–4–94; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. RP93–109–000]

Williams Natural Gas Co.; Informal Settlement Conference

April 29, 1994.

Take notice that an informal settlement conference will be convened in this proceeding on May 5, 1994, at 10 a.m. at the offices of the Federal Energy Regulatory Commission, 810 First Street, NE., Washington, DC, for the purpose of exploring the possible settlement of the above-referenced docket.

Any party, as defined by 18 CFR 385.102(c), or any participant as defined by 18 CFR 385.102(b), is invited to attend. Persons wishing to become a party must move to intervene and receive intervenor status pursuant to the Commission's regulations (18 CFR 385.214).

For additional information, please contact James A. Pederson at (202) 208-5705 or Sandra Delude at (202) 208-0583.

Lois D. Cashell,

Secretary.

[FR Doc. 94-10770 Filed 5-4-94; 8:45 am]

BILLING CODE 6717-01-M

Office of Hearings and Appeals

Proposed Implementation of Special Refund Procedures

AGENCY: Office of Hearings and Appeals, Department of Energy.

ACTION: Notice of proposed implementation of special refund procedures.

SUMMARY: The Office of Hearings and Appeals (OHA) of the Department of Energy (DOE) announces the proposed procedures for disbursement of $21,764.57, plus accrued interest, in refined petroleum overcharges obtained by the DOE under the terms of a Remedial Order issued to Aptos Shell, *et al.* (Aptos) Case Nos. LEF-0092, *et al.* The OHA has tentatively determined that the funds will be distributed in accordance with the provisions of 10 CFR part 205, subpart V and 15 U.S.C. 4501, the Petroleum Overcharge distribution and Restitution Act (PODRA).

DATE AND ADDRESS: Comments must be filed in duplicate within 30 days of publication of this notice in the **Federal Register** and should be addressed to the Office of Hearings and Appeals, Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585. All comments should display a reference to Case Number LEF-0092, *et al.*

FOR FURTHER INFORMATION CONTACT: Kim L. Hargrove, Staff Attorney, Office of Hearings and Appeals, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586-2400.

SUPPLEMENTARY INFORMATION: In accordance with 10 CFR 205.282(b), notice is hereby given of the issuance of the Proposed Decision and Order set out below. The Proposed Decision sets forth the procedures that the DOE has tentatively formulated to distribute to eligible claimants $21,764.57, plus accrued interest, obtained by the DOE under the terms of a Remedial Order that the DOE issued to Aptos Shell, *et al.* (Aptos) on December 14, 1981. Under the Remedial Order, Aptos was found to have violated the Federal petroleum price and allocation regulations involving the sale of refined petroleum products during the relevant audit periods.

The OHA has proposed to distribute the Remedial Order funds in a two stage refund proceeding. Purchasers of motor gasoline from any one of the gasoline retailers considered in the Aptos proceeding will have an opportunity to submit refund applications in the first stage. Refunds will be granted to applicants who satisfactorily demonstrate they were injured by the pricing violations and who document the volume of refined petroleum products they purchased from one of the gasoline retailers during the relevant audit periods. In the event that money remains after all first stage claims have been disposed of, the remaining funds will be disbursed in accordance with the provisions of 15 U.S.C. 4501, the Petroleum Overcharge Distribution and Restitution Act of 1986 (PODRA).

Any member of the public may submit written comments regarding the proposed refund procedures. Commenting parties are requested to forward two copies of their submissions, within 30 days of publication of this notice in the **Federal Register**, to the address set forth at the beginning of this notice. Comments so received will be made available for public inspection between the hours of 1 p.m. and 5 p.m., Monday through Friday, except Federal holidays, in the Public Reference Room 1E-234, 1000 Independence Avenue SW., Washington, DC 20585.

Dated: April 28, 1994.

George B. Breznay,

Director, Office of Hearings and Appeals.

Proposed Decision and Order of the Department of Energy

Implementation of Special Refund Procedures

Date: April 28, 1994.

Names of Firms: Aptos Shell, *et al.*
Date of Filing: July 20, 1993.
Case Numbers: LEF-0092, *et al.*

On July 20, 1993, the Economic Regulatory Administration of the Department of Energy (ERA) filed a Petition requesting that the Office of Hearings and Appeals (OHA) formulate and implement subpart V special refund proceedings. Under the procedural regulations of the DOE, special refund proceedings may be implemented to refund monies to persons injured by violations of the DOE petroleum price regulations, provided DOE is unable to readily identify such persons or to ascertain the amount of any refund. 10 CFR 205.280. We have considered the ERA's request to formulate refund procedures for the disbursement of monies remitted by Aptos Shell and 4 other firms pursuant to a Remedial Order (hereafter, the Order) issued by OHA on December 14, 1981, and have determined that such procedures are appropriate. Each firm's name, case number and amount of money it remitted under the Order has been set out in the appendix immediately following this Decision.

The firms remitted a total of $21,764.57 to the DOE to remedy pricing violations which occurred during the period covered by the ERA's audit. These funds are being held in an escrow account established with the Treasury pending a determination of their proper distribution. See Memorandum from George B. Breznay, Director OHA, to James T. Campbell, Comptroller, "Transferring Funds to Escrow Account," August 30, 1993. OHA's tentative plan to distribute those funds is set forth in this Decision. Specific application requirements appear in Section III. Because these procedures are set forth in proposed form, refund applications should not be filed at this time. Comments are solicited.

I. Jurisdiction and Authority

The general guidelines that govern OHA's ability to formulate and implement a plan to distribute refunds are set forth at 10 CFR part 205, subpart V. These procedures apply in situations where the DOE cannot readily identify the persons who were injured as a result of actual or alleged violations of the regulations or ascertain the refund amount each person should receive. For a more detailed discussion of subpart V and OHA's authority to fashion procedures to distribute refunds, see Office of Enforcement, 9 DOE ¶ 82,508 (1981) and Office of Enforcement, 8 DOE ¶ 82,597 (1981).

II. Background

The facts alleged in the Order were undisputed. Aptos and each of the 4 firms identified in the Appendix to this Decision were "retailers" of motor gasoline as that term has been defined at 10 CFR 212.31 and were therefore subject to the provisions of 10 CFR part 210 and 10 CFR part 212, subpart F. The Order states that, during the period covered by the ERA's audit, each retailer charged prices higher than those permitted by 10 CFR 212.93(a)(2); levied

a cents-per-gallon fee for services associated with the sale of motor gasoline in violation of 10 CFR 210.62(d)(1) and refused to make its records available for inspection in violation of 10 CFR 210.92(b).

The retailers were ordered to reduce their prices for motor gasoline by specified amounts until sufficient volumes of gasoline could be sold at the reduced prices to remedy the violations.[1] After decontrol, the Order was modified to require direct monetary restitution to the Treasury instead. See Sunset Boulevard Car Wash, 20 FERC ¶ 62,319 at 63,537 (1982). The retailers objected. The Order has since been affirmed by the Federal Energy Regulatory Commission (FERC) in a Proposed Order issued on August 13, 1982. *Id.* FERC issued a final Order adopting its Proposed Order on September 29, 1982.

III. The Proposed Refined Product Refund Procedures

This section sets forth the considerations that will be used to evaluate refund applications payable from the monies remitted by the retailers. We propose implementing a two stage refund proceeding. Purchasers of motor gasoline from any one of the gasoline retailers considered in this proceeding will have an opportunity to submit refund applications in the first stage. In the event that money remains after all first stage claims have been disposed of, the remaining funds will be disbursed in accordance with the provisions of the Petroleum Overcharge Distribution and Restitution Act of 1986 (15 U.S.C. 4501) (PODRA).

Refund applications submitted in this special refund proceeding will be evaluated in exactly the same manner as applications submitted in other refined product proceedings. Refunds will be granted to applicants who satisfactorily demonstrate they were injured by the pricing violations and who document the volume of motor gasoline they purchased from one or more of the retailers during the relevant audit period. In order to permit applicants to participate in the refund proceeding without incurring inordinate expense and to facilitate OHA's consideration of refund applications, we plan to adopt certain presumptions regarding the nature and extent of the pricing violations and the requirement that applicants demonstrate injury. Our authority to adopt presumptions in refund cases is set forth at 10 CFR 205.282(e).

With regard to the pricing violations, we propose adopting a rebuttable presumption that such violations were dispersed equally throughout each retailer's sales of motor gasoline during the appropriate audit period and that refunds should therefore be made on a pro rata or volumetric basis. Under this volumetric refund approach, applicants will be eligible to receive refunds that are equal to the gallons of gasoline they purchased multiplied by the per gallon refund amount (volumetric), plus accrued interest.

We propose that a separate volumetric be set for each retailer. The volumetrics for each retailer appear in the Appendix. Each was obtained by dividing the funds the retailer remitted to the DOE by the total gallons of motor gasoline we believe that retailer sold during the period covered by the ERA's audit.[2] A higher volumetric may be used to calculate an applicant's refund provided he satisfactorily demonstrates that he was disproportionately overcharged by one or more of the retailers, during a relevant audit period.

The potential applicants in this proceeding are likely to fall into just two categories since each of the Remedial Order firms was a retailer of motor gasoline. We will provide a presumption of injury for both categories of applicants; that is, end-users of petroleum products whose businesses were unrelated to the petroleum industry and were therefore not subject to the regulations promulgated under the Emergency Petroleum Allocation Act of 1973 (EPAA), 15 U.S.C. 751–760h, and retailers or resellers.

End-user applicants whose businesses were unrelated to the petroleum industry were presumed injured by the motor gasoline overcharges covered by the Remedial Order. These applicants need only document the volume of motor gasoline they purchased from one of the gasoline retailers in this proceeding in order to be eligible to receive a refund.

We are proposing to adopt a small claim presumption of injury for reseller and retailer applicants seeking refunds of $5,000 or less, exclusive of interest. These applicants will not be required to prove injury. In order to be eligible to receive a refund in this proceeding, a small claim applicant need only document the volume of motor gasoline he purchased from one of the gasoline retailers listed in the appendix.

Only claims for at least $15 in principal will be processed. We have adopted this minimum in refined product refund proceedings because the cost of processing claims for refunds of less than $15 outweighs the benefits of restitution in those instances. See Mobil Oil Corp., 13 DOE ¶ 85,339 (1985).

The deadline for filing an Application for Refund is June 1, 1995.

It Is Therefore Ordered That:

The refund amount remitted to the Department of Energy by Aptos Shell and the 4 other firms listed in the Appendix, pursuant to the Remedial Order finalized on December 14, 1981, be distributed in accordance with the foregoing Decision.

Dated: April 28, 1994.

APPENDIX

Case No.	Case name	Amount (dollars)	Audit period	Volumetric (dollars)
LEF–0092	Aptos Shell, 18 Rancho Del Mar, Aptos, CA 95003	$4,588.44	8/1/79–11/13/79	$.0267
LEF–0109	C.J. King Chevron, 403 S. Saratoga Ave., San Jose, CA 95129	4,786.36	12/15/79–11/6/80	.0089
LEF–0110	Hughes Burlingame Shell, 1490 Burlingame Ave., Burlingame, CA 94010	7,284.06	8/1/79–11/13/79	.0424
LEF–0111	Sandusky's Service, 1201 Terrence Street, Vallejo, CA 94590	2,855.71	1/79–1/31/80	.0096
LEF–0112	Skycrest Shell, 1600 King Drive, Daly City, CA 94015	2,250.00	8/1/79–11/13/79	.0131
Total		21,764.57		

[1] The Order imposed no sanctions upon the firms for failing to provide records pursuant to 10 CFR 210.92(b). See Remedial Order.

[2] In the absence of accurate figures indicating the amount of motor gasoline sold by each firm during the audit period, we have estimated the volume of their sales using the best available data. Our estimate is that each gasoline retailer sold 50,000 gallons of motor gasoline per month for each month of its audit period. This figure was used to calculate each retailer's volumetric. Should the claims submitted pursuant to this Order indicate that our sales volume estimate was inaccurate, it may be necessary to reestimate the volumetric.

[FR Doc. 94–10650 Filed 5–4–94; 8:45 am]
BILLING CODE 6450–01–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–4881–7]

Technical Review Workshop on the Reference Dose for Aroclor 1016

AGENCY: U.S. Environmental Protection Agency.

ACTION: Notice of meeting.

SUMMARY: This notice announces a workshop sponsored by the U.S. Environmental Protection Agency's (EPA's) Risk Assessment Forum to study the sceintific analysis underlying the Reference Dose (RfD) for Aroclor 1016, which appears on EPA's Integrated Risk Information System (IRIS). EPA will use recommendations developed at this meeting to re-examine the RfD for Aroclor 1016.

DATES: The workshop will begin on Tuesday, May 24, 1994, at 8:30 a.m. and end on Wednesday, May 25, 1994, at 12 noon. Members of the public may attend as observers.

ADDRESSES: The Meeting will be held at the Barcelo Washington Hotel, 2121 P Street, NW., Washington, DC.

Eastern Research Group, Inc., an EPA contractor, is providing logistical support for the workshop. To attend the workshop as an observer, call Deborah Kanter, Eastern Research Group, Inc., 110 Hartwell Avenue, Lexington, Massachusetts, 02173, Tel: 617/674–7320 by Friday, May 13, 1994. Space is limited.

FOR FURTHER INFORMATION CONTACT: Clare Stine, U.S. Environmental Protection Agency, Risk Assessment Forum (8101), 401 M Street, SW., Washington, DC 20460, Tel: (202) 260–6743.

SUPPLEMENTARY INFORMATION: Aroclor 1016 is a commercial mixture of polychorinated biphenyls devoid of dibenzofurans. In January 1993, based in part on a series of published reports on perinatal and long-term neurobehavioral effects in monkeys, EPA entered an Aroclor 1016 reference dose of 0.007 mg/kg-day into the Integrated Risk Information System. The IRIS entry states that, in general, the RfD is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily exposure to human populations that is likely to be without appreciable risk of deleterious effects during a lifetime.

The purpose of the May 24–25 workshop is for EPA to collect expert opinions and recommendations from a panel of independent scientists regarding Aroclor 1016 data and the related IRIS entry. Although discussion of the RfD for any substance may present generic issues, this technical review meeting is limited to the science-based information and analyses relevant to Aroclor 1016. Larger issues regarding the generic RfD process are being addressed by the Agency as a separate effort (58 FR 11490; February 25, 1993).

IRIS is an online database created by the Environmental Protection Agency and mounted on the National Library of Medicine's (NLM) Toxicology Data Network (TOXNET). Registered NLM online services users are able to access IRIS and all other TOXNET system files through the COMPUSERVE, TYMNET, TELENENT, or INFONET telecommunication net works or by direct dial.

Dated: April 29, 1994.

Gary J. Foley,

Assistant Administrator for Research and Development.

[FR Doc. 94–10840 Filed 5–4–94; 8:45 am]
BILLING CODE 6560–50–M

[FRL–4880–9]

Massachusetts: Adequacy Determination of State/Tribal Municipal Solid Waste Permit Program

AGENCY: Environmental Protection Agency.

ACTION: Notice of tentative determination to fully approve the adequacy of the Commonwealth of Massachusetts's municipal solid waste permitting program, public hearing and public comment period.

SUMMARY: Section 4005(c)(1)(B) of the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. 6945(c)(1)(B), requires states to develop and implement permit programs to ensure that municipal solid waste landfills (MSWLFs), which may receive hazardous household waste or small quantity generator hazardous waste will comply with the revised Federal MSWLF Criteria (40 CFR part 258). RCRA section 4005(c)(1)(C), 42 U.S.C. 6945(c)(1)(C), requires the Environmental Protection Agency (EPA) to determine whether states have adequate "permit" programs for MSWLFs, but does not mandate issuance of a rule for such determinations. EPA has drafted and is in the process of proposing a State/Tribal Implementation Rule (STIR) that will provide procedures by which EPA will approve, or partially approve, State/Tribal landfill permit programs. The Agency intends to approve adequate State/Tribal MSWLF permit programs as applications are submitted. Thus, these approvals are not dependent on final promulgation of the STIR. Prior to promulgation of the STIR, adequacy determinations will be made based on the statutory authorities and requirements. In addition, States/Tribes may use the draft STIR as an aid in interpreting these requirements. The Agency believes that early approvals have an important benefit. Approved State/Tribal permit programs provide for interaction between the State/Tribe and the owner/operator regarding site-specific permit conditions. Only those owners/operators located in States/Tribes with approved permit programs can use the site-specific flexibilities provided by 40 CFR part 258 to the extent the State/Tribal permit program allows such flexibility. EPA notes that regardless of the approval status of a State/Tribe and the permit status of any facility, the Federal land fill criteria shall apply to all permitted and unpermitted MSWLF facilities.

The Commonwealth of Massachusetts has applied for a determination of adequacy under section 4005(c)(1)(C) of RCRA, 42 U.S.C. 6945(c)(1)(C). EPA Region I has reviewed Massachusetts's MSWLF permit program adequacy application and has made a tentative determination that all portions of Massachusetts's MSWLF permit program are adequate to assure compliance with the revised MSWLF Criteria. Massachusetts's application for program adequacy determination is available for public review and comment at the places listed in the "ADDRESSES" section below during regular office hours.

Although RCRA does not require EPA to hold a public hearing on a determination to approve any State/Tribe's MSWLF permit program, the Region has tentatively scheduled a public hearing on this determination. If a sufficient number of persons express interest in participating in a hearing by writing to the EPA Region I, Solid Waste Section or calling the contact given below within 30 days of the date of publication of this notice, the Region will hold a hearing, in Boston, Massachusetts, on the date given below in the "DATES" section. The Region will notify all persons who submit comments on this notice if it appears that there is sufficient public interest to warrant a hearing. In addition, anyone who wishes to learn whether the hearing will be held may call the person

listed in the "CONTACTS" section below.

DATES: All comments on Massachusetts's application for a determination of adequacy must be received by the close of business on June 4, 1994. If there is sufficient interest, a public hearing will be held on June 20, 1994, at 1 p.m., at the Offices of the Massachusetts Department of Environmental Protection, 10th Floor, One Winter Street, Boston, Massachusetts. Massachusetts will participate in the public hearing, if held by EPA on this subject.

ADDRESSES: Copies of Massachusetts's application for adequacy determination are available during the hours of 8 a.m. to 5 p.m. at the following addresses for inspection and copying: Massachusetts Department of Environmental Protection, Division of Solid Waste Management, One Winter Street, 4th Floor, Boston, MA 02108; USEPA Region I, Waste Management Division, Solid Waste Section, 90 Canal Street, Boston, MA 02203, Attn: Fred Friedman, telephone (617) 573–9687. Written comments should be sent to Mr. John F. Hackler, Chief, Solid Waste Section, mail code HER–CAN6, EPA Region I, John F. Kennedy Federal Building, Boston, MA 02203–2211.

FOR FURTHER INFORMATION CONTACT: EPA Region I, John F. Kennedy Federal Building, Boston, MA 02203, Attn: Ms. Connie Dewire, mail code HER-CAN6, telephone (617) 573–5719.

SUPPLEMENTARY INFORMATION:

A. Background

On October 9, 1991, EPA promulgated revised Criteria for MSWLFs (40 CFR part 258). Subtitle D of RCRA, as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), requires states to develop permitting programs to ensure that MSWLFs comply with the Federal Criteria under 40 CFR part 258. Subtitle D also requires in section 4005(c)(1)(C), 42 U.S.C. 6945(c)(1)(C) that EPA determine the adequacy of state municipal solid waste landfill permit programs to ensure that facilities comply with the revised Federal Criteria. To fulfill this requirement, the Agency has drafted and is in the process of proposing a State/Tribal Implementation Rule (STIR). The rule will specify the requirements which State/Tribal programs must satisfy to be determined adequate.

The EPA intends to approve State/Tribal MSWLF permit programs prior to the promulgation of the STIR. EPA interprets the requirements for states or tribes to develop "adequate" programs for permits, or other forms of prior approval and conditions (for example, license to operate) to impose several minimum requirements. First, each State/Tribe must have enforceable standards for new and existing MSWLFs that are technically comparable to EPA's revised MSWLF criteria. Second, the State/Tribe must have the authority to issue a permit or other notice of prior approval and conditions to all new and existing MSWLFs in its jurisdiction. The State/Tribe also must provide for public participation in permit issuance and enforcement as required in section 7004(b) of RCRA, 42 U.S.C. 6974(b). Finally, the State/Tribe must show that it has sufficient compliance monitoring and enforcement authorities to take specific action against any owner or operator that fails to comply with an approved MSWLF program.

EPA Regions will determine whether a State/Tribe has submitted an "Adequate" program based on the interpretation outlined above. EPA plans to provide more specific criteria for this evaluation when it proposes the STIR. EPA expects States/Tribes to meet all of these requirements for all elements of a MSWLF program before it gives full approval to a MSWLF program.

B. Commonwealth of Massachusetts

On August 13, 1993, EPA Region I received Massachusetts's final MSWLF Permit Program application for adequacy determination. Region I reviewed the final application and submitted comments to Massachusetts. Massachusetts addressed EPA's comments and submitted a revised final application for adequacy determination on August 30, 1993. Region I received additional clarifying information on the Massachusetts MSWLF Permit Program on November 2, 1993 and March 23, 1994. Region I has reviewed Massachusetts's revised application and has tentatively determined that all portions of Massachusetts's MSWLF program meet all the requirements necessary to qualify for full program approval and ensures compliance with the revised Federal Criteria.

The public may submit written comments on EPA's tentative determination until June 6, 1994. Copies of Massachusetts's application are available for inspection and copying at the location indicated in the **ADDRESSES** section of this notice.

In the Commonwealth of Massachusetts, the jurisdiction for siting and permitting of solid waste management facilities lies with local boards of health and the Department of Environmental Protection (DEP), an agency falling under the Executive Office of Environmental Affairs (EOEA). The Department of Public Health (DPH) is also given an advisory role in the siting process. Authority for respective roles of the boards of health, DEP and DPH is granted by Chapter 111, section 150A of the Massachusetts General Laws. Region I based its decision of tentative full approval on the current approach for approving the construction and operation of MSWLFs in Massachusetts. This approach includes: (1) A review pursuant to the Massachusetts Environmental Policy Act (MEPA), a public information process that generally involves the submission of an Environmental Impact Report, which must be approved by the Secretary of the Office of Environmental Affairs; (2) a Site Assignment Process, which focuses on determining whether a specific location is suitable for a specific type of solid waste facility (the local board of health is responsible for granting a site assignment in accordance with the procedures and criteria at 310 CMR 16.00); and (3) a Solid Waste Management Facility Permit, a permit that must be obtained from DEP's Division of Solid Waste Management after completing the MEPA process and obtaining a site assignment. The permitting process regulates the design, operation and maintenance, closure, post-closure and financial assurance aspects of a facility.

The Massachusetts regulations require, at 310 CMR 19.021, the repermitting of all landfills existing as of the effective date of July 1, 1990, unless they choose to close prior to July 1, 1992. Furthermore, the regulations at 310 CMR 19.022(1) require the completion of closure of all unlined areas of landfills by July 1, 1995. A recent amendment of MGL c. 111, s. 150A makes the 1995 closure date applicable only to privately owned landfills.

The design standard for new and lateral expansions of landfills currently in effect in Massachusetts includes a composite liner system which features: a subgrade layer which must ensure a minimum of four foot separation between the top of bedrock or the maximum high groundwater table and the bottom of the lowermost low permeability layer; a two foot, low permeability, soil/admixture layer having a maximum in-place saturated hydraulic conductivity of 1x10–7 cm/sec; a minimum 30-mil flexible membrane liner (60-mil minimum for high density polyethylene) in direct contact with the underlying soil/admixture; a drainage/protection layer; and a leachate collection system.

Alternative liner designs must meet the performance standard for ground water protection systems found at 310 CMR 19.110 and do so in a manner which meets or exceeds the design standard of that section.

The current siting criteria carefully restrict new or expanding landfills from being located in settings that may conflict with the Location Criteria specified in 40 CFR 258.10, 258.11, 258.12, 258.13, 258.14 and 258.16. By currently restricting landfills to such settings, Massachusetts has protected all state drinking water resources, whether surface water or groundwater, from the potential impact of leachate -an approach which EPA has determined to be an alternate to the 40 CFR part 258 requirements, but still as protective as the Federal requirements at 40 CFR part 258. In addition, the Commonwealth's requirements are no less stringent than the requirements set forth at 40 CFR part 258.

The Massachusetts MSWLF Permitting Program features an unique approach to landfill assessment which includes four parts. The first part is an Initial Site Assessment (ISA), which examines the general history of the site, the types and amounts of waste landfilled, the size of the site and other historical information concerning the site. The second part is a Comprehensive Site Assessment (CSA) to characterize the nature and extent of any contamination that may exist. The CSA, which is used to develop a suitable closure strategy, involves, in its final step, a two-phased risk assessment approach to determine whether corrective action is warranted. The first phase of the risk assessment is called a qualitative risk assessment. The following three pieces of information are analyzed in this phase: the existence of contamination above standards or approved levels; the existence of potential public health or environmental receptors; and the existence of pathways which would serve to link contamination to receptors. If all three are determined to exist in any media (air, surface water, ground water or soil), the second phase in the risk assessment process, the quantitative risk assessment, is invoked as is a round of sampling for all the 40 CFR part 258, appendix II constituents. The third part of the landfill assessment is a Corrective Actions Alternatives Analysis (CAAA), which is conducted to determine the type of cap and any additional remediation measures which will be needed to properly close the sanitary landfill. The fourth and final part of the landfill assessment process is a Corrective Action Design (CAD), in which the landfill cap and any additional remediation measures are designed.

Massachusetts covers the landfill assessment requirements in more detail in its Guidance on Conducting Qualitative Risk Assessments at Solid Waste Landfills and Guidance for Disposal Site Risk Characterization and Related Phase II Activities. The revised Landfill Assessment and Closure Guidance Manual (LAC Manual) is applicable to all existing MSWLFs and to all MSWLF permit applications effective July 1, 1993. Massachusetts will implement its MSWLF permit program through enforceable permit conditions. To ensure compliance with the Federal criteria, Massachusetts has revised its current permit requirements through the existing Supplement to Landfill Assessment and Closure Manual. These revisions occur in the following areas:

1. The adoption of the EPA approved method 8260 to test ground water.
2. Addition of the provision on minimum distance of ground water monitoring well from landfill boundary.
3. Compliance with the protocols for testing and analyzing ground water for constituents listed in appendix II to part 258.
4. Compliance with the procedures for notifying the DEP about explosive levels of landfill gas.
5. Compliance with the protocols for conducting inspections to detect presence of hazardous waste and procedures for reporting results of such inspections.
6. Compliance with the minimum design standard for alternative landfill cover.

The Massachusetts Department of Environmental Protection will update the permits of existing municipal solid waste landfills scheduled to remain open after the effective date of 40 CFR part 258, to assure compliance with current state requirements. The Commonwealth of Massachusetts is not asserting jurisdiction over Tribal land recognized by the United States government for the purpose of this notice. Tribes recognized by the United States government are also required to comply with the terms and conditions found at 40 CFR part 258.

EPA will consider all public comments on its tentative determination received during the public comment period and during any public hearing held. Issues raised by those comments may be the basis for a determination of inadequacy for Massachusetts's program. EPA will make a final decision on approval of the Commonwealth of Massachusetts's program and will give notice of the final determination in the **Federal Register**. The notice shall include a summary of the reasons for the final determination and a response to all significant comments.

Section 4005(a) of RCRA, 42 U.S.C. 6945(a) provides that citizens may use the citizen suit provisions of section 7002 of RCRA, 42 U.S.C. 6972 to enforce the Federal MSWLF criteria set forth in 40 CFR part 258 independent of any State/Tribal enforcement program. As EPA explained in the preamble to the final MSWLF criteria, EPA expects that any owner or operator complying with provisions in a State/Tribal program approved by EPA should be considered to be in compliance with the Federal Criteria. See 56 FR 50978, 50995 (October 9, 1991).

Compliance With Executive Order 12866

The Office of Management and Budget has exempted this notice from the requirements of section 6 of Executive Order 12866.

Certification Under the Regulatory Flexibility Act

Pursuant to the provisions of 5 U.S.C. 605(b), I hereby certify that this approval will not have a significant economic impact on a substantial number of small entities. It does not impose any new burdens on small entities. This notice, therefore, does not require a regulatory flexibility analysis.

Authority: This notice is issued under the authority of sections 2002, 4005 and 4010(c) of the Solid Waste Disposal Act as amended, 42 U.S.C. 6912, 6945 and 6949a(c-c).

Dated: April 25, 1994.

John P. DeVillars,

Acting Regional Administrator.

[FR Doc. 94–10713 Filed 5–4–94; 8:45 am]

BILLING CODE 6560–50–F

FEDERAL COMMUNICATIONS COMMISSION

[DA 94–371]

Provision of Direct Telex Service Between the United States and Cuba

AGENCY: Federal Communications Commission.

ACTION: Notice.

SUMMARY: The Commission has authorized IDB WorldCom Services, Inc. to provide direct telex service between the United States and Cuba pursuant to the Executive Branch's general policy guidelines for implementation of the telecommunications provisions of the Cuban Democracy Act, which provides

that "telecommunication services between the United States and Cuba shall be permitted."

EFFECTIVE DATE: April 22, 1994.

FOR FURTHER INFORMATION CONTACT: John M. Coles, Attorney, Common Carrier Bureau, (202) 632-7265.

SUPPLEMENTARY INFORMATION:

In the Matter of: IDB WorldCom Services, Inc. Application for authority to lease and operate facilities for the provision of direct telex service between the United States and Cuba.

File No. I-T-C-94-211

Order and Authorization

Adopted: April 14, 1994
Released: April 22, 1994

By the Chief, International Facilities Division:

1. The Commission has under consideration the above-captioned application filed by the IDB WorldCom Services, Inc. (IDB) requesting authority pursuant to Section 214 of the Communications Act of 1934, as amended, to establish channels of communication between the United States and Cuba for the provision of direct telex service. The application was placed on the Commission's public notice and no comments were received.

2. IDB proposes to provide international telex service between the U.S. and Cuba via the INTELSAT satellite located at 325.5° E.L. using appropriately licensed existing earth station facilities owned or leased by it or its affiliates. Specifically, IDB requests authority to lease from Comsat and operate one 9.6 kbps analog SCPC circuit to be used together with matching facilities provided by INTERTEL S.A. (INTERTEL) of Cuba to derive up to 46 telex circuits with the use of TDM equipment. IDB states that it has already entered into an operating agreement with INTERTEL for the establishment of direct telex service between the U.S. and Cuba. Under the terms of its agreement with INTERTEL, there will be a 50/50 split of the prevailing $3.00 per minute accounting rate for telex services.[1] IDB states that it will initiate service within one year.

3. IDB states that the public interest would be served by a grant of its application since it will result in the rapid introduction of new lines of telecommunications between the United States and Cuba. IDB notes that it is virtually impossible to make a telephone call from the U.S. to Cuba. Because of the continuing dispute over the appropriate switched voice accounting rate and the disposition of blocked funds, U.S. carriers have been unable to expand direct telephone service between the U.S. and Cuba. IDB proposes to offer direct telex service as a means to satisfy a small portion of the enormous demand for telecommunications between the U.S. and Cuba.

4. In a letter dated July 22, 1993, the U.S. Department of State informed the Commission of the Executive Branch's general policy guidelines for implementation of the telecommunications provisions of the Cuban Democracy Act, which provides that "telecommunication services between the United States and Cuba shall be permitted."[2] Among the policy guidelines are the following requirements: (1) The proposals must have the potential to be operational within a year; (2) settlements must not be more favorable to Cuba than the current 50/50 split of the $1.20 per minute accounting rate; (3) proposals must be limited to equipment and services necessary to deliver a signal to Cuba; (4) proposals must utilize modes of communications already in place between the U.S. and Cuba; and (5) carriers shall report the number of circuits activated by facility on June 30 and December 31 of each year and on the one-year anniversary of the notification by the FCC in the Federal Register.

5. Upon consideration of IDB's application, we find that a grant of its application will serve the public interest subject to the conditions set forth below. IDB's application is consistent with the Executive Branch's general guidelines set forth in the Department of State's letter. IDB states that it will initiate service within one year, and expects to initiate service shortly after all requisite regulatory approvals have been obtained. IDB's proposed use of INTELSAT facilities and appropriately licensed existing earth station facilities satisfies the requirements that facilities already be in existence and be limited to equipment and services necessary to deliver a signal to Cuba. With respect to IDB's proposed 50/50 split of a $3.00 per minute accounting rate, the Department of State in a follow-up letter dated March 14, 1994 found a $3.00 per minute accounting rate for telex service to be consistent with the guidelines contained in its July 22, 1993 letter. Furthermore, the Department of State states that it has no objection to our approval of the application.[3]

6. According, it is Ordered That application File No. I-T-C-94-211 is granted and IDB WorldCom Services, Inc. is authorized to:

a. lease from Comsat and operate one 9.6 kbps analog SCPC circuit between an appropriately licensed existing U.S. earth station and the INTELSAT satellite located 325.5° E.L. correspondent in Cuba, INTERTEL;

b. lease and operate necessary connecting facilities in the U.S.; and

c. use the above facilities for the provision of direct telex service (46 circuits) between the U.S. and Cuba subject to the conditions set forth herein.

7. It is further Ordered That the service authorized herein must be implemented within one year from the date of release of this order.

8. It is further Ordered That the applicant shall submit reports on or before June 30, and December 31 of each year, and on the one-year anniversary of the notification of the grant of this application in the **Federal Register** indicating the numbers of circuits activated by facility.

9. It is further Ordered That this authorization is subject to the applicant's obtaining all necessary licenses and authorizations from the Departments of Treasury and Commerce.

10. It is further Ordered That this order is subject to revocation without a hearing in the event the Department of State or FCC determines that the continuation of communications between the U.S. and Cuba is no longer in the national interest.

11. It is further Ordered That, pursuant to section 203 of the Communications Act, 47 U.S.C. § 203, and part 61 of the Commission's Rules, 47 CFR part 61, IDB shall file and have in effect a tariff for the service authorized in this order before offering services to the public.

12. It is further Ordered That IDB shall file copies of any operating agreements entered into by itself or its parent/affiliates with its correspondents within 30 days of their execution, and shall otherwise comply with the filing requirements contained in Section 43.51

[1] IDB notes that the prevailing accounting rate for telex services is $3.00 per minute which is typical for most Caribbean, Central American and Latin American countries. In comparison, the prevailing accounting rate for switched voice services between the U.S. and Cuba is $1.20 per minute. IDB explains that it is common for the telex accounting rate between two countries to be much higher than the switched voice accounting rate.

[2] Letter dated July 22, 1993, from Richard C. Beaird, Acting U.S. Coordinator and Director, Bureau of International Communications and Information Policy, U.S. Department of State to FCC Chairman James H. Quello.

[3] Letter dated March 14, 1994, from Richard C. Beaird, Acting U.S. Coordinator and Director, Bureau of International Communications and Information Policy, U.S. Department of State, to FCC Chairman Reed Hundt.

of the Commission's Rules, 47 CFR 43.51.

13. It is further Ordered That IDB shall file annual reports of overseas telecommunications traffic required by § 43.61 of the Commission's Rules, 47 CFR 43.61.

14. It is further Ordered That IDB shall file a Section 214 application for any additional circuits it proposes to establish between the U.S. and Cuba.

15. Acceptance of this authorization shall be deemed acceptance of the conditions set forth herein.

16. This authorization is issued pursuant to § 0.291 of the Commission's Rules and is effective upon release. Petitions for reconsideration under § 1.106 or applications for review under § 1.115 of the Commission's Rules may be filed within 30 days of public notice of this order (*see* Section 1.4(b)(2)).

Federal Communications Commission.

George S. Li,

Chief, International Facilities Division, Common Carrier Bureau.

[FR Doc. 94–10728 Filed 5–4–94; 8:45 am]

BILLING CODE 6712-01-M

FEDERAL RESERVE SYSTEM

First Fidelity Bancorporation, et al.; Acquisitions of Companies Engaged in Permissible Nonbanking Activities

The organizations listed in this notice have applied under § 225.23(a)(2) or (f) of the Board's Regulation Y (12 CFR 225.23(a)(2) or (f)) for the Board's approval under section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. 1843(c)(8)) and § 225.21(a) of Regulation Y (12 CFR 225.21(a)) to acquire or control voting securities or assets of a company engaged in a nonbanking activity that is listed in § 225.25 of Regulation Y as closely related to banking and permissible for bank holding companies. Unless otherwise noted, such activities will be conducted throughout the United States.

Each application is available for immediate inspection at the Federal Reserve Bank indicated. Once the application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the question whether consummation of the proposal can "reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." Any request for a hearing on this question must be accompanied by a statement of the reasons a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute, summarizing the evidence that would be presented at a hearing, and indicating how the party commenting would be aggrieved by approval of the proposal.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated for the application or the offices of the Board of Governors not later than May 26, 1994.

A. Federal Reserve Bank of Philadelphia (Thomas K. Desch, Vice President) 100 North 6th Street, Philadelphia, Pennsylvania 19105:

1. First Fidelity Bancorporation, Lawrenceville, New Jersey; to acquire First Inter-Bancorp Inc., Fishkill, New York, and its subsidiary Mid-Hudson Savings Bank FSB, Fishkill, New York, and thereby engage in savings association activities of deposit taking and lending pursuant to § 225.25(b)(9) of the Board's Regulation Y.

B. Federal Reserve Bank of Richmond (Lloyd W. Bostian, Jr., Vice President) 701 East Byrd Street, Richmond, Virginia 23261:

1. First Union Corporation, Charlotte, North Carolina; to acquire BancFlorida Financial Corporation, Naples, Florida, and its wholly owned subsidiary, BancFlorida, a Federal Savings Bank, Naples, Florida, and thereby engage in owning and operating a savings bank pursuant to § 225.25(b)(9) of the Board's Regulation Y.

C. Federal Reserve Bank of Minneapolis (James M. Lyon, Vice President) 250 Marquette Avenue, Minneapolis, Minnesota 55480:

1. Community First Bankshares, Inc., Fargo, North Dakota; to acquire indirectly through its subsidiary, Community Insurance, Inc., Fargo, North Dakota, the assets of Key Insurance Agency, Gettysburg, South Dakota, and thereby engage in general insurance agency activities in a place (Gettysburg, South Dakota) with a population not exceeding 5,000 pursuant to § 225.25(b)(8)(iii) of the Board's Regulation Y. **Comments on this application must be received by May 20, 1994.**

D. Federal Reserve Bank of San Francisco (Kenneth R. Binning, Director, Bank Holding Company and International Regulation) 101 Market Street, San Francisco, California 94105:

1. BankAmerica Corporation, San Francisco, California; to acquire United Mortgage Holding Corporation; Bloomington, Minnesota, and thereby engage in originating and servicing first mortgages on residential property, and purchasing residential first mortgages originated by others, all pursuant to § 225.25(b)(1) of the Board's Regulation Y.

Board of Governors of the Federal Reserve System, April 29, 1994.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 94–10744 Filed 5–4–94; 8:45 am]

BILLING CODE 6210-01-F

Hebron Bancorp, Inc., et al.; Formations of; Acquisitions by; and Mergers of Bank Holding Companies

The companies listed in this notice have applied for the Board's approval under section 3 of the Bank Holding Company Act (12 U.S.C. 1842) and § 225.14 of the Board's Regulation Y (12 CFR 225.14) to become a bank holding company or to acquire a bank or bank holding company. The factors that are considered in acting on the applications are set forth in section 3(c) of the Act (12 U.S.C. 1842(c)).

Each application is available for immediate inspection at the Federal Reserve Bank indicated. Once the application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank or to the offices of the Board of Governors. Any comment on an application that requests a hearing must include a statement of why a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute and summarizing the evidence that would be presented at a hearing.

Unless otherwise noted, comments regarding each of these applications must be received not later than May 31, 1994.

A. Federal Reserve Bank of Cleveland (John J. Wixted, Jr., Vice President) 1455 East Sixth Street, Cleveland, Ohio 44101:

1. Hebron Bancorp, Inc., Hebron Kentucky; to become a bank holding company by acquiring 100 percent of the voting shares of Hebron Deposit Bank, Hebron, Kentucky.

B. Federal Reserve Bank of Atlanta (Zane R. Kelley, Vice President) 104 Marietta Street, N.W., Atlanta, Georgia 30303:

1. Bank Investors Limited Partnership, Lafayette, Louisiana; to become a bank holding comany by acquiring 100 percent of the voting shares of Royal Bankgroup of Acadiana, Inc., Lafayette,

Louisiana, and thereby indirectly acquire Bank of Lafayette, Lafayette, Louisiana.

2. Chance Investments, Inc., Lafayette, Louisiana; to become a bank holding company by acquiring 100 percent of the voting shares of Bank Investors Limited Partnership, Lafayette, Louisiana, and Royal Bankgroup of Acadiana, Inc., Lafayette, Louisiana, and thereby indirectly acquire Bank of Lafayette, Lafayette, Louisiana.

3. Royal Bankgroup of Acadiana, Inc., Lafayette, Louisiana; to become a bank holding company by acquiring 100 percent of the voting shares of Bank of Lafayette, Lafayette, Louisiana.

C. Federal Reserve Bank of Chicago (David S. Epstein, Vice President) 230 South LaSalle Street, Chicago, Illinois 60690:

1. Baylake Corp., Sturgeon Bay, Wisconsin; to merge with Kewaunee County Banc-Shares, Inc., Kewaunee, Wisconsin, and thereby indirectly acquire State Bank of Kewaunee, Kewaunee, Wisconsin.

2. Comerica Incorporated, Detroit, Michigan, and Comerica Texas Incorporated, Dallas, Texas; to merge with Lockwood Banc Group, Inc., Houston, Texas, and thereby indirectly acquire Lockwood National Bank of Texas, Houston, Texas.

3. Town Financial Corporation, Hartford City, Indiana; to acquire 100 percent of the voting shares of Pacesetter Bank of Hartford City, Hartford City, Indiana, and Pacesetter Bank of Montpelier, Montpelier, Indiana.

D. Federal Reserve Bank of St. Louis (Randall C. Sumner, Vice President) 411 Locust Street, St. Louis, Missouri 63166:

1. First Bank Corp., Fort Smith, Arkansas; to acquire 100 percent of the voting shares of Vista Bancorporation, Inc., Van Buren, Arkansas, and thereby indirectly acquire Citizens Bank & Trust Company, Van Buren, Arkansas.

E. Federal Reserve Bank of Minneapolis (James M. Lyon, Vice President) 250 Marquette Avenue, Minneapolis, Minnesota 55480:

1. First Bank System, Inc., Minneapolis, Minnesota; to acquire 100 percent of the voting shares of Green Mountain Bancorporation, Inc., Lakewood, Colorado, and thereby indirectly acquire Green Mountain Bank, Lakewood, Colorado.

2. First Holding Company of Park River, Inc., Park River, North Dakota; to merge with Lamb's Bancorporation, Inc., Michigan, North Dakota, and thereby indirectly acquire Lamb's Bank of Michigan City, Michigan, North Dakota.

F. Federal Reserve Bank of Kansas City (John E. Yorke, Senior Vice President) 925 Grand Avenue, Kansas City, Missouri 64198:

1. Falcon Bancorp, Inc., Anadarko, Oklahoma; to become a bank holding company by acquiring 100 percent of the voting shares of Anadarko Bancshares, Inc., Anadarko, Oklahoma, and thereby indirectly acquire Anadarko Bank and Trust Company, Anadarko, Oklahoma.

2. Pinnacle Bancorp, Inc., Central City, Nebraska; to acquire 100 percent of the voting shares of Nebraska Capital Corporation, Lincoln, Nebraska, and thereby indirectly acquire Havelock Bank, Lincoln, Nebraska.

G. Federal Reserve Bank of Dallas (Genie D. Short, Vice President) 2200 North Pearl Street, Dallas, Texas 75201-2272:

1. Adam Financial Corporation, Bryan, Texas; to become a bank holding company by acquiring 100 percent of the voting shares of New Adam Bank Group, Inc., Dover, Delaware, and thereby indirectly acquire First American Bank, Bryan, Texas.

2. New Adam Bank Group, Inc., Dover, Delaware; to become a bank holding company by acquiring 100 percent of the voting shares of First American Bank, Bryan, Texas.

Board of Governors of the Federal Reserve System, April 29, 1994.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 94–10745 Filed 5–4–94; 8:45 am]

BILLING CODE 6210–01–F

Louis F. Pignatelli, et al.; Change in Bank Control Notices; Acquisitions of Shares of Banks or Bank Holding Companies

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. Once the notices have been accepted for processing, they will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than May 25, 1994.

A. Federal Reserve Bank of Chicago (David S. Epstein, Vice President) 230 South LaSalle Street, Chicago, Illinois 60690:

1. Louis F. Pignatelli, Rock Falls, Illinois; to acquire an additional 7.5 percent of the voting shares of Community Illinois Corporation, Rock Falls, Illinois, and thereby indirectly acquire Community State Bank of Rock Falls, Rock Falls, Illinois.

B. Federal Reserve Bank of St. Louis (Randall C. Sumner, Vice President) 411 Locust Street, St. Louis, Missouri 63166:

1. Jack A. Marantz, Springfield, Illinois, to acquire an additional 7.67 percent, for a total of 27.62 percent, and Tom E. Marantz, Springfield, Illinois, to acquire an additional .72 percent, for a total of 2.57 percent, of the voting shares Staun Bancorp, Inc., Staunton, Illinois, and thereby indirectly acquire First Community State Bank, Staunton, Illinois.

Board of Governors of the Federal Reserve System, April 29, 1994.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 94–10746 Filed 5–4–94; 8:45 am]

BILLING CODE 6210–01–F

South Banking Company; Notice of Application To Engage de novo in Permissible Nonbanking Activities

The company listed in this notice has filed an application under § 225.23(a)(1) of the Board's Regulation Y (12 CFR 225.23(a)(1)) for the Board's approval under section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. 1843(c)(8)) and § 225.21(a) of Regulation Y (12 CFR 225.21(a)) to commence or to engage *de novo*, either directly or through a subsidiary, in a nonbanking activity that is listed in § 225.25 of Regulation Y as closely related to banking and permissible for bank holding companies. Unless otherwise noted, such activities will be conducted throughout the United States.

The application is available for immediate inspection at the Federal Reserve Bank indicated. Once the application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the question whether consummation of the proposal can "reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." Any request for a hearing on this question must be

accompanied by a statement of the reasons a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute, summarizing the evidence that would be presented at a hearing, and indicating how the party commenting would be aggrieved by approval of the proposal.

Comments regarding the application must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than May 16, 1994.

A. Federal Reserve Bank of Atlanta (Zane R. Kelley, Vice President) 104 Marietta Street, N.W., Atlanta, Georgia 30303:

1. South Banking Company, Alma, Georgia; to engage *de novo* through its subsidiary Bankers Data Services, Inc., Alma, Georgia, in providing to others data processing and data transmission services pursuant to § 225.25(b)(7) of the Board's Regulation Y.

Board of Governors of the Federal Reserve System, April 29, 1994.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 94–10747 Filed 5–4–94; 8:45 am]

BILLING CODE 6210–01–F

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Hospital Infection Control Practices Advisory Committee: Meeting

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), the Centers for Disease Control and Prevention (CDC) announces the following meeting.

Name: Hospital Infection Control Practices Advisory Committee.

Time and Date: 8:30 a.m.–5 p.m., June 13, 1994. 8:30 a.m.–5 p.m., June 14, 1994.

Place: CDC, Auditorium B, 1600 Clifton Road, NE., Atlanta, Georgia 30333.

Status: Open to the public, limited only by the space available.

Purpose: The committee is charged with providing advice and guidance to the Secretary, the Assistant Secretary for Health, the Director, CDC, and the Director, National Center for Infectious Diseases (NCID), regarding the practice of hospital infection control and strategies for surveillance, prevention, and control of nosocomial infections in U.S. hospitals and updating of guidelines and other policy statements regarding prevention of nosocomial infections.

Matters to be Discussed: This is the fifth meeting of the Hospital Infection Control Practices Advisory Committee. The agenda will include review of comments on the published draft of the CDC Guideline for Prevention of Nosocomial Pneumonia, review of the final draft of the proposed revision of the CDC Guideline for Isolation Precautions in Hospitals, and review of the second draft of the proposed revision of the CDC Guideline for Prevention of Intravascular Infections; and an update on CDC activities of interest to the committee. Agenda items are subject to change as priorities dictate.

Contact Person For More Information: Julia S. Garner, R.N., M.N., Nurse Consultant, Hospital Infections Program, NCID, CDC, 1600 Clifton Road, NE., Mailstop A–07, Atlanta, Georgia 30333, telephone 404/639–1552.

Dated: April 29, 1994.

Robert L. Foster,

Assistant Director for Special Programs, Office of Program Support, Centers for Disease Control and Prevention (CDC).

[FR Doc. 94–10778 Filed 5–4–94; 8:45 am]

BILLING CODE 4163–18–M

National Committee on Vital and Health Statistics (NCVHS) Subcommittee on Disability and Long-Term Care Statistics: Meeting

Pursuant to Public Law 92–463, the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), announces the following meeting.

Name: NCVHS Subcommittee on Disability and Long-Term Care Statistics.

Time and Date: 9 a.m.–5 p.m., May 24, 1994.

Place: Room 703A, Hubert H. Humphrey Building, 200 Independence Avenue, SW., Washington, DC 20201.

Status: Open.

Purpose: The subcommittee will discuss the Resident Assessment Instrument and the minimum data set for nursing home residents.

Contact Person for More Information: Substantive program information as well as summaries of the meeting and a roster of committee members may be obtained from Gail F. Fisher, Ph.D., Executive Secretary, NCVHS, NCHS, CDC, room 1100, Presidential Building, 6525 Belcrest Road, Hyattsville, Maryland 20782, telephone 301/436–7050.

Dated: April 29, 1994.

Robert L. Foster,

Assistant Director for Special Programs, Office of Program Support, Centers for Disease Control and Prevention (CDC).

[FR Doc. 94–10779 Filed 5–4–94; 8:45 am]

BILLING CODE 4163–18–M

Office of Community Services

[Program Announcement No. OCS 94–10]

Limited Competition; Request for Applications Under the Office of Community Services' FY 1994 Demonstration Partnership Program, Special Set-Aside for Empowerment Zone/Enterprise Community—Technical Assistance/Planning Grants

AGENCY: Administration for Children and Families (ACF), DHHS.

ACTION: Request for applications for technical assistance-planning grants from all eligible entities under the Demonstration Partnership Program (DPP) which also meet the eligibility criteria set forth below.

SUMMARY: The Office of Community Services (OCS) announces that, based on availability of funds, it has set aside up to two million dollars ($2,000,000) for technical assistance/planning grants not to exceed ten thousand dollars ($10,000) each, related to the development of Strategic Plans by communities seeking designation as Empowerment Zones or Enterprise Communities under Title XX of the Social Security Act. Applications will be accepted for grants pursuant to the Secretary's authority under section 408(a) as amended (Pub. L. 99–425), of the Human Services Reauthorization Act of 1986. This Program Announcement contains forms and instructions for submitting an application, and consists of six parts:

Part A sets forth eligibility criteria for funding under this Program Announcement;

Part B describes the purposes of this program, the type of project that will be considered for funding, and the size and duration of grants;

Part C provides details on application requirements such as the amount of matching funds applicants are required to commit, prohibitions on use of funds, partnership agreements, etc.;

Part D describes the application procedures including where and how to submit an application;

Part E describes contents of application and how the project narrative should be ordered and presented;

Part F details post-award information and reporting requirements.

CLOSING DATE: The closing date for submission of applications is May 12, 1994.

FOR FURTHER INFORMATION CONTACT: Office of Community Services, Division of Community Demonstration Programs, Attn: Richard M. Saul, 370 L'Enfant

Promenade SW., Fifth floor, Washington, DC 20447, telephone (202) 401-9341.

Part A—Eligible Applicants

1. Basic Eligibility Criteria

Grants pursuant to this announcement may be made to any organization which is officially designated as a community action agency or community action program under section 673(1) of the Community Services Block Grant (CSBG) Act, meets all the requirements under section 675(c)(3) of the CSBG Act, and which meets the additional criteria set out in paragraph 2. below. All eligible applicants are current recipients of Community Services Block Grant funds. For purposes of the Demonstration Partnership Program only, the term eligible applicant also includes an organization that serves migrant and seasonal farmworkers and that received Community Services Block Grant funds in fiscal year 1993. OCS/ACF will be the final determiner of an organization's status as an eligible entity under the Community Services Block Grant Act.

2. Additional Eligibility Criteria

Additional Criteria: to be eligible for funding under this Program Announcement an applicant must also:

a. Contain within its service area a community or communities which as of the closing date for application under this Program Announcement has filed with HUD or USDA a Notice of Intent to Participate indicating an intent to apply for designation as an Empowerment Zone or Enterprise Community; and

b. Of the agencies meeting the criteria set out in subparagraph (1), above, have a CSBG funding level in FY 1994 which is one of the 200 smallest among those submitting an otherwise acceptable application in response to this announcement. (OCS estimates that agencies which received FY 1994 CSBG grants of less than approximately $350,000 should be eligible, although the final figure will not be known until all applications are received.)

Part B—Type of Project Eligible for Funding

OCS is interested in providing funds to eligible applicants with limited resources whose service areas have a high incidence of poverty. The purpose of this set-aside is to provide capacity-building grants that will enable eligible applicants to strengthen their staffs or obtain other resources that will enable them to participate, in partnership with others in their communities, in the development of Strategic Plans for their service areas which will be submitted to USDA and HUD seeking designation as Empowerment Zones or Enterprise Communities. OCS looks to the participation in this planning process made possible by these grants as a way of achieving the following goals: (1) That low income people will be involved in the design and implementation of these Strategic Plans and as beneficiaries of the programs they propose, (2) that the Plans will include provision for independent third-party evaluation that will verify such involvement and assess its benefits, and (3) that the Plans will provide a vehicle for replication of past successful Demonstration Partnership Programs.

Funds under this set aside may be used to acquire additional staff and/or to contract for necessary expertise or resources in order to enable the applicant to develop partnership arrangements through which it can contribute effectively to the development of a Strategic Plan that will embody the goals outlined above. Reasonable and necessary travel costs, including those necessary to facilitate low income participation in the strategic planning process, may also be paid for with grant funds. The end result should be a comprehensive, finely-tuned Strategic Plan that will include innovative approaches to provide for greater self-sufficiency of the poor.

A maximum of $10,000 will be granted to eligible applicants which submit acceptable applications as described below. OCS has set aside a total of up to two million dollars ($2,000,000) to fund these grants, which will have project periods of six months. Funds not obligated by grantees at the end of the project period will lapse.

It should be noted that under the terms of the authorizing legislation recipients of these TA/Planning grants will not be eligible to receive any other grants under the Demonstration Partnership Program in FY 1994.

Part C—Application Requirements

1. Limitation on Use of Funds

Grant funds under this Program Announcement may only be used for Salaries, Travel, and Contract/Consultant Services. (Categories a, c, and f on SF 424A)

2. Prohibition on the Use of Funds

The use of funds for the purchase, construction or improvement of real property is prohibited. This prohibition includes expenditures for weatherization and home repairs.

3. Eligibility

Applicant must be an eligible entity as defined in Part A. As part of establishing eligibility, the application must contain a letter signed by the State Director of the Community Services Block Grant program certifying that the applicant meets the Basic Eligibility Criteria set out in Part A, Paragraph 1 of this Announcement, and that it has the capacity to operate the proposed project. The application must also contain, as part of the Project Narrative, a statement certifying that a Notice of Intent to Participate has been submitted from the applicant's service area to either HUD or USDA indicating an intent to apply for designation as an Empowerment Zone or an Enterprise Community. The statement must identify the entity which submitted the Notice and its location, and must indicate that to the best of the applicant's knowledge and belief the submission was based on the existence of eligible census tracts within the applicant's community or service area.

4. Matching Funds

An applicant is required to obtain commitment of at least one private or public sector dollar or equivalent in-kind contribution for each dollar of OCS funds awarded for under this Program Announcement. Public sector resources that can be counted toward the minimum match include funds from State and local governments, and funds from certain block grants allocated to the States by the Federal Government, provided that the authorizing legislation for these grants permits such use. (CDBG legislation permits such use; CSBG legislation does not.) Funds identified by the applicant as those to be counted toward the minimum match requirement may be in the form of grantee-incurred costs, cash or third-party in-kind contributions fairly valued.

5. Partnership Agreement

To be considered for funding applicants must include in the application a signed letter from the EZ/EC Applicant Entity, if already selected, and from the unit or units of local government which will be signing off on the EZ/EC Application for designation, pledging cooperation with the applicant as a member of the group engaged in development of the Strategic Plan in their community. Applicants are encouraged to seek similar letters from other agencies or organizations in their community involved in the Strategic Planning process.

6. Sub-Contracting or Delegating Projects

An applicant will not be funded where the proposal is for a grantee to act as a mere conduit of funds to a third party without performing a substantive role itself. This prohibition does not bar subcontracting or subgranting for specific services or activities needed to conduct the project.

7. Maintenance of Effort

The activities funded under this program announcement must be in addition to, and not in substitution for, activities previously carried on without Federal assistance. Also, funds or other resources currently devoted to activities designed to meet the needs of the poor within a community, area, or State must not be reduced in order to provide the required matching contributions. When legislation for a particular block grant permits the use of its funds as match, the applicant must show that it has received a real increase in its block grant allotment and must certify that other anti-poverty programs will not be scaled back to provide the match required for this project. (See Attachment B)

Part D—Submission of Applications

1. Application Submission

Applications may be mailed to the Department of Health and Human Services, Administration for Children and Families, Division of Discretionary Grants, 370 L'Enfant Promenade, SW., 6th Floor OFM/DDG–EZ/EC, Washington, DC 20447. Hand delivered applications are accepted during the normal working hours of 8 a.m. to 4:30 p.m., Monday through Friday, on or prior to the established closing date at: Administration for Children and Families, Division of Discretionary Grants, 6th Floor OFM/DDG, 901 D Street, SW., Washington, DC 20447. An application will be considered to be received on time if sent on or before the closing date as evidenced by a legible U.S. Postal Service postmark or a legibly dated receipt from a commercial carrier.

(Applicants are cautioned to request a legibly dated U. S. Postal Service postmark or to obtain a legibly dated receipt from a commercial carrier or the U. S. Postal Service. Private metered postmarks are not acceptable as proof of timely mailing.)

2. Late Applications

Applications which do not meet one of these criteria are considered late applications. The ACF Division of Discretionary Grants will notify each late applicant that its application will not be considered in this competition.

3. Extension of Deadline

The ACF Office of Community Services may extend the deadline for all applicants because of acts of God such as floods, hurricanes, etc., or when there is a disruption of the mails. However, if the Office of Community Services does not extend the deadline for all applicants, it may not waive or extend the deadline for any applicant.

Applications once submitted are considered final and no additional materials will be accepted.

One signed original application and two copies should be submitted.

Part E—Contents of Application, Appendices, and Intergovernmental Review

1. Contents of Application

Each application submission should include a signed original and two additional copies of the application. Each application should include the following in the order presented:

a. A completed Standard Form 424 which has been signed by an official of the organization applying for the grant who has authority to obligate the organization legally; [Note: The original SF–424 must bear the original signature of the authorizing representative of the applicant organization]

b. Budget Information-Non-Construction Programs (SF–424A) Note that grant funds under this Announcement may only be used for Salaries, Travel, and Contract/Consultant Services (Budget Categories a, c, and f). Attach to the SF 424A a breakout of total project costs reflecting Federal (OCS funds) and matching non-Federal resources (including funds from other Federal programs) along with budget justification. (See Attachment A, SF–424 and SF–424A)

c. Filled out, signed and dated Assurances—Non-Construction Programs (SF–424B);

d. By signing and submitting this application the applicant is certifying that it will comply with the Federal requirements concerning Drug-Free Workplace and debarment regulations;

e. Restrictions on Lobbying, Certification for Contracts, Grants, Loans, and Cooperative Agreements: Filled out, signed and dated form found at Attachment D;

f. Disclosure of Lobbying Activities, SF–LLL: Filled out, signed and dated form found at Attachment D, if necessary;

g. A project narrative of not more than two pages that will include the following components in the order enumerated:

(1) A statement of the amount of applicant's FY 1994 CSBG grant award.

(2) A statement certifying that a Notice of Intent to Participate has been submitted from the applicant's service area to either HUD or USDA indicating an intent to apply for designation as an Empowerment Zone or an Enterprise Community. The statement must identify the entity which submitted the Notice and its location, and must indicate that to the best of the applicant's knowledge and belief the submission was based on the existence of eligible census tracts within the applicant's community or service area.

(3) A statement indicating the names of the counties and principal towns in the applicant's service area;

(4) A brief Project Design indicating how applicant proposes to achieve the goals set out in Part B, above;

(5) Identification of the program Partners (Selected EZ/EC Applicant, Unit of Local Government, other organizations involved in planning process, etc.)

h. An itemized budget justification detailing proposed costs, explaining budget appropriateness and showing required match.

2. Appendices

Including Maintenance of Effort Certification (See Attachment B); letter from the State CSBG Director certifying eligibility of applicant (as described in Part C, Paragraph 3, Eligibility, above; letter(s) of cooperation (described in Part C, Paragraph 5, Partnership Agreement, above); letters of match commitment or letters of intent; and signed certifications, etc., in attachment A (listed in sub-paragraphs (e) and (f) above).

3. Intergovernmental Review

This program is covered under Executive Order 12372, Intergovernmental Review of Federal Programs and 45 CFR part 100, Intergovernmental Review of Department of Health and Human Services Programs and Activities. Under the Order, States may design their own processes for reviewing and commenting on proposed Federal assistance under covered programs.

All States and Territories except Alabama, Alaska, Connecticut, Hawaii, Idaho, Kansas, Louisiana, Minnesota, Montana, Nebraska, Oregon, Oklahoma, Pennsylvania, Virginia, Washington, American Samoa and Palau have elected to participate in the Executive Order process and have established Single Points of Contact (SPOCs). Applications

from Federally-recognized Indian Tribes are exempt from the requirements of Executive Order 12372.

Applicants from these seventeen jurisdictions need take no action regarding Executive Order 12372. All other applicants should contact their SPOC as soon as possible to alert them of the prospective application and to receive any necessary instructions.

Applicants must submit any required material to the SPOCs as soon as possible so that the program office can obtain and review SPOC comments as part of the award process. It is imperative that the applicant submit all required materials, if any, to the SPOC and indicate the date of this submittal (or the date of contact if no submittal is required) on the Standard Form 424, item 16a.

Under 45 CFR 100.8(a)(2), a SPOC has 60 days from the application deadline date to comment on proposed new or competing continuation awards. However, for this program announcement, the SPOC comment period has been reduced to seven (7) days in order to ensure timely awards. These comments are reviewed as part of the award process. Failure to notify the SPOC can result in a delay in grant award.

SPOCs are encouraged to eliminate the submission of routine endorsements as official recommendations. Additionally, SPOCs are requested to clearly differentiate between mere advisory comments and those official State process recommendations which they intend to trigger the accommodate or explain rule under 45 CFR 100.10. It is helpful in tracking SPOC comments if the SPOC will clearly indicate the applicant organization as it appears on the application SF–424.

When comments are submitted directly to ACF, they should be addressed to: Department of Health and Human Services, Administration for Children and Families, Office of Financial Management, Division of Discretionary Grants, 6th Floor, 370 L'Enfant Promenade, SW., Washington, DC 20447. A list of the Single Points of Contact for each State and Territory is included at Attachment C of this announcement.

Part F—Post-Award and Reporting Requirements

Following approval of the applications selected for funding, notice of project approval and authority to draw down project funds will be made in writing. The official award document is the Financial Assistance Award which provides the amount of Federal funds approved for use in the project, the project and budget periods for which support is provided, the terms and conditions of the award, and the total required financial grantee participation.

Grantees are subject to the audit requirements in OMB Circulars A–128 and A–133.

Attachment E indicates the regulations which apply to all applicants/grantees under the Demonstration Partnership Program.

Grantees will be required to submit a final progress and financial report within 90 days of the termination of the project.

Dated: April 22, 1994.

Donald Sykes,

Director, Office of Community Services.

BILLING CODE 4184–01–P

Attachment A

APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

1. TYPE OF SUBMISSION: Application ☐ Construction ☐ Non-Construction; Preapplication ☐ Construction ☐ Non-Construction	2. DATE SUBMITTED	Applicant Identifier
	3. DATE RECEIVED BY STATE	State Application Identifier
	4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

5. APPLICANT INFORMATION

Legal Name:	Organizational Unit:
Address (give city, county, state, and zip code):	Name and telephone number of the person to be contacted on matters involving this application (give area code)

6. EMPLOYER IDENTIFICATION NUMBER (EIN): ☐☐ – ☐☐☐☐☐☐☐

7. TYPE OF APPLICANT: (enter appropriate letter in box) ☐

A. State
B. County
C. Municipal
D. Township
E. Interstate
F. Intermunicipal
G. Special District
H. Independent School Dist.
I. State Controlled Institution of Higher Learning
J. Private University
K. Indian Tribe
L. Individual
M. Profit Organization
N. Other (Specify) _____

8. TYPE OF APPLICATION:

☐ New ☐ Continuation ☐ Revision

If Revision, enter appropriate letter(s) in box(es): ☐ ☐

A. Increase Award B. Decrease Award C. Increase Duration
D. Decrease Duration Other (specify):

_____

9. NAME OF FEDERAL AGENCY:

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: ☐☐ . ☐☐☐

TITLE:

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:

12. AREAS AFFECTED BY PROJECT (cities, counties, states, etc.):

13. PROPOSED PROJECT:		14. CONGRESSIONAL DISTRICTS OF:	
Start Date	Ending Date	a. Applicant	b. Project

15. ESTIMATED FUNDING:		
a. Federal	$	.00
b. Applicant	$	.00
c. State	$	.00
d. Local	$	.00
e. Other	$	.00
f. Program Income	$	.00
g. TOTAL	$	.00

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:

DATE _____

b. NO. ☐ PROGRAM IS NOT COVERED BY E.O. 12372

☐ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?

☐ Yes If "Yes," attach an explanation. ☐ No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED

a. Typed Name of Authorized Representative	b. Title	c. Telephone number
d. Signature of Authorized Representative		e. Date Signed

Previous Editions Not Usable

Standard Form 424 (REV 4-88)
Prescribed by OMB Circular A-102

Authorized for Local Reproduction

BILLING CODE 4184-01-C

Instructions for the SF 424

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

Item and Entry

1. Self-explanatory.

2. Date application submitted to Federal agency (or State if applicable) & applicant's control number (if applicable).

3. State use only (if applicable).

4. If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank.

5. Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application.

6. Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service.

7. Enter the appropriate letter in the space provided.

8. Check appropriate box and enter appropriate letter(s) in the space(s) provided:

—"New" means a new assistance award.

—"Continuation" means an extension for an additional funding/budget period for a project with a projected completion date.

—"Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation.

9. Name of Federal agency from which assistance is being requested with this application.

10. Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested.

11. Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project.

12. List only the largest political entities affected (e.g., State, counties, cities).

13. Self-explanatory.

14. List the applicant's Congressional District and any District(s) affected by the program or project.

15. Amount requested or to be contributed during the first fund/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate *only* the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on a an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15.

16. Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process.

17. This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes.

18. To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application).

BILLING CODE 4184–01–P

OMB Approval No. 0348-0044

BUDGET INFORMATION — Non-Construction Programs

SECTION A – BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.		$	$	$	$	$
2.						
3.						
4.						
5. TOTALS		$	$	$	$	$

SECTION B – BUDGET CATEGORIES

6 Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
a. Personnel	$	$	$	$	$
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a - 6h)					
j. Indirect Charges					
k. TOTALS (sum of 6i and 6j)	$	$	$	$	$
7. Program Income	$	$	$	$	$

Authorized for Local Reproduction

Standard Form 424A (4-88)
Prescribed by OMB Circular A-102

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8.	$	$	$	$
9.				
10.				
11.				
12. TOTALS (sum of lines 8 and 11)	$	$	$	$

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$	$	$	$	$
14. NonFederal					
15. TOTAL (sum of lines 13 and 14)	$	$	$	$	$

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16.	$	$	$	$
17.				
18.				
19.				
20. TOTALS (sum of lines 16 -19)	$	$	$	$

SECTION F - OTHER BUDGET INFORMATION

(Attach additional Sheets if Necessary)

21. Direct Charges:	22. Indirect Charges:

23. Remarks

SF 424A (4-88) Page 2
Prescribed by OMB Circular A-102

Authorized for Local Reproduction

BILLING CODE 4184-01-C

Instructions for the SF–424A

General Instructions

This form is designed so that application can be made for funds from one or more grant programs. In preparing the budget, adhere to any existing Federal grantor agency guidelines which prescribe how and whether budgeted amounts should be separately shown for different functions or activities within the program. For some programs, grantor agencies may require budgets to be separately shown by function or activity. For other programs, grantor agencies may require a breakdown by function or activity. Sections A, B, C, and D should include budget estimates for the whole project except when applying for assistance which requires Federal authorization in annual or other funding period increments. In the latter case, Sections A, B, C, and D should provide the budget for the first budget period (usually a year) and Section E should present the need for Federal assistance in the subsequent budget periods. All applications should contain a breakdown by the object class categories shown in Lines a–k of Section B.

Section A. Budget Summary Lines 1–4, Columns (a) and (b)

For applications pertaining to a *single* Federal grant program (Federal Domestic Assistance Catalog number) and *not requiring* a functional or activity breakdown, enter on Line 1 under Column (a) the catalog program title and the catalog number in Column (b).

For applications pertaining to a *single* program *requiring* budget amounts by multiple functions or activities, enter the name of each activity or function on each line in Column (a), and enter the catalog number in Column (b). For applications pertaining to multiple programs where none of the programs require a breakdown by function or activity, enter the catalog program title on each line in *Column* (a) and the respective catalog number on each line in Column (b).

For applications pertaining to *multiple* programs where one or more programs *require* a breakdown by function or activity, prepare a separate sheet for each program requiring the breakdown. Additional sheets should be used when one form does not provide adequate space for all breakdown of data required. However, when more than one sheet is used, the first page should provide the summary totals by programs.

Lines 1–4, Columns (c) through (g.)

For new applications, leave Columns (c) and (d) blank. For each line entry in Columns (a) and (b), enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the project for the first funding period (usually a year).

For continuing grant program applications, submit these forms before the end of each funding period as required by the grantor agency. Enter in Columns (c) and (d) the estimated amounts of funds which will remain unobligated at the end of the grant funding period only if the Federal grantor agency instructions provide for this. Otherwise, leave these columns blank. Enter in columns (e) and (f) the amounts of funds needed for the upcoming period. The amount(s) in Column (g) should be the sum of amounts in Columns (e) and (f).

For supplemental grants and changes to existing grants, do not use Columns (c) and (d). Enter in Column (e) the amount of the increase or decrease of Federal funds and enter in Column (f) the amount of the increase or decrease of non-Federal funds. In Column (g) enter the new total budgeted amount (Federal and non-Federal) which includes the total previous authorized budgeted amounts plus or minus, as appropriate, the amounts shown in Columns (e) and (f). The amount(s) in Column (g) should not equal the sum of amounts in Columns (e) and (f).

Line 5—Show the totals for all columns used.

Section B. Budget Categories

In the column headings (1) through (4), enter the titles of the same programs, functions, and activities shown on lines 1–4, Column (a), Section A. When additional sheets are prepared for Section A, provide similar column headings on each sheet. For each program, function or activity, fill in the total requirements for funds (both Federal and non-Federal) by object class categories.

Lines 6a–i—Show the totals of Lines 6a to 6h in each column.

Line 6j—Show the amount of indirect cost.

Line 6k—Enter the total of amounts on Lines 6i and 6j. For all applications for new grants and continuation grants the total amount in column (5), Line 6k, should be the same as the total amount shown in Section A, Column (g), Line 5. For supplemental grants and changes to grants, the total amount of the increase or decrease as shown in Columns (1)–(4), Line 6k should be the same as the sum of the amounts in Section A, Columns (e) and (f) on Line 5.

Line 7—Enter the estimated amount of income, if any, expected to be generated from this project. Do not add or subtract this amount from the total project amount. Show under the program narrative statement the nature and source of income. The estimated amount of program income may be considered by the federal grantor agency in determining the total amount of the grant.

Section C. Non-Federal-Resources

Lines 8–11—Enter amounts of non-Federal resources that will be used on the grant. If in-kind contributions are included, provide a brief explanation on a separate sheet.

Column (a)—Enter the program titles identical to Column (a), Section A. A breakdown by function or activity is not necessary.

Column (b)—Enter the contribution to be made by the applicant.

Column (c)—Enter the amount of the State's cash and in-kind contribution if the applicant is not a State or State agency. Applicants which are a State or State agencies should leave this column blank.

Column (d)—Enter the amount of cash and in-kind contributions to be made from all other sources.

Column (e)—Enter totals of Columns (b), (c), and (d).

Line 12—Enter the total for each of Columns (b)-(e). The amount in Column (e) should be equal to the amount on Line 5, Column (f), Section A.

Section D. Forecasted Cash Needs

Line 13—Enter the amount of cash needed by quarter from the grantor agency during the first year.

Line 14—Enter the amount of cash from all other sources needed by quarter during the first year.

Line 15—Enter the totals of amounts on Lines 13 and 14.

Section E. Budget Estimates of Federal Funds Needed for Balance of the Project

Lines 16–19—Enter in Column (a) the same grant program titles shown in Column (a), Section A. A breakdown by function or activity is not necessary. For new applications and continuation grant applications, enter in the proper columns amounts of Federal funds which will be needed to complete the program or project over the succeeding funding periods (usually in years). This section need not be completed for revisions (amendments, changes, or supplements) to funds for the current year of existing grants.

If more than four lines are needed to list the program titles, submit additional schedules as necessary.

Line 20—Enter the total for each of the Columns (b)-(e). When additional schedules are prepared for this Section, annotate accordingly and show the overall totals on this line.

Section F. Other Budget Information

Line 21—Use this space to explain amounts for individual direct object-class cost categories that may appear to be out of the ordinary or to explain the details as required by the Federal grantor agency.

Line 22—Enter the type of indirect rate (provisional, predetermined, final or fixed) that will be in effect during the funding period, the estimated amount of the base to which the rate is applied, and the total indirect expense.

Line 23—Provide any other explanations or comments deemed necessary.

Assurances—Non-Construction Programs

Note: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in

accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§ 4728–4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88–352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681–1683, and 1685–1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101–6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92–255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91–616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd–3 and 290 ee–3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91–646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

8. Will comply with the provisions of the Hatch Act (5 U.S.C. §§ 1501–1508 and 7324–7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§ 276a to 276a–7), the Copeland Act (40 U.S.C. § 276c and 18 U.S.C. §§ 874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327—333), regarding labor standards for federally assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93–234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91–190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§ 1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. § 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93–523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93–205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§ 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 4469a-1 et seq.)

14. Will comply with P.L. 93–348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89–544, as amended, 7 U.S.C. 2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

Signature of Authorized Certifying Official

Applicant Organization

Title

Date Submitted

Attachment B—Certification Regarding Maintenance of Effort

The undersigned certifies that:

(1) activities funded under this program announcement are in addition to, and not in substitution for, activities previously carried on without Federal assistance.

(2) funds or other resources currently devoted to activities designed to meet the needs of the poor within a community, area, or State have not been reduced in order to provide the required matching contributions.

When legislation for a particular block grant permits the use of its funds as match, the applicant must show that it has received a real increase in its block grant allotment and must certify that other anti-poverty programs will not be scaled back to provide the match required for this project.

Organization

Authorized Signature

Title

Date

Attachment C—Executive Order 12372—State Single Points of Contact

Arizona

Mrs. Janice Dunn, Attn: Arizona State Clearinghouse, 3800 N. Central Avenue, 14th Floor, Phoenix, Arizona 85012, Telephone (602) 280–1315

Arkansas

Tracie L. Copeland, Manager, State Clearinghouse, Office of Intergovernmental Services, Department of Finance and Administration, P.O. Box 3278, Little Rock, Arkansas 72203, Telephone (501) 682–1074

California

Glenn Stober, Grants Coordinator, Office of Planning and Research, 1400 Tenth Street, Sacramento, California 95814, Telephone (916) 323–7480

Colorado

State Single Point of Contact, State Clearinghouse, Division of Local

Government, 1313 Sherman Street, Room 520, Denver, Colorado 80203, Telephone (303) 866–2156

Delaware

Ms. Francine Booth, State Single Point of Contact, Executive Department, Thomas Collins Building, Dover, Delaware 19903, Telephone (302) 736–3326

District of Columbia

Rodney T. Hallman, State Single Point of Contact, Office of Grants Management and Development, 717 14th Street, NW., Suite 500, Washington, DC 20005, Telephone (202) 727–6551

Florida

Florida State Clearinghouse, Intergovernmental Affairs Policy Unit, Executive Office of the Governor, Office of Planning and Budgeting, The Capitol, Tallahassee, Florida 32399–0001, Telephone (904) 488–8441

Georgia

Mr. Charles H. Badger, Administrator, Georgia State Clearinghouse, 254 Washington Street, SW., Atlanta, Georgia 30334, Telephone (404) 656–3855

Illinois

Steve Klokkenga, State Single Point of Contact, Office of the Governor, 107 Stratton Building, Springfield, Illinois 62706, Telephone (217) 782–1671

Indiana

Jean S. Blackwell, Budget Director, State Budget Agency, 212 State House, Indianapolis, Indiana 46204, Telephone (317) 232–5610

Iowa

Mr. Steven R. McCann, Division of Community Progress, Iowa Department of Economic Development, 200 East Grand Avenue, Des Moines, Iowa 50309, Telephone (515) 281–3725

Kentucky

Ronald W. Cook, Office of the Governor, Department of Local Government, 1024 Capitol Center Drive, Frankfort, Kentucky 40601, Telephone (502) 564–2382

Maine

Ms. Joyce Benson, State Planning Office, State House Station #38, Augusta, Maine 04333, Telephone (207) 289–3261

Maryland

Ms. Mary Abrams, Chief, Maryland State Clearinghouse, Department of State Planning, 301 West Preston Street, Baltimore, Maryland 21201–2365, Telephone (301) 225–4490

Massachusetts

Karen Arone, State Clearinghouse, Executive Office of Communities and Development, 100 Cambridge Street, Room 1803, Boston, Massachusetts 02202, Telephone (617) 727–7001

Michigan

Richard S. Pastula, Director, Michigan Department of Commerce, Lansing, Michigan 48909, Telephone (517) 373–7356

Mississippi

Ms. Cathy Mallette, Clearinghouse Officer, Office of Federal Grant Management and Reporting, 301 West Pearl Street, Jackson, Mississippi 39203, Telephone (601) 960–2174

Missouri

Ms. Lois Pohl, Federal Assistance Clearinghouse, Office of Administration, P.O. Box 809, room 430, Truman Building, Jefferson City, Missouri 65102, Telephone (314) 751–4834

Nevada

Department of Administration, State Clearinghouse, Capitol Complex, Carson City, Nevada 89710, Telephone (702) 687–4065, Attention: Ron Sparks, Clearinghouse Coordinator

New Hampshire

Mr. Jeffrey H. Taylor, Director, New Hampshire Office of State Planning, Attn: Intergovernmental Review, Process/ James E. Bieber, 2½ Beacon Street, Concord, New Hampshire 03301, Telephone (603) 271–2155

New Jersey

Gregory W. Adkins, Acting director, Division of Community Resources, N.J. Department of Community Affairs, Trenton, New Jersey 08625–0803, Telephone (609) 292–6613.

Please direct correspondence and questions to: Andrew J. Jaskolka, State Review Process, Division of Community Resources, CN 814, room 609, Trenton, New Jersey, 08625–0803, Telephone (609) 292–9025.

New Mexico

George Elliott, Deputy Director, State Budget Division, room 190, Bataan Memorial Building, Santa Fe, New Mexico 87503, Telephone (505) 827–3640, FAX (505) 827–3006

New York

New York State Clearinghouse, Division of the Budget, State Capitol, Albany, New York 12224, Telephone (518) 474–1605

North Carolina

Mrs. Chrys Baggett, Director, Office of the Secretary of Admin., N.C. State Clearinghouse, 116 W. Jones Street, Raleigh, North Carolina 27603–8003, Telephone (919) 733–7232

North Dakota

N.D. Single Point of Contact, Office of Intergovernmental Assistance, Office of Management and Budget, 600 East Boulevard Avenue, Bismarck, North Dakota 58505–0170, Telephone (701) 224–2094

Ohio

Larry Weaver, State Single Point of Contact, State/Federal Funds Coordinator, State Clearinghouse, Office of Budget and Management, 30 east Broad Street, 34th Floor, Columbus, Ohio 43266–0411, Telephone (614) 466–0698

Rhode Island

Mr. Daniel W. Varin, Associate Director, Statewide Planning Program, Department of Administration, Division of Planning, 265 Melrose Street, Providence, Rhode Island 02907, Telephone (401) 277–2656

Please direct correspondence and questions to: Review Coordinator, Office of Strategic Planning.

South Carolina

Omeagia Burgess, State Single Point of Contact, Grant Services, Office of the Governor, 1205 Pendleton Street, Room 477, Columbia, South Carolina 29201, Telephone (803) 734–0494

South Dakota

Ms. Susan Comer, State Clearinghouse Coordinator, Office of the Governor, 500 East Capitol, Pierre, South Dakota 57501, Telephone (605) 773–3212

Tennessee

Mr. Charles Brown, State Single Point of Contact, State Planning Office, 500 Charlotte Avenue, 309 John Sevier Building, Nashville, Tennessee 37219, Telephone (615) 741–1676

Texas

Mr. Thomas Adams, Governor's Office of Budget and Planning, P.O. Box 12428, Austin, Texas 78711, Telephone (512) 463–1778

Utah

Utah State Clearinghouse, Office of Planning and Budget, Attn: Carolyn Wright, Room 116 State Capitol, Salt Lake City, Utah 84114, Telephone (801) 538–1535

Vermont

Mr. Bernard D. Johnson, Assistant Director, Office of Policy Research & Coordination, Pavilion Office Building, 109 State Street, Montpelier, Vermont 05602, Telephone (802) 828–3326

West Virginia

Mr. Fred Cutlip, Director, Community Development Division, West Virginia Development Office, Building #6, Room 553, Charleston, West Virginia 25305, Telephone (304) 348–4010

Wisconsin

Mr. William C. Carey, Federal/State Relations, Wisconsin Department of Administration, 101 South Webster Street, P.O. Box 7864, Madison, Wisconsin 53707, Telephone (608) 266–0267

Wyoming

Sheryl Jeffries, State Single Point of Contact, Herschler Building, 4th Floor, East Wing, Cheyenne, Wyoming 82002, Telephone (307) 777–7574

Guam

Mr. Michael J. Reidy, Director, Bureau of Budget and Management Research, Office of the Governor, P.O. Box 2950, Agana, Guam 96910, Telephone (671) 472–2285

Northern Mariana Islands

State Single Point of Contact, Planning and Budget Office, Office of the Governor, Saipan, CM, Northern Mariana Islands 96950

Puerto Rico

Norma Burgos/Jose H. Caro, Chairman/Director, Puerto Rico Planning Board, Minillas Government Center, P.O. Box 41119, San Juan, Puerto Rico 00940–9985, Telephone (809) 727–4444

Virgin Islands

Jose L. George, Director, Office of Management and Budget, #41 Norregade Emancipation Garden Station, Second Floor, Saint Thomas, Virgin Islands 00802

Please direct correspondence to: Linda Clarke, Telephone (809) 774–0750.

BILLING CODE 4184–01–P

Attachment D

U.S. Department of Health and Human Services
Certification Regarding Drug-Free Workplace Requirements
Grantees Other Than Individuals

By signing and/or submitting this application or grant agreement, the grantee is providing the certification set out below.

This certification is required by regulations implementing the Drug-Free Workplace Act of 1988, 45 CFR Part 76, Subpart F. The regulations, published in the May 25, 1990 Federal Register, require certification by grantees that they will maintain a drug-free workplace. The certification set out below is a material representation of fact upon which reliance will be placed when the Department of Health and Human Services (HHS) determines to award the grant. If it is later determined that the grantee knowingly rendered a false certification, or otherwise violates the requirements of the Drug-Free Workplace Act, HHS, in addition to any other remedies available to the Federal Government, may taken action authorized under the Drug-Free Workplace Act. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or governmentwide suspension or debarment.

Workplaces under grants, for grantees other than individuals, need not be identified on the certification. If known, they may be identified in the grant application. If the grantee does not identify the workplaces at the time of application, or upon award, if there is no application, the grantee must keep the identity of the workplace(s) on file in its office and make the information available for Federal inspection. Failure to identify all known workplaces constitutes a violation of the grantee's drug-free workplace requirements.

Workplace identifications must include the actual address of buildings (or parts of buildings) or other sites where work under the grant takes place. Categorical descriptions may be used (e.g., all vehicles of a mass transit authority or State highway department while in operation, State employees in each local unemployment office, performers in concert halls or radio studios.)

If the workplace identified to HHS changes during the performance of the grant, the grantee shall inform the agency of the change(s), if it previously identified the workplaces in question (see above).

Definitions of terms in the Nonprocurement Suspension and Debarment common rule and Drug-Free Workplace common rule apply to this certification. Grantees' attention is called, in particular, to the following definitions from these rules:

"Controlled substance" means a controlled substance in Schedules I through V of the Controlled Substances Act (21 USC 812) and as further defined by regulation (21 CFR 1308.11 through 1308.15).

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes;

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, use, or possession of any controlled substance;

"Employee" means the employee of a grantee directly engaged in the performance of work under a grant, including: (i) All "direct charge" employees; (ii) all "indirect charge" employees unless their impact or involvement is insignificant to the performance of the grant; and, (iii) temporary personnel and consultants who are directly engaged in the performance of work under the grant and who are on the grantee's payroll. This definition does not include workers not on the payroll of the grantee (e.g., volunteers, even if used to meet a matching requirement; consultants or independent contractors not on the grantee's payroll; or employees of subrecipients or subcontractors in covered workplaces).

The grantee certifies that it will or will continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an ongoing drug-free awareness program to inform employees about:

(1) The dangers of drug abuse in the workplace; (2) The grantee's policy of maintaining a drug-free workplace; (3) Any available drug counseling, rehabilitation, and employee assistance programs; and, (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:

(1) Abide by the terms of the statement; and, (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

(e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;

(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:

(1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or, (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;

(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant (use attachments, if needed):

Place of Performance (Street address, City, County, State, ZIP Code)_____

_____

Check ___ if there are workplaces on file that are not identified here.

Sections 76.630(c) and (d)(2) and 76.635(a)(1) and (b) provide that a Federal agency may designate a central receipt point for STATE-WIDE AND STATE AGENCY-WIDE certifications, and for notification of criminal drug convictions. For the Department of Health and Human Services, the central receipt point is: Division of Grants Management and Oversight, Office of Management and Acquisition, Department of Health and Human Services, Room 517-D, 200 Independence Avenue, S.W., Washington, D.C. 20201.

DGMO Form#2 Revised May 1990

BILLING CODE 4184-01-C

Certification Regarding Debarment, Suspension, and Other Responsibility Matters—Primary Covered Transactions

By signing and submitting this proposal, the applicant, defined as the primary participant in accordance with 45 CFR part 76, certifies to the best of its knowledge and belief that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal Department or agency;

(b) Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted or otherwise criminally or civilly charged by a governmental entity (Federal, State of local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

The inability of a person to provide the certification required above will not necessarily result in denial of participation in this covered transaction. If necessary, the prospective participant shall submit an explanation of why it cannot provide the certification. The certification or explanation will be considered in connection with the Department of Health and Human Services (HHS) determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

The prospective primary participant agrees that by submitting this proposal, it will include the clause entitled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion—Lower Tier Covered Transaction." provided below without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transactions (To Be Supplied to Lower Tire Participants)

By signing and submitting this lower tier proposal, the prospective lower tier participant, as defined in 45 CFR part 76, certifies to the best of its knowledge and belief that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

(b) Where the prospective lower tier participant is unable to certify to any of the above, such prospective participant shall attach an explanation to this proposal.

The prospective lower tier participant further agrees by submitting this proposal that it will include this clause entitled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion—Lower Tier Covered Transactions." without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

Certification Regarding Lobbying

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

State for Loan Guarantee and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL "Disclosure Form to Report Lobbying," in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature

Title

Organization

Date

BILLING CODE 4184-01-P

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB
0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

1. Type of Federal Action:
☐ a. contract
b. grant
c. cooperative agreement
d. loan
e. loan guarantee
f. loan insurance

2. Status of Federal Action:
☐ a. bid/offer/application
b. initial award
c. post-award

3. Report Type:
☐ a. initial filing
b. material change
For Material Change Only:
year _____ quarter _____
date of last report _____

4. Name and Address of Reporting Entity:
☐ Prime ☐ Subawardee
Tier _____, *if known:*

Congressional District, *if known:*

5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:

Congressional District, *if known:*

6. Federal Department/Agency:

7. Federal Program Name/Description:

CFDA Number, *if applicable:* _____

8. Federal Action Number, *if known:*

9. Award Amount, *if known:*
$

10. a. Name and Address of Lobbying Entity *(if individual, last name, first name, MI):*

b. Individuals Performing Services *(including address if different from No. 10a) (last name, first name, MI):*

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

11. Amount of Payment *(check all that apply):*
$ _____ ☐ actual ☐ planned

12. Form of Payment *(check all that apply):*
☐ a. cash
☐ b. in-kind; specify: nature _____
value _____

13. Type of Payment *(check all that apply):*
☐ a. retainer
☐ b. one-time fee
☐ c. commission
☐ d. contingent fee
☐ e. deferred
☐ f. other; specify: _____

14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employee(s), or Member(s) contacted, for Payment Indicated in Item 11:

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

15. Continuation Sheet(s) SF-LLL-A attached: ☐ Yes ☐ No

16. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature: _____
Print Name: _____
Title: _____
Telephone No.: _____ **Date:** _____

Federal Use Only:

Authorized for Local Reproduction
Standard Form - LLL

BILLING CODE 4184-01-C

Attachment E

The following DHHS regulations apply to all applicants/grantees under the Demonstration Partnership Program, Special Set-Aside for Empowerment Zone/Enterprise Community—Technical Assistance/Planning Grants:

Title 45 of the *Code of Federal Regulations*:

Part 16—Procedures of the Departmental Grant Appeals Board

Part 74—Administration of Grants (non-governmental)

Part 74—Administration of Grants (state and local governments and Indian Tribal affiliates):

Sections 74.62(a) Non-Federal Audits

74.173 Hospitals

74.174(b) Other Nonprofit Organizations

74.304 Final Decisions in Disputes

74.710 Real Property, Equipment and Supplies

74.715 General Program Income

Part 75—Informal Grant Appeal Procedures

Part 76—Debarment and Suspension from Eligibility for Financial Assistance

Subpart F—Drug Free Workplace Requirements

Part 80—Non-discrimination Under Programs Receiving Federal Assistance through the Department of Health and Human Services

Effectuation of Title VI of the Civil Rights Act of 1964

Part 81—Practice and Procedures for Hearings Under Part 80 of this Title

Part 83—Nondiscrimination on the basis of sex in the admission of individuals to training programs

Part 84—Non-discrimination on the Basis of Handicap in Programs

Part 91—Non-discrimination on the Basis of Age in Health and Human Services Programs or Activities

Receiving Federal Financial Assistance

Part 92—Uniform Administrative Requirements for Grants and Cooperative Agreements to States and Local Governments (*Federal Register*, March 11, 1988)

Part 93—New Restrictions on Lobbying

Part 100—Intergovernmental Review of Department of Health and Human Services Programs and Activities

[FR Doc. 94–10648 Filed 5–4–94; 8:45 am]

BILLING CODE 4184–01–P

National Institutes of Health

Notice of Establishment

Pursuant to the Federal Advisory Committee Act of October 6, 1972 [Pub. L. 92–463, 86 Stat. 770–776] and section 402(b)(6), of the Public Health Service Act, as amended [42 U.S. Code 282(b)(6)], the Director, National Institutes of Health (NIH), announces the establishment of the Scientific and Technical Review Board on Biomedical and Behavioral Research Facilities.

The Scientific and Technical Review Board on Biomedical and Behavioral Research Facilities (Board) shall provide advice to the Director of the National Center for Research Resources (NCRR) and the National Advisory Research Council (NARRC). The Board shall determine the merit of the grant applications requesting funds to construct facilities and additions to or renovations of existing facilities to meet the research needs of applicant institutions, and shall report the results of the determination to the Director, NCRR, and the NARRC.

Duration of this committee is continuing unless formally determined by the Director, NIH, that termination would be in the best public interest.

Dated: April 25, 1994.

Harold Varmus,

Director, NIH.

[FR Doc. 94–10736 Filed 5–4–94; 8:45 am]

BILLING CODE 4140–01–M

National Heart, Lung, and Blood Institute; Meeting

Pursuant to Public Law 92–463, notice is hereby given of the meeting of the following Heart, Lung, and Blood Special Emphasis Panel.

The meeting will be closed in accordance with the provisions set forth in section 552b(c)(4) and 552b(c)(6), Title 5, U.S.C. and section 10(d) of Public Law 92–463, for the review, discussion and evaluation of individual grant applications, contract proposals, and/or cooperative agreements. These applications and/or proposals and the discussions could reveal confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the applications and/or proposals, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Panel: NHLBI SEP on PPG for Respiratory Afferents and the Control of Breathing.

Dates of Meeting: May 16–18, 1994.

Time of Meeting: 7:30 p.m.

Place of Meeting: Congressional Park Ramada Inn, Rockville, Maryland.

Agenda: To evaluate and review grant applications.

Contact Person: Dr. Jon, Ranhand, 5333 Westbard Avenue, room 554, Bethesda, Maryland 20892, (301) 594–7439.

(Catalog of Federal Domestic Assistance Programs Nos. 93.837, Hearth and Vascular Diseases Research; 93.838, Lung Diseases Research; and 93.839, Blood Diseases and Resources Research, National Institutes of Health.)

Dated: April 21, 1994.

Susan K. Feldman,

Committee Management Officer, NIH.

[FR Doc. 94–10737 Filed 5–4–94; 8:45 am]

BILLING CODE 4140–01–M

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Assistant Secretary for Housing-Federal Housing Commissioner

[Docket No. N–94–3729; FR–3623–N–02]

Notice of Funding Availability (NOFA) for Fiscal Year 1994, Section 8 Community Investment Demonstration Program; Notice to Change Date of Presubmission Conference

AGENCY: Office of the Assistant Secretary for Housing-Federal Housing Commissioner, HUD.

ACTION: Notice to change date of presubmission conference.

SUMMARY: On April 26, 1994 (59 FR 21826), the Department published in the **Federal Register**, a Notice of Funding Availability (NOFA) for Fiscal Year 1994 for Section 8 Community Investment Demonstration Program. The purpose of this Notice is to change the date of the presubmission conference set forth in that NOFA from May 11, 1994 to May 16, 1994.

FOR FURTHER INFORMATION CONTACT: Joseph E. Malloy, Office of Insured Multifamily Housing Development, Room 6134, telephone (202) 708–3000, or Richard L. Schmitz, Policies and Procedures Division, Room 6138, Telephone (202) 708–1113. Both addresses are at the Department of Housing and Urban Development, 451 Seventh Street, SW., Washington, DC 20401–8000. (These telephone numbers are not toll-free).

SUPPLEMENTARY INFORMATION: The date for the presubmission conference set forth in the April 26 NOFA is changed from May 11, 1994 to May 16, 1994. The time and place for this conference still remains 1 p.m., Departmental Conference Room.

Accordingly, FR Doc. 94–9887, published at 59 FR 21826 (April 26, 1994) is revised as follows:

On page 12826, in the second column, the second paragraph after the heading "ADDRESSES" is revised to read as follows:

"A presubmission conference for parties who may be interested in participating in this demonstration program has been scheduled at 1 p.m., May 16, 1994, in Room 10233, Departmental Conference Room, at HUD headquarters. While not a precondition to eligibility for submission of a formal application, representatives of the pension funds or their affiliates are encouraged to attend."

Authority: 42 U.S.C. 3535(d).

Dated: April 28, 1994.

Jeanne K. Engel,

General Deputy Assistant Secretary for Housing-Federal Housing Commissioner.

[FR Doc. 94–10740 Filed 5–4–94; 8:45 am]

BILLING CODE 4210–27–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[MT–940–04–4730–02]

Land Resource Management, Meridian, MT

AGENCY: Bureau of Land Management, Montana State Office, Interior.

ACTION: Notice.

SUMMARY: The amended field notes of the following described land approved April 11, 1994, will be officially filed in the Montana State Office, Billings, Montana, 30 days from the date of this publication.

Principal Meridian, Montana

T. 12 S., R. 4 E.

The amended field notes correcting the corner description of the C–N–NE 1/64 section corner of section 5 as previously described in the field notes approved April 30, 1974, and referring to the plat accepted April 30, 1974, Township 12 South, Range 4 East, Principal Meridian, Montana. The copy of the preceding described field notes will be immediately placed in an open file and will be available to the public as a matter of information. Copies of the field notes may be furnished to the public upon payment of the appropriate fee.

If a protest against these notes is received prior to the date of official distribution, the distribution will be stayed pending consideration of the protest. The protested notes of survey will not be officially distributed until the day after all protests have been accepted or dismissed and become final or appeals from the dismissal affirmed.

This survey was executed at the request of the U.S. Forest Service, Region 1.

FOR FURTHER INFORMATION CONTACT: Bureau of Land Management, 222 North 32d Street, P.O. Box 36800, Billings, Montana 59107–6800.

Dated: April 22, 1994.

Francis R. Cherry, Jr.,

Acting State Director.

[FR Doc. 94–10808 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–DN–M

Bureau of Land Management

[CA–069–4350–03]

Closure of Public Lands; Bonanza King Mine Canyon, San Bernardino County, CA

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of closure.

SUMMARY: Notice is hereby given in accordance with 43 CFR 8364.1 that the following described public lands within the Bonanza King Mine Canyon in San Bernardino County, California, are closed to the collecting, possessing, killing, or transporting of butterflies or any part of their lifecycle or the collecting of plants they need for their survival.

San Bernardino Meridian

T.11 N., R.14 E., Sections 31 and 32.

The BLM may approve scientific research by qualified persons, which could include limited collecting, if this research is deemed important and is compatible with the preservation of the species.

EFFECTIVE DATE: May 8, 1994.

ADDRESSES: For further information, Contact Michael McGill, Bureau of Land Management (BLM), Needles Resource Area Office, 101 Spikes Road, Needles, California 92363; (619) 326–3896.

SUPPLEMENTARY INFORMATION: The Martin's swallowtail butterfly, (*Paplio indra martini*), is under threat by poaching on lands managed by the BLM. The estimated number of females in the population is about 20, and no larvae were known to survive to an adult stage in 1993. The butterfly currently is not a listed or a candidate species. The Martin's swallowtail butterfly is known to occur within a very restricted area within the Providence Mountains of the Eastern Mojave Desert of San Bernardino County, California. The entire known range is circumscribed by a three by five mile rectangle. The butterfly is prized by collectors, and its value is enhanced by its rare status. Poaching by collectors is a threat. Poachers will often collect plants, eggs and/or larvae to be raised in captivity. Swallowtails are very susceptible to disease when raised in captivity on harvested plants. If larvae do not survive, poachers must collect again. Since this butterfly is not protected under the Endangered Species Act, this disclosure will help prevent individuals from attempting to collect the Swallowtail butterfly under the pretense of collecting other butterflies that are found in the area.

Penalties

Violations of supplementary rules authorized by 43 CFR title 43, chapter II, part 8360, subpart 8364.1 are punishable by a fine not to exceed $1000 and/or imprisonment not to exceed 12 months.

Dated: April 25, 1994.

Michael Blymyer,

Acting Area Manager.

[FR Doc. 94–10841 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–40–M

Bureau of Land Management

[OR–087–04–4333–01: GP4–154]

Closures and Restrictions: Yaquina Head Outstanding Natural Area, OR

SUMMARY: To fulfill the specific administrative mandate set forth in the Act of Congress dated March 5, 1980 (Pub. L. 96–199), and in accordance with CFR 8364.1, notice is hereby given that the closures and restrictions listed below apply to lands within the congressionally established Yaquina Head Outstanding Natural Area. This 100-acre area is located in Lincoln County, Oregon, along the Pacific Coast in Sections 29 and 30, T. 10 S., R 11 W., Willamette Meridian. These regulations are in addition to closures and restrictions affecting Yaquina Head Outstanding Natural Area, Oregon, as published in the **Federal Register**, Vol. 54, No. 114, dated Thursday, June 15, 1989; Page 25502.

Closure #:

13. Access to or through the following construction areas will be restricted to provide for the safety of visitors and the protection of contractors' equipment.

a. Lower quarry tidepool construction area.

1. Closed September 15, 1993, to September 15, 1994.

b. Marine garden stairway construction area.

1. Closed April 18, 1994, to September 18, 1994.

This closure and restriction notice does not apply to:

1. Any Federal, State, or local official or member of an organized rescue, medical, or firefighting unit while in the performance of fire, emergency, law enforcement, or other similar duty;

2. Any Bureau of Land Management, U.S. Coast Guard, or U.S. Fish and Wildlife Service employee, agent, contractor, or cooperator while in the performance of an official duty; and

3. Any person or member of a group or institution expressly authorized by permit, license, agreement, or other similar authorization while in the performance of activities covered by the authorization.

Dated: April 26, 1994.

Mark Lawrence,

Acting District Manager.

[FR Doc. 94–10842 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–33–M

[WY–060–93–4410–02]

Newcastle Resource Area, WY

AGENCY: Bureau of Land Management, Interior.

ACTION: Comment period extension for the *Draft Environmental Impact Statement for the Newcastle Resource Management Plan for the BLM Administered Public Lands in the Wyoming Portion of the Newcastle Resource Area.*

SUMMARY: The Bureau of Land Management (BLM) is extending the public comment period for the Draft Environmental Impact Statement (EIS) for the Newcastle Resource Management Plan (RMP). Comments will be accepted until June 10, 1994.

The draft EIS for the Newcastle RMP describes and analysis four alternative RMPs, including the BLM's preferred alternative, for managing the Wyoming portion of the Newcastle Resource Area. The planning area is located in Crook, Weston, and Niobrara Counties, in northeastern Wyoming. When completed, the Newcastle RMP will provide the management direction for future land and resource management actions on approximately 291,000 acres of public land surface and approximately 1,700,000 acres of Federal mineral estate administered by the BLM within this portion of the Newcastle Resource Area.

The draft EIS focuses on resolving three key issues that were identified with public involvement early in the planning process. These issues are: (1) Retention or disposal of public lands; (2) surface disturbance; and (3) special management areas designations.

There is one designated area of environmental concern (ACEC) within the Newcastle RMP planning area, the Whoopup Canyon ACEC. The preferred alternative recommends that the Whoopup Canyon ACEC designation be retained and that the area of the ACEC be expanded in size. The potential for new ACEC designations was also explored. One potential new ACEC was identified and is proposed in the preferred alternative. This involves the BLM administered public land surface in the Lance Creek Fossil Area.

During development of the draft EIS, the BLM conducted a Wild and Scenic Rivers review of BLM administered public lands that lie along waterways within the planning area. There were no BLM administered public lands in the planning areas that were found to meet the Wild and Scenic Rivers eligibility criteria to be given further consideration for inclusion in the Wild and Scenic Rivers System.

The coal screening process (including application of the coal unsuitability criteria under 43 CFR part 3461) was not conducted for the planing effort. Any interest in coal exploration or leasing will be handled on a case by case basis. If an application for a coal lease is received sometime in the future, an appropriation land use environmental analysis will be conducted (which will include conducting the coal screening process), to determine whether or not the coal areas applied for are acceptable for development and leasing consideration. The RMP will be amended by necessary. To date, there has been no interest expressed to the BLM for leasing and development of BLM-administered coal in the planning area.

Wilderness management and wild horse management were not addressed in the planning effort. There are no wilderness areas or wilderness study areas on BLM-administered public lands in the planning area. In addition, there have been no other areas with wilderness characteristics identified on public lands in the planning area. There are no known wild horse or wild horse herd management areas in the planning area.

When approved, the Newcastle RMP will guide BLM's management of the public lands in the Newcastle Resource Area.

DATES: Written comments will be accepted until June 10, 1994.

ADDRESSES: Copies of the Newcastle RMP draft EIS are available from the BLM Newcastle Resource Area Office at 1101 Washington Boulevard, Newcastle, Wyoming 82701, or the BLM Casper District Office at 1701 East "E" Street, Casper Wyoming 82601. Comments should be sent to the Newcastle Area Manager at the Newcastle Resource Area Office.

FOR FURTHER INFORMATION CONTACT: Floyd Ewing, Newcastle Area Manager, or Gary Lebsack, Newcastle RMP Team Leader, at the above address or telephone 307–746–4453.

SUPPLEMENTARY INFORMATION: The Newcastle Resource Area is responsible for managing the BLM administered public lands in Crook, Niobrara, and Weston countries in Wyoming, and all BLM administered public lands in Nebraska. Management of the BLM administered public lands in Nebraska is covered under the Nebraska Resource Management Plan completed in 1992.

Within the Nescastle RMP planning areas, there are varied and intermingled land surface ownerships and overlapping mineral ownerships. Therefore, the administrative jurisdictions for land use planning and for managing the land surface and minerals are also varied, intermingled, and sometimes overlapping. For this reason, it is important to understand that the Newcastle RMP draft EIS does not address management of lands or minerals within the planning areas that are privately owned or owned by the State of Wyoming of local Governments (about 1,000 acres). If also does not address those Federally owned minerals within the planning area that are under Federal land surface managed by other Federal agencies (about 420,000 acres).

The draft EIS for the Newcastle RMP presents four alternatives, multiple use RMPs for managing the BLM administered public lands in the planning area, Alternative A (continuation of present management) and three other alternatives that suggest different combinations and emphases for managing the various resource and land uses on the BLM administered public lands, on the basis of needs, opportunities, and public demand. The four alternative plans focus on allocating public lands and resources among their valid uses and prescribing general management actions that would be taken. The preferred alternative is a combination of parts of Alternatives A, B, and C and represents what BLM believes is the best balance between the public land and resource uses and environmental protection in the planning area. The various impacts that

would be expected from implementing each of the alternative is also presented in the draft EIS.

Dated: April 29, 1994.

David J. Walter,

Acting State Director.

[FR Doc. 94–10774 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–22–M

[CO–920–94–4110–03; COC30463]

Colorado; Proposed Reinstatement of Terminated Oil and Gas Lease

Under the provisions of Public Law 97–451, a petition for reinstatement of oil and gas lease COC30463, Mesa and Delta County, Colorado, was timely filed and was accompanied by all required rentals and royalties at rates of $5 per acre and 16⅔ percent, respectively. The lessee has paid the required $500 administrative fee for the lease and has reimbursed the Bureau of Land Management for the cost of this **Federal Register** notice.

Having met all the requirements for reinstatement of the lease as set out in Section 31 (d) and (e) of the Mineral Leasing Act of 1920, as amended, (30 U.S.C. 188 (d) and (e), the Bureau of Land Management is proposing to reinstate the lease effective October 1, 1993, subject to the original terms and conditions of the lease and the increased rental and royalty rates cited above.

Questions concerning this notice may be directed to Milada Krasilinec of the Colorado State Office at (303) 239–3767.

Dated: April 20, 1994.

Milada Krasilince,

Lease Closure Team.

[FR Doc. 94–10804 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–JB–M

[(WY–920–41–5700; WYW106130)]

Proposed Reinstatement of Terminated Oil and Gas Lease

April 28, 1994.

Pursuant to the provisions of 30 U.S.C. 188(d) and (e) and 43 CFR 3108.2–3(a) and (b)(1), a petition for reinstatement of oil and gas lease WYW106130 for lands in Sweetwater County, Wyoming, was timely filed and was accompanied by all the required rentals accruing from the date of termination. The lessee has agreed to the amended lease terms for rentals and royalties at rates of $5.00 per acre, or fraction thereof, per year and 16–2/3 percent, respectively.

The lessee has paid the required $500 administrative fee and $125 to reimburse the Department for the cost of this **Federal Register** notice. The lessee has met all the requirements for reinstatement of the lease as set out in section 31 (d) and (e) of the Mineral Lands Leasing Act of 1920 (30 U.S.C. 188), and the Bureau of Land Management is proposing to reinstate lease WYW106130 effective November 1, 1993, subject to the original terms and conditions of the lease and the increased rental and royalty rates cited above.

Pamela J. Lewis,

Supervisory Land Law Examiner.

[FR Doc. 94–10805 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–22–M

Bureau of Land Management

[WY–920–41–5700; WYW126770]

Proposed Reinstatement of Terminated Oil and Gas Lease

April 26, 1994.

Pursuant to the provisions of 30 U.S.C. 188 (d) and (e), and 43 CFR 3108.2–3(a) and (b)(1), a petition for reinstatement of oil and gas lease WYW126770 for lands in Sweetwater County, Wyoming, was timely filed and was accompanied by all the required rentals accruing from the date of termination. The lessee has agreed to the amended lease terms for rentals and royalties at rates of $5.00 per acre, or fraction thereof, per year and 16⅔ percent, respectively.

The lessee has paid the required $500 administrative fee and $125 to reimburse the Department for the cost of this **Federal Register** notice. The lessee has met all the requirements for reinstatement of the lease as set out in section 31 (d) and (e) of the Mineral Lands Leasing Act of 1920 (30 U.S.C. 188), and the Bureau of Land Management is proposing to reinstate lease WYW126770 effective November 1, 1993, subject to the original terms and conditions of the lease and the increased rental and royalty rates cited above.

Pamela J. Lewis,

Supervisory Land Law Examiner.

[FR Doc. 94–10806 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–22–M

Bureau of Land Management

[CA–010–04–4210–03; CA–33873]

Realty Action; Land Use Lease of Public Lands, El Dorado County, CA

AGENCY: Department of the Interior, Bureau of Land Management.

REALTY ACTION: Land use lease, El Dorado County, CA–33873.

SUMMARY: The following described public land is being considered for a non-competitive, lifetime, residential, land use lease pursuant to section 302 of the Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1713):

El Dorado County, California

T. 11 N., R. 10 E., M.D.M.

Sec. 12: lot 18.

Comprising 1 acre, more or less.

The above parcel of public land would be leased to Doil Fred and Ruth Anna Burkett to resolve a trespass situation. The lease would be issued for the remainder of Mr. and Mrs. Burkett's lives. Upon their death, all improvements would have to be removed from the public land. The land will be leased at fair market value.

The parcel would be subject to any prior existing rights. All necessary clearances including clearances for archeology and for rare plants and animals would be completed prior to any lease being issued. The proposal is consistent with the Bureau's land use plans that support the settlement of trespass by lease when an undue hardship case is present.

ADDRESSES: Interested parties may submit comments to the District Manager, c/o Folsom Resource Area Manager, 63 Natoma Street, Folsom, California 95630. Comments must be received within 45 days from date of publication of this notice in the **Federal Register.**

FOR ADDITIONAL INFORMATION: Contact Marianne Wetzel Lopez at (916) 985–4474 or at the address above.

D.K. Swickard,

Area Manager.

[FR Doc. 94–10807 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–40–M

[UT–934–04–4410–03; 4–00152]

Resource Management Plans, etc.; Eastern Utah Resource Area, UT; Correction

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of correction.

SUMMARY: This notice is a correction to the notice that appeared in the February 25, 1994, **Federal Register** concerning a Call for Information for the Eastern Utah Resource Management Plan. This planning effort will incorporate the components of ecosystem management. To do this, it is important to increase

the level of involvement of those interested in the planning area. In addition to the usual scoping meetings held to identify issues, we will be using representatives from the various interest groups to help collect and analyze the data and develop the alternatives to be analyzed in the National Environmental Policy Act process. In the February 25, 1994, **Federal Register** notice, public workshops were scheduled to be held in April of 1994. In order to make these workshops more responsive to public needs and to help focus the issues discussion, the workshops are being rescheduled. Information on the dates, times, and places of these workshops will appear in local papers and planning updates. In order to help the public better understand ecosystem management and the increased opportunity for the public to participate in this process, the Bureau of Land Management is preparing a series of information bulletins to be mailed to those interested in the process. We are also seeking opportunities to meet with groups and organizations interested in assisting in the preparation of this plan.

FOR FURTHER INFORMATION CONTACT: Wayne Erickson, Project Manager, Utah State Office, 324 South State Street, suite 301, Salt Lake City, Utah 84111; Michael O'Donnell, Team Leader, Bureau of Land Management, Moab District Office, 82 East Dogwood, Moab, Utah 84532; or Jerry Kenczka, Team Leader, Vernal District, 170 South 500 East, Vernal, Utah 84078. Office hours are: Utah State Office, 7:30 a.m. to 4:3 p.m., telephone (801) 539–4076; Moab District, 7:45 a.m. to 4:30 p.m., telephone (801) 259–6111; Vernal District, 7:45 a.m. to 4:30 p.m., telephone (801) 781–4400 or (801) 789–1362, Monday through Friday, except holidays.

Ted D. Stephenson,

Acting State Director.

[FR Doc. 94–10733 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–DQ–M

[ID–030–94–4210–05; IDI–29265]

Intent To Prepare a Planning Amendment to the Pocatello Resource Management Plan

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of intent to prepare a planning amendment to the Pocatello Resource Management Plan (RMP).

SUMMARY: The following described public land in Bingham County, Idaho will be examined for possible disposal by exchange under section 206 and section 209 of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1716 AND 1719.

Boise Meridian, Idaho

T. 1 S., R. 38 E.,
Sec. 17, S½SW¼,
Sec. 18, SE¼NW¼, E½SW¼, S½SE¼,
Sec. 19, N½NE¼, NE¼NW¼.

The land described above contains 400 acres, more or less.

An environmental assessment will be completed for this action. If the land is found suitable for disposal, the United States would offer it for exchange to Bingham County at fair market value. The public is invited to provide scoping comments on the issues that should be addressed in the planning amendment. Planning criteria which will be used to prepare this planning amendment is available for review at the Bureau of Land Management, Idaho Falls District Office, Pocatello Resource Area, 1111 North 8th Avenue, Pocatello, Idaho.

For a period of 30 days from the date of publication of this notice, interested parties may submit comments to the District Manager, Bureau of Land Management, 940 Lincoln Road, Idaho Falls, Idaho 83401, (208) 524–7500.

Dated: April 26, 1994.

Sandra Courtney-Berain,

Acting District Manager.

[FR Doc. 94–10809 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–GG–M

[CO–942–94–4730–02]

Colorado: Filing of Plats of Survey

April 18, 1994.

The plats of survey of the following described land, will be officially filed in the Colorado State Office, Bureau of Land Management, Lakewood, Colorado, effective 10 a.m., April 18, 1994.

The plat representing the dependent resurvey of portions of the Eleventh Auxiliary Guide Meridian West (east boundary), north boundary and subdivisional line, and the subdivision of section 1, T. 9 S., R. 93 W., Sixth Principal Meridian, Colorado, Group No. 1032, was accepted March 17, 1994.

The plat representing the dependent resurvey of a portion of the subdivisional lines and Mineral Survey No. 11496, Fayette Placer, and the survey of lot 12 in section 33, T. 44 N., R. 11 W., New Mexico Principal Meridian, Colorado, Group No. 1051, was accepted March 18, 1994.

These surveys were executed to meet certain administrative needs of this Bureau.

The plat (in 11 sheets), representing the dependent resurvey of certain mineral claims, section 15, T. 3 S., R. 73 W., Sixth Principal Meridian, Colorado, Group No. 679, was accepted March 17, 1994.

The plat representing the dependent resurvey of a portion of the line between sections 33 and 34 and a portion of the subdivision lines in section 33, and a survey of a portion of the boundary of the Holy Cross Wilderness and a metes-and-bounds survey of the line between lots 1 and 2 in section 33, T. 5 S., R. 82 W., Sixth Principal Meridian, Colorado, Group No. 1065, was accepted March 18, 1994.

These surveys were executed to meet certain administrative needs of the U.S. Forest Service.

All inquiries about this land should be sent to the Colorado State Office, Bureau of Land Management, 2850 Youngfield Street, Lakewood, Colorado 80215.

Daryl A. Wilson,

Acting Chief, Cadastral Surveyor for Colorado.

[FR Doc. 94–10734 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–JB–M

[ID–942–04–406A–02]

Idaho: Filing of Plats of Survey

The plat of survey of the following described land was officially filed in the Idaho State Office, Bureau of Land Management, Boise, Idaho, effective 9 a.m., April 25, 1994.

The plat representing the dependent resurvey of a portion of the subdivisional lines and the subdivision of section 9, Township 18 North, Range 1 East, Boise Meridian, Idaho, Group No. 865, was accepted April 21, 1994.

This survey was executed to meet certain administrative needs of the USDA Forest Service.

All inquiries concerning the survey of the above-described land must be sent to the Chief, Branch of Cadastral Survey, Idaho State Office, Bureau of Land Management, 3380 Americana Terrace, Boise, Idaho, 83706.

Dated: April 25, 1994.

Jeff A. Lee,

Acting Chief Cadastral Surveyor for Idaho.

[FR Doc. 94–10810 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–GG–M

Fish and Wildlife Service

Information Collection Submitted to the Office of Management and Budget for Review Under the Paperwork Reduction Act

The proposal for the collection of information listed below has been

submitted to the Office of Management and Budget (OMB) for reinstatement approval under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35). copies of the proposed information collection requirement and related forms and explanatory material may be obtained by contacting the Service's clearance officer at the phone number listed below. Comments and suggestions on the requirement should be made directly to the Service Clearance Officer and the Office of Management and Budget, Paperwork Reduction Project (1018–0012) Washington, DC 20503, telephone 202–395–7340.

Title: Declaration for Importation or Exportation of Fish or Wildlife.

OMB Approval Number: 1018–0012.

Abstract: The Service regulates the importation and exportation of fish and wildlife, as a treaty obligation under the Convention on International Trade in Endangered Species, and as required by regulations contained in 50 CFR part 14. The information is used by the Service as an enforcement and management aid and to regulate and enforce the import/export provisions of several laws the Service enforces, such as the Endangered Species Act of 1973, the Lacey Act Amendments of 1981, and the Marine Mammal Protection Act. Form 3–177 must be filed at designated ports with the Service—for imports, when requesting wildlife clearance. For exports, such declaration must be filed in advance of the actual departure of wildlife from the United States to allow reasonable time for inspection. At non-designated ports, such declaration should be filed with the U.S. Customs prior to removal of the wildlife from the United States.

Service Form Number: 3–177.

Frequency: On occasion.

Description of Respondents: Individuals and households, small businesses or organizations, and businesses or other for profit.

Estimated Completion Time: The overall reporting burden is estimated to average 15 minutes per response with a response rate average of 4 entries per respondent.

Annual Burden Hours: 21,250.

Service Clearance Officer: Phyllis H. Cook, 703–358–1943 Mail Stop—224 Arlington Square, U.S. Fish and Wildlife Service, Washington, DC 20240.

Dated: April 22, 1994.

William F. Hartwig,

Acting Assistant Director—Refuges and Wildlife.

[FR Doc. 94–10803 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–55–M

Availability of a Draft Revised Recovery Plan for the Masked Bobwhite Quail for Review and Comment

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of document availability and public comment period.

SUMMARY: The U.S. Fish and Wildlife Service (Service) announces the availability for public review of a draft recovery plan for the masked bobwhite quail (*Colinus virginianus ridgwayi*) which the Service listed as an endangered species on March 11, 1967 (32 FR 4001). Four populations are known to exist in the wild: Three in Mexico and one on the Buenos Aires National Wildlife Refuge in the United States. The total wild population is believed to be less than 1,500 birds. Historic accounts and collections indicate this subtropical subspecies has always been restricted to level plains and river valleys in Sonora, Mexico and extreme south-central Arizona in the United States. The Service solicits review and comments from the public on this draft plan.

DATES: Comments on the draft recovery plan must be received on or before July 5, 1994 to receive consideration by the Service.

ADDRESSES: Persons wishing to review the draft recovery plan may obtain a copy by contacting the Refuge Manager, Buenos Aires National Wildlife Refuge P.O. Box 109, Sasabe, Arizona 85633. Written comments and materials regarding the plan should be addressed to the Field Supervisor at the above address. Comments and materials received are available on request for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Dr. William (Bill) Kuvlesky, Jr., U.S. Fish and Wildlife Service Biologist, telephone (602) 823–4251 or at the above address.

SUPPLEMENTARY INFORMATION:

Background

Restoring an endangered or threatened plant or animal to the point where it is again a secure, self-sustaining member of its ecosystem is a primary goal of the U.S. Fish and Wildlife Service. To help guide the recovery effort, the Service is working to prepare recovery plans for most of the listed species native to the United States. Recovery plans describe site specific management actions considered necessary for conservation and survival of the species, establish objective, measurable criteria for the recovery levels for downlisting or delisting species, and estimate time and cost for implementing recovery measures needed.

The Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*) requires development of recovery plans for listed species unless such a plan would not promote conservation of a particular species. Section 4(f) of the Act, as amended in 1988, requires that public notice and an opportunity for public review and comment be provided during recovery plan development. The Service will consider all information presented during a public comment period prior to approval of each new or revised recovery plan. The Service and other Federal agencies will also take these comments into account in the course of implementing approved recovery plans.

Habitat of the masked bobwhite quail (*Colinus virginianus ridgwayi*) is open savanna grassland within dry-tropic scrub. Occupied habitat is further restricted to elevations ranging between 10 and 1,200 meters where mean rainfall ranges from 250 to over 500 millimeters. The birds are associated with weedy bottomlands, grassy and herb-strewn valleys, and forb-rich plains. This habitat type has declined drastically as a result of overgrazing by livestock and periods of severe drought. The recovery plan addresses populations that remain in Mexico and steps being taken in the United States to reintroduce the species to areas once occupied in the state of Arizona. Although the goal is to recover the species to the level where delisting can occur, the recovery plan emphasizes short term actions deemed necessary to stabilize the species in the wild and prevent the species, extinction.

The plan will be finalized and approved following incorporation of comments and materials received during this comment period.

Public Comments Solicited

The Service solicits written comments on the recovery plan described. All comments received by the date specified above will be considered prior to the plan's approval.

Authority

The Authority for this action is section 4(f) of the Endangered Species Act, 16 U.S.C. 1533(f).

Dated: April 28, 1994.

Lynn B. Starnes,

Acting Regional Director.

[FR Doc. 94–10781 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–55–M

Availability of a Draft Recovery Plan for the Mexican Long-Nosed Bat for Review and Comment

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of document availability and public comment period.

SUMMARY: The U.S. Fish and Wildlife Service (Service) announces the availability for public review of a draft recovery plan for the Mexican long-nosed bat (*Leptonycteris nivalis*) which the Service listed as an endangered species on September 30, 1988 (53 FR 38460). This species is known to occur in central and northern Mexico, the Big Bend area of Texas, and Hildago County in southwestern New Mexico. The Service solicits review and comment from the public on this draft plan.

DATES: Comments on the draft recovery plan must be received on or before July 5, 1994 to receive consideration by the Service.

ADDRESSES: Persons wishing to review the draft recovery plan may obtain a copy by contacting the U.S. Fish and Wildlife Service, Ecological Services Field Office, 611 E. Sixth Street, room 407, Austin, Texas 78701; (512) 482–5436. Written comments and materials regarding the plan should be addressed to the State Administrator at the above address. Comments and materials received are available on request for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Ms. Carol J. Beardmore, U.S. Fish and Wildlife Service Biologist, telephone (512) 482–5436 or at the above address.

SUPPLEMENTARY INFORMATION:

Background

Restoring an endangered or threatened plant or animal to the point where it is again a secure, self-sustaining member of its ecosystem is a primary goal of the U.S. Fish and Wildlife Service's endangered species program. To help guide the recovery effort, the Service is working to prepare recovery plans for most of the listed species native to the United States. Recovery plans describe site specific management actions considered necessary for conservation and survival of the species, establish objective, measurable criteria for the recovery levels for downlisting or delisting species, and estimate time and cost for implementing the recovery measures needed.

The Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*) requires the development of recovery plans for listed species unless such a plan would not promote the conservation of a particular species. Section 4(f) of the Act, as amended in 1988, requires that public notice and an opportunity for public review and comment be provided during recovery plan development. The Service will consider all information presented during a public comment period prior to approval of each new or revised recovery plan. The Service and other Federal agencies will also take these comments into account in the course of implementing approved recovery plans.

The Mexican long-nosed bat (*Leptonycteris nivalis*) is known to occur in central and northern Mexico, the Big Bend area of Texas, and Hildago County, New Mexico. The species roosts in caves, crevices, mines, and occasionally man-made structures. The only known Mexican long-nosed bat roost in the United States is found in the Big Bend National Park, Texas. This roost is used for a relatively short period during the summer. The Mexican long-nosed bat feeds primarily on the nectar produced by night blooming plants (Agave spp.) and is one of only two bat species found in the United States that is nectarivorous. These bats appear to follow the seasonal blooming of agave plants.

The Mexican long-nosed bat is threatened by loss and disruption of roosting and foraging habitat. Preferred (historical) roost sites are a limiting factor for this and other bat species. When occupying a roost, this bat appears to be particularly sensitive to human movement and disruption. Mexican long-nosed bat roosts are threatened by curious individuals, cave vandals, and citizens attempting to eradicate vampire bats.The foraging habitat of the Mexican long-nosed bat is threatened by producers of tequila, mescal, and pulque who harvest heads from flowering agave stalks before they mature and producers flower. Except for protection of plants and roost sites in the Big Bend National Park, food producing plants and roosts are generally unprotected.

The objective of the Draft Recovery Plan for the Mexican long-nosed bat is downlisting. Downlisting is selected because there is insufficient information regarding the bat and its habitat to specify delisting criteria. Downlisting criteria are specified in the plan. Recovery efforts outlined in the plan focus on roosting and foraging habitat identification and protection, public education, and research to determine biological and habitat requirements of the species as they apply to identification and protection efforts.

The Mexican long-nosed bat recovery plan has been reviewed by the appropriate Service staff in Region 2. The plan will be finalized and approved following incorporation of comments and materials received during this comment period.

Public Comments Solicited

The Service solicits written comments on the recovery plan described. All comments received by the date specified above will be considered prior to the approval of the plan. Because the majority of this bat's range is found in Mexico, the Service is especially interested in soliciting comments from Mexican biologists and others who have studied the bat fauna in Mexico.

Authority

The Authority for this action is section 4(f) of the Endangered Species Act, 16 U.S.C. 1533(f).

Dated: April 28, 1994.

Lynn B. Starnes,

Acting Regional Director.

[FR Doc. 94–10780 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–55–M

Minerals Management Service

Environmental Documents Prepared for Proposed Oil and Gas Operations on the Gulf of Mexico Outer Continental Shelf (OCS)

AGENCY: Minerals Management Service, Interior.

ACTION: Notice of the availability of environmental documents prepared for OCS mineral proposals on the Gulf of Mexico OCS.

SUMMARY: The Minerals Management Service (MMS), in accordance with Federal Regulations (40 CFR 1501.4 and 1506.6) that implement the National Environmental Policy Act (NEPA), announces the availability of NEPA-related Environmental Assessments (EA's) and Findings of No Significant Impact (FONSI's), prepared by the MMS for the following oil and gas activities proposed on the Gulf of Mexico OCS. This listing includes all proposals for which the FONSI's were prepared by the Gulf of Mexico OCS Region in the period subsequent to publication of the preceding notice.

Activity/operator	Location	Date
Oryx Energy Company, six exploratory wells, SEA No. S-3047U.	High Island Area, East Addition, South Extension, block A-379, lease OCS-G 13808, 112 miles southeast of the nearest coastline on Galveston Island, Texas.	11/24/93
Texaco Pipeline, Inc., pipeline activity, SEA No. OCS-G 13219A.	High Island Area, East Addition, South Extension, blocks A-393, A-390, A-377, A-374, A-373, A-367, A-366, A-365, and A-364; Garden Banks, blocks 189, 188, 187, 186, 142, 141, and 97; lease OCS-G 13219; 130 miles southeast of the nearest coastline in Texas.	12/11/92
ARCO Oil and Gas Company, NORM disposal operations, SEA No. NORM-073.	Eugene Island Area, Block 175, lease OCS 0438, 40 miles southwest of the nearest landfall in Terrebonne Parish, Louisiana.	07/12/93
Sonat Exploration Company, NORM disposal operations, SEA No. NORM-100.	East Cameron Area, block 23, lease OCS-G 2853, three miles south of Cameron Parish, Louisiana.	03/31/94
Samedan Oil Corporation, NORM disposal operations, SEA No. NORM-108.	Main Pass Area, block 305, lease OCS-G 1676, 23 miles east of Plaquemines Parish, Louisiana.	03/11/94
Chevron U.S.A., NORM disposal operations SEA No. NORM-109.	East Cameron Area, block 281, lease OCS-G 2050, 84 miles southwest of Cameron Parish, Louisiana.	02/11/94
Shell Offshore, Inc., NORM disposal operations SEA No. NORM-111.	East Cameron Area, block 40, lease OCS-G 4101, 70 miles southwest of Vermilion Parish, Louisiana.	02/23/94
Unocal Corporation, NORM disposal operations, SEA No. NORM-112.	West Cameron Area, block 292, lease OCS-G 6581, 29 miles south of Cameron Parish, Louisiana.	03/03/94
Mobil Exploration & Producing U.S. Inc., NORM disposal operations, SEA No. NORM-113.	Eugene Island Area, block 116, lease OCS 0478, 37 miles southeast of Lafourche Parish, Louisiana.	04/11/94
EP Operating Company, pipeline activity, pipeline "bottom tow" route SEA.	Offshore Matagorda Peninsula, Texas, to the Mississippi Canyon 441 Field, 55 miles south of Jefferson Parish, Louisiana.	11/12/92
Freeport McMoRan Inc., structure-removal operations, SEA Nos. ES/SR 92-138A and 93-139A.	Vermilion Area, block 161, lease OCS-G 1127, 45 miles south of Vermilion Parish, Louisiana.	08/18/93
Texaco Exploration and Production Inc., structure-removal operations, SEA No. ES/SR 93-122A.	West Cameron Area, South Addition, block 487, lease OCS-G 2847, 80 miles south of Cameron Parish, Louisiana.	03/11/94
Santa Fe Energy resources, structure-removal operations, SEA No. ES/SR 93-141(B).	West Cameron Area, block 472, lease OCS-G 8409, 90 miles south of Cameron Parish, Louisiana.	03/28/94
Pennzoil Petroleum Company, structure-removal operations, SEA Nos. ES/SR 94-07 through 94-09.	Eugene Island Area, block 305; Ship Shoal Area, blocks 176 and 198; leases OCS-G 2108 and OCS 0589; 52 miles south of Terrebonne and Saint Mary Parishes, Louisiana.	01/20/94
Pennzoil Petroleum Company, structure-removal operations, SEA Nos. ES/SR 94-015 through 94-017.	West Cameron Area, block 20, lease OCS 0680, four miles south of Cameron Parish, Louisiana.	02/16/94
Kerr-McGee Corporation, structure-removal operations, SEA Nos. ES/SR 94-018 through 94-021.	Ship Shoal Area, blocks 27 and 28, leases OCS 0347 and 0346, five miles south of Terrebonne Parish, Louisiana.	01/13/94
Walter Oil & Gas Corporation, structure-removal operations, SEA No. ES/SR 94-022.	Galveston Area, block 389, lease OCS-G 4259, 40 miles south of Galveston County, Texas.	02/02/94
Mobil Exploration and Producing U.S. Inc., structure-removal operations, SEA Nos. ES/SR 94-023 through 94-025.	West Cameron Area, blocks 71 and 72, leases OCS 0245 and 0244, 17 miles southeast of Cameron Parish, Louisiana.	03/01/94
Seagull Energy E&P Inc., structure-removal operations, SEA No. ES/SR 94-026.	Galveston Area, block 383, lease OCS-G 8131, 46 miles southwest of Galveston, Texas.	03/17/94
PG&E Resources Company, structure-removal operations, SEA No. ES/SR 94-027.	East Cameron Area, South Addition, block 267, lease OCS-G 6638, 58 miles south of the Rockefeller Wildlife Refuge in Cameron Parish, Louisiana.	04/05/94
Chevron U.S.A. Production Co., structure-removal operations, SEA No. ES/SR 94-028.	West Cameron Area, block 173, lease OCS 0759, 28 miles southwest of Cameron, Louisiana.	03/03/94
Union Pacific Resources Company, structure-removal operations, SEA No. ES/SR 94-029 through 94-031.	High Island Area, block 178, lease OCS-G 8150, 20 miles south of Chambers County, Texas.	03/03/94
Sonat Exploration Company, structure-removal operations, SEA No. ES/SR 94-032.	Ship Shoal Area, block 225, lease OCS-G 1984, 106 miles southeast of Intracoastal City, Louisiana.	03/15/94
Union Pacific Resources Co., structure-removal operations, SEA No. ES/SR 94-039.	High Island Area, block 178, lease OCS-G 8150, 23 miles east of Galveston, Texas.	03/11/94
Murphy Exploration & Production Company, structure-removal operations, SEA No. ES/SR 94-045.	West Cameron Area, block 188, lease OCS-G 6573, 22 miles south of Cameron Parish, Louisiana.	04/07/94

Persons interested in reviewing environmental documents for the proposals listed above or obtaining information about EA's and FONSI's prepared for activities on the Gulf of Mexico OCS are encouraged to contact the MMS office in the Gulf of Mexico OCS Region.

FOR FURTHER INFORMATION CONTACT: Public Information Unit, Information Services Section, Gulf of Mexico OCS Region, Minerals Management Service, 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123-2394, Telephone (504) 736-2519.

SUPPLEMENTARY INFORMATION: The MMS prepares EA's and FONSI's for proposals which relate to exploration for and the development/production of oil and gas resources on the Gulf of Mexico OCS. The EA's examine the potential environmental effects of activities described in the proposals and present MMS conclusions regarding the significance of those effects. Environmental Assessments are used as a basis for determining whether or not approval of the proposals constitutes major Federal actions that significantly affect the quality of the human environment in the sense of NEPA section 102(2)(C). A FONSI is prepared in those instances where the MMS finds that approval will not result in significant effects on the quality of the human environment. The FONSI briefly

presents the basis for that finding and includes a summary or copy of the EA.

This notice constitutes the public notice of availability of environmental documents required under the NEPA Regulations.

Dated: April 25, 1994.

Chris C. Oyens,

Acting Regional Director, Gulf of Mexico OCS Region.

[FR Doc. 94–10811 Filed 5–4–94; 8:45 am]

BILLING CODE 4310–MR–M

INTERSTATE COMMERCE COMMISSION

[Docket No. AB–32 (Sub-No. 67X)]

Boston and Maine Corporation—Discontinuance of Trackage Rights Exemption—Hampden County, MA

Boston and Maine Corporation (B&M), has filed a notice of exemption under 49 CFR 1152 Subpart F—Exempt Abandonments and Discontinuances of Trackage Rights to discontinue trackage rights over approximately 0.52 miles of rail line owned by Consolidated Rail Corporation (Conrail) between milepost 98.02 and milepost 98.54, in Springfield, Hampden County, MA.[1] Conrail will continue to provide rail service on the line.

B&M has certified with respect to the trackage rights involved here that:

(1) No local traffic has moved over the line for at least 2 years;

(2) Any overhead traffic on the line has been rerouted over other lines;

(3) No formal complaint filed by a user of rail service on the line (or by a state or local government entity acting on behalf of such user) regarding cessation of service over the line either is pending with the Commission or with any U.S. District Court or has been decided in favor of the complainant within the 2-year period; and

(4) The requirements at 49 CFR 1152.50(d)(1) (notice to governmental agencies) have been met.[2]

As a condition to use of this exemption, any employee adversely affected by the discontinuance shall be protected under Oregon Short Line R. Co.—Abandonment—Goshen, 360 I.C.C. 91 (1979). To address whether this condition adequately protects affected employees, a petition for partial revocation under 49 U.S.C. 10505(d) must be filed.

Provided no formal expression of intent to file an offer of financial assistance (OFA) has been received, this exemption will be effective on June 4, 1994, unless stayed pending reconsideration. Petitions to stay must be filed by May 16, 1994. Petitions to reopen must be filed by May 25, 1994, with: Office of the Secretary, Case Control Branch, Interstate Commerce Commission, Washington, DC 20423.[3]

A copy of any petition filed with the Commission should be sent to applicant's representative: John R. Nadolny, Iron Horse Park, North Billerica, MA 01862.

If the notice of exemption contains false or misleading information, the exemption is void ab initio.

Decided: April 22, 1994.

By the Commission, David M. Konschnik, Director, Office of Proceedings.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 94–10797 Filed 5–4–94; 8:45 am]

BILLING CODE 7035–01–P

[Finance Docket No. 30739 (Sub-No. 1)]

Burlington Northern Railroad Company—Trackage Rights Exemption—Southern Railway Company

Norfolk Southern Railway Company (NS), successor to Southern Railway Company, has agreed to grant additional overhead trackage rights to Burlington Northern Railroad Company, and to modify the terms and conditions of the trackage rights previously acquired from SR pursuant to a 1985 Agreement. The original agreement granted trackage rights from Kimbrough, AL to Saraland, AL, a distance of 102.55 miles. NS and BN's supplemental agreement extends the trackage rights from Saraland, AL to Mobile, AL, a distance of 5.75 miles. The trackage rights were to become effective April 25, 1994.

This notice is filed under 49 CFR 1180.2(d)(7). If the notice contains false or misleading information, the exemption is void *ab initio*. Petitions to revoke the exemption under 49 U.S.C. 10505(d) may be filed at any time. The filing of a petition to revoke will not stay the transaction. Pleadings must be filed with the Commission and served on: Michael E. Roper, Burlington Northern Railroad Company, 3800 Continental Plaza, 777 Main St., Fort Worth, TX 76102–5384.

As a condition to use of this exemption, any employees adversely affected by the trackage rights will be protected pursuant to Norfolk and Western Ry. Co.—Trackage Rights—*BN*, 354 I.C.C. 605 (1978), as modified in Mendocino Coast Ry., Inc.—Lease and Operate, 360 I.C.C. 653 (1980).

Decided: April 28, 1994.

By the Commission, David M. Konschnik, Director, Office of Proceedings.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 94–10796 Filed 5–4–94; 8:45 am]

BILLING CODE 7035–01–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree

In accordance with the policy of the Department of Justice, 28 CFR 50.7, notice is hereby given that the final proposed Consent Decree in *United States* v. *Hawaiian Western Steel, Inc., et al.*, 92–00587 ACK, was lodged with the United States District Court for the District of Hawaii on April 22, 1994. This action was brought on behalf of the United States Environmental Protection Agency pursuant to section 3008 of the Resource Conservation and Recovery Act ("RCRA"), as amended, 42 U.S.C. 6928.

Under the proposed Consent Decree, Hawaii Western Steel, Inc., Western Canada Steel, Inc., IPSCO, Inc., and the Estate of James Campbell agree to pay $700,000 to the United States to resolve the penalty claims of the United States against those defendants for violations of RCRA at the steel facility operated by Hawaii Western Steel in the Estate of James Campbell Industrial Park, Ewa Beach, Hawaii (the "Plant" site). These defendants also agree to undertake specified corrective action at the Plant site, at a nearby Landfill, and surrounding Estate owned land.

The Department of Justice will receive comments relating to the proposed Consent Decree for a period of 30 days from the date of this publication. Comments should be addressed to the Acting Assistant Attorney General of the Environment and Natural Resources Division, Department of Justice, 10th and Pennsylvania Ave., Washington, DC

[1] Under 49 CFR 1152.50(d)(2), the railroad must file a verified notice with the Commission at least 50 days before the abandonment or discontinuance is to be consummated. B&M's verified notice indicated a proposed consummation date of June 1, 1994. Because the verified notice was not filed until April 15, 1994, consummation should not have been proposed to take place prior to June 6, 1994. B&M's representative has confirmed that the correct consummation date is on or after June 6, 1994.

[2] Because under 49 CFR 1105.6(b)(3) no environmental assessment will be prepared for discontinuances of trackage rights where the affected line will continue to be operated, environmental or historical documentation is not required here. 49 CFR 1105.6(c)(6) and 49 CFR 1105.8.

[3] Because this is only a discontinuance proceeding and Conrail will continue to provide service over the line, the routine provisions for trail use/rail banking or public use conditions provided for in abandonment proceedings are not appropriate here.

20530. All comments should refer to *United States* v. *Hawaii Western Steel, Inc.*, D.J. Ref. 90–7–1–659A.

The proposed Consent Decree may be examined at the office of the United States Attorney, PJKK Federal Building, 300 Ala Moana Blvd., Honolulu, Hawaii 96850. A copy of the proposed Consent Decree may also be examined at the Environmental Enforcement Section, Document Center, 601 Pennsylvania Avenue Building, NW., Washington, DC 20004 (202–347–2072).

A copy of the proposed Consent Decree may be obtained in person or by mail from the Environmental Enforcement Section Document Center, 601 Pennsylvania Avenue, NW., Box 1097, Washington, DC 20004. Any request for a copy of the proposed Consent Decree should be accompanied by a check in the amount or $18.75 for copying costs ($0.25 per page) payable to "Consent Decree Library".

John C. Cruden,

Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 94–1081 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Notice of Lodging of Consent Decree Pursuant to the Clean Air Act

In accordance with Departmental policy, 28 CFR 50.7, notice of hereby given that a proposed consent decree in *United States* v. *Olin Corporation*, Civil Action No. 1–91–472, was lodged on April 21, 1994 with the United States District Court for the Eastern District of Tennessee. The United States filed a civil action against Olin Corporation, seeking injunctive relief and civil penalties for violations of section 112(c) of the Clean Air Act, as amended, 42 U.S.C. 7412(c), the National Emission Standard for Hazardous Air Pollutants for mercury promulgated under the Act (the "mercury NESHAP"), 40 CFR part 61, Subparts A and E, and Section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, ("CERCLA"), 42 U.S.C. 9603(a), and 40 CFR 302.6 promulgated under CERCLA. The action was originally filed in November 1991.

Defendant Olin Corporation ("Olin") owns and operates a plant in Charleston, Tennessee, where it uses mercury chlor-alkali cells to manufacture chlorine and other products. Olin's mercury chlor-alkali cell process includes over 400 feet of piping referred to as the "dilute caustic header." The dilute caustic header pipe is an "alkali metal hydroxide line" within the meaning of the mercury NESHAP. Mercury, as well as other substances, flow through this piping. The United States alleged that Olin Corporation violated the mercury NESHAP by failing to maintain the header pipe and the cell room basement floor in good condition. The United States also alleged, among other things, that on or about August 22, 1988, Olin violated the mercury NESHAP by allowing the use of torches to cut through the header pipe to remove and replace it, by allowing mercury to spill from the header pipe, by failing to ensure that exposed employees were decontaminated, and by otherwise failing to ensure that the spills were properly contained or cleaned up.

Under the proposed consent decree, Olin Corporation will pay a civil penalty of $1,000,000 to the United States in settlement of these claims as well as other claims relating to the incident on August 22, 1988.

The Department of Justice will receive, for a period of thirty (30) days from the date of this publication comments relating to the proposed consent decree. Comments should be addressed to the Assistant Attorney General for the Environment and Natural Resources Division, Department of Justice, Washington, DC 20530, and should refer to *United States* v. *Olin Corporation*, DOJ Ref. # 90–5–2–1–1482.

The proposed consent decree may be examined at the office of the United Sates Attorney, 1110 Market Street, Suite 301 Chattanooga, Tennessee 37402, (615) 752–5140; United States Environmental Protection Agency, Region IV, 345 Courtland Street NE., Atlanta, Georgia 30365; and at the Consent Decree Library, 1120 G Street NW., 4th Floor, Washington, DC 20005, (202) 624–0892. A copy of the proposed consent decree may be obtained in person or by mail from the Consent Decree Library, 1120 G Street NW., 4th Floor, Washington, DC 20005. In requesting a copy please refer to the referenced case and enclose a check in the amount of $2.75 (25 cents per page reproduction costs), payable to the Consent Decree Library.

John C. Cruden,

Chief, Environmental Enforcement Section, Environmental and Natural Resources Division.

[FR Doc. 94–10812 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Antitrust Division

Notice Pursuant to the National Cooperative Research and Production Act of 1993—Bell Communications Research, Inc.

Notice is hereby given that, on March 29, 1994, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), Bell Communications Research, Inc. ("Bellcore") has filed written notifications on behalf of Bellcore and Italtel Societa Italiana Telecomunicazioni S.p.A. ("Italtel") simultaneously with the Attorney General and the Federal Trade Commission disclosing (1) the identities of the parties and (2) the nature and objectives of the venture. The notifications were filed for the purpose of invoking the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Pursuant to section 6(b) of the Act, the identities of the parties are Bellcore, Livingston, NJ; and Italtel, Milan, Italy. Bellcore and Italtel entered into an agreement effective as of March 10, 1994, to engage in cooperative research with respect to understanding ATM and networking protocol issues related to interactive video communications, and to better understand the feasibility and applicability of technologies underlying such issues for exchange and exchange access services.

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 94–10814 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Notice Pursuant to the National Cooperative Research and Production Act of 1993—Corporation for National Research Initiatives—Cross Industry Working Team Project

Notice is hereby given that, on March 30, 1994, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), the Corporation for National Research Initiatives ("CNRI") has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing additions to the membership of the Cross Industry Working Team Project ("XIWT"). The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically,

the following parties have become Primary Members of XIWT: American Express Company, Phoenix, AZ; Compaq Computer Corporation, Houston, TX; Concentric Research Corporation, Ballwin, MO; Electric Power Research Institute, Palo Alto, CA; Novell, Inc., San Jose, CA; WilTel, Inc., The Woodlands, TX; and Wellfleet Communications, Inc., Billerica, MA. Satellite Broadcasting and Communications Association, Alexandria, VA, has become an Associate Member of XIWT.

No other changes have been made in either the membership or planned activity of the group research project. Membership in this group research project remains open, and CNRI intends to file additional written notifications disclosing all changes in membership. On September 28, 1993, CNRI filed its original notification pursuant to section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to section 6(b) of the Act on December 17, 1993 (58 FR 66022). The last notification was filed with the Department on December 28, 1993. A notice was published in the **Federal Register** pursuant to section 6(b) of the Act on March 23, 1994 (59 FR 13745).

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 94–10815 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Notice Pursuant to the National Cooperative Research and Production Act of 1993; The Frame Relay Forum

Notice is hereby given that, on March 25, 1994, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), The Frame Relay Forum ("FRF") has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing changes in its membership.

The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically, the identity of the additional member of FRF is: LCI International, Dublin, OH.

Teleglobe, a member of FRF, has changed its name to Memotec Communications Inc., and Netlink Ltd., a member of FRF, has changed its name to Netlink Inc.

No other changes have been made in either the membership or planned activities of the FRF. Membership remains open, and FRF intends to file additional written notifications disclosing all changes in membership.

On April 10, 1992, FRF filed its original notification pursuant to section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to section 6(b) of the Act on July 2, 1992 (57 FR 29537).

The last notification was filed with the Department on January 24, 1994. A notice was published in the **Federal Register** pursuant to section 6(b) of the Act on March 23, 1994 (59 FR 13746).

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 94–10816 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Notice Pursuant to the National Cooperative Research and Production Act of 1993—Hart Communication Foundation

Notice is hereby given that, on March 17, 1994, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), Hart Communication Foundation ("HCF") has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing (1) the identities of the parties and (2) the nature and objectives of the venture. The notifications were filed for the purpose of invoking the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Pursuant to section 6(b) of the Act, the identities of the parties are Delta Controls Limited, West Molesey, Surrey, ENGLAND; Drexelbrook Engineering Company, Horsham, PA; Endress & Hauser GmbH, Maulburg, GERMANY; Fairchild Industrial Products, Winston-Salem, NC; Fischer & Porter Company, Warminster, PA; Fisher-Rosemount Systems, Inc., Burnsville, MN; Flowdata, Inc., Richardson, TX; Honeywell Loveland Controls Company, Loveland, CO; Kay-Ray/Sensall, Inc., Mt. Prospect, IL; KDG Mobrey Ltd., Slough, Berks, ENGLAND; Leeds & Northrup, North Wales, PA; Measurement Technology Limited, Luton, Bedfordshire, ENGLAND; Micro Motion, Inc., Boulder, CO; Moore Industries-International, Inc., Sepulveda, CA; Moore Products Co., Spring House, PA; Oyster Terminal Ltd., Gwent, Great Britain; Prime Technology, Inc., North Branford, CT; Princo Instruments, Inc., Southhampton, PA; Rosemount Analytical Inc., Eden Prairie, MN; Rosemount Inc., Eden Prairie, MN; Smar International Corporation, Houston, TX; SOR, Inc., Lenexa, KS; UTSI International Corp., Friendswood, TX; Viatran Corporation, Grand Island, NY; Westlock Controls Corporation, Saddle Brook, NJ; Whessoe Varec, Inc., Cypress, CA.

A Minnestoa not-for-profit corporation, HCF has been established through which cooperative research and development work will be conducted. Membership in HCF will be open to any individual or entity that supports the objectives of the organization, subscribes to its bylaws and pays the dues for such membership.

The objective of the HCF is to develop an open and interoperable standard protocol for a digitally enhanced analog communications technology to be used by instruments and control systems for process control and other industrial applications. A successful open and interoperable standard protocol will permit field devices of different manufacturers to be used within a system, thereby reducing both the initial and operating costs and improving performance of such a system. Such a protocol will also increase the range of options for builders of industrial equipment systems. The development and use of this technology will provide compatability with analog instruments currently installed in these systems and will provide new capability for those installations. Use of this technology will allow a transition to the fully digital technology to be implemented when it is available in the future.

Constance K. Robinson,

Director of Operations Antitrust Division.

[FR Doc. 94–10817 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Notice Pursuant to the National Cooperative Research and Production Act of 1993—National Storage Industry Consortium

Notice is hereby given that, on November 2, 1993, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), National Storage Industry Consortium ("NSIC") has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing changes in its membership. The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically, the identities of the new members of NSIC are: Advanced Research Corporation, Minneapolis, MN; Bandgap Technology Corporation,

Broomfield, CO; Bellcore, Red Bank, NJ; Censtor Corporation, San Jose, CA; Convex Computer Corporation, Richardson, TX; Cray Research, Eagan, MN; CREO Products, Burnably, BC, CANADA; DOW Chemical Company, Midland, MI; E-Mass Storage System Solutions, Inc., Dallas, TX; Exabyte, San Jose, CA; Hughes Research Laboratories, Malibu, CA; IBM-Federal Sector Division, Houston, TX; Lots Technology, Incorporated, Santa Clara, CA; Non-Volatile Electronics, Inc., Plymouth, MN; Rockwell Science Center, Thousand Oaks, CA; Seagate Technology, Inc., Bloomington, MN; Southwall Technologies, Palo Alto, CA; and Uniphase Corporation, San Jose, CA. Lawrence Livermore National Laboratory, Livermore, CA; and Rice University, Lincoln, NE, have joined NSIC as university associate members.

No other changes have been made in either the membership or planned activity of the group research project. Membership in this group research project remains open, and NSIC intends to file additional written notification disclosing all changes in membership.

On June 12, 1991, NSIC filed its original notification pursuant to section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to section 6(b) of the Act on August 13, 1991 (56 FR 38465).

This last notification was filed with the Department on May 22, 1992. A notice was published in the **Federal Register** pursuant to Section 6(b) of the Act on July 2, 1992 (57 FR 29538).

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 94–10818 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Notice Pursuant to the National Cooperative Research and Production Act of 1993 Petroleum Environmental Research Forum

Notice is hereby given that, on March 22, 1994, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), the participants in the Petroleum Environmental Research Forum ("PERF") Project No. 93–12, titled "Advanced Vehicle Emissions Sulfur Effects", have filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing (1) the identities of the parties to Project No. 93–12, and (2) the nature and objective of the venture. The notifications were filed for the purpose of invoking the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Pursuant to Section 6(b) of the Act, the identities of the parties to the project are Amoco Oil Company, Naperville, IL; Chevron Research and Technology Company, Richmond, CA; Exxon Research and Engineering Company, Linden, NJ; Mobil Research and Development Corporation, Paulsboro, NJ; Shell Oil Company, Westhollow Research Center, Houston, TX; Sun Company, Inc., Philadelphia, PA; and Texaco Research and Development, Inc., Glenham NY. The objective of this project is to determine the effects of fuel sulfur on emissions from vehicles that have advanced emission control technology. If there are effects, the goal is to determine their magnitude and whether they are reversible.

Information regarding participation in the project may be obtained from Mark L. Sztenderowicz, Chevron Research and Technology Company, 100 Chevron Way, P.O. Box 1627, Richmond, CA 94802–0627, Telephone: (510) 242–5673, Facsimile: (510) 242–2390.

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 94–10819 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Notice Pursuant to the National Cooperative Research and Production Act of 1993—PowerOpen Association, Inc.

Notice is hereby given that, on January 7, 1994, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), PowerOpen Association, Inc. ("PowerOpen"), has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing changes in membership. The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically, the identities of the new members of PowerOpen are: 4Front Technologies, Inglewood, CA; Abacus Computer Applications, Framingham, MA; Adaptec, Inc., Milpitas, CA; Advantest America, Inc., Ft. Lee, NJ; Alsys Group, Reston, VA; Bear, Stearns & Co., Whippany, NJ; Breno De Avellar Gomes, Porto, PORTUGAL; C3, Inc., Herndon, VA; Citibank N.A., New York, NY; Computer Associates International Inc., Islandia, NY; Dassault Systemes of America Corp., North Hollywood, CA; Dun & Bradstreet, Corporation, Framingham, MA; EMASSr, Dallas, TX; Fast, Inc., Bridgeport, CT; Foothills Software, Inc., Littleton, CO; Highland Logic P/L, Moss Vale, AUSTRALIA; Information Presentation Technologies Inc., San Luis Obispo, CA; Interleaf, Inc., Waltham, MA; Ithaca Software, Alameda, CA; J.P. Morgan & Co., Inc., New York, NY; Liant Software Corporation, Austin, TX; MacWeek, San Mateo, CA; Magna Software Corporation, New York, NY; Mercury Computer Systems, Inc., Chelmsford, MA; Metrowerks Inc., St-Laurent, Quebec, CANADA; Mic Associates, Inc., Tokyo, JAPAN; Micro Focus, Palo Alto, CA; Microwave Systems Corporation, Des Moines, IA; Modular Assured Quality Software, Oakland, CA; Motorola, Inc., Computer Group, Austin, TX; NCR Systems Engineering, Copenhagen, DENMARK; Prisma, Inc., Austin, TX; Prograph International, Halifax, CANADA; Quest Engineering Solutions, Billerica, MA; Roemmers S.A.C.I.F., Miami, FL; Seek Systems, Inc., Kirkland, WA; Siren Software Corporation, Menlo Park, CA; Soft Dynamic, Melrose, MA; Sterling Software, Inc., Bellevue, NE; Tecsiel-Finsiel Group, Rome, ITALY; The Mitre Corporation, McLean, VA; U.S. Computer Services U.S., Rancho Cordova, CA; Verdix Corporation, Herndon, VA; Wind River Systems, Alameda, CA; WordPerfect Corporation, Orem, UT; Z-Code Software Corporation, San Raphael, CA; Z.U.K.E.N. Incorporated, Mideriku, JAPAN.

On April 21, 1993, PowerOpen filed its original notification pursuant to section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to section 6(b) of the Act on June 22, 1993 (58 FR 33954).

The last notification was filed with the Department on October 7, 1993. A notice ws published in the **Federal Register** pursuant to section 6(b) of the Act on December 14, 1993 (58 FR 65399).

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 94–10820 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Notice Pursuant to the National Cooperative Research and Production Act of 1993—Switched Multi-Megabit Data Service Interest Group

Notice is hereby given that, on March 15, 1994, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), the Switched Multi-Megabit Data Service Interest Group ("the Group") has filed written

notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing changes to its membership. The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically, Novell Inc., and Synoptics Communications are no longer parties to the Group.

No other changes have been made in either the membership or planned activity of the group research project. Membership in this group research project remains open, and the Group intends to file additional written notifications disclosing all changes in membership.

On April 19, 1991, the Group filed its original notification pursuant to section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to section 6(b) of the Act on May 23, 1991 (56 FR 23723). The last notification was filed with the Department on September 10, 1993. A notice was published in the **Federal Register** pursuant to section 6(b) of the Act on October 28, 1993 (58 FR 58019).

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 94–10821 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

Lodging of Consent Decree Pursuant to the Clean Air Act

In accordance with Departmental policy, 28 CFR 50.7, notice is hereby given that a proposed consent decree in *United States* v. *Bank IV Kansas, N.A. and Taylor Crane and Rigging, Inc.*, Civil Action No. 93–2315JWL, was lodged on April 21, 1994, with the United States District Court for the District of Kansas.

The United States brought a civil action against Bank IV, Kansas N.A. ("Bank IV") and Taylor Crane and Rigging, Inc. ("Taylor") under Section 113 of the Clean Air Act ("the Act"), 42 U.S.C. 7413, and the National Emissions Standards for Hazardous Air Pollutants for asbestos (the "asbestos NESHAP"), 40 CFR part 61, subpart M. The Complaint, filed of record July 22, 1993, alleges that Bank IV, and Taylor committed violations of section 112 of the Act, 42 U.S.C. 7412, and the NESHAP for asbestos, 40 CFR part 61, subpart M, § 61.145, in connection with the demolition of the "Sunrise" apartment building formerly located at 101 North 10th Street, Independence, Kansas. Further, the Complaint requests injunctive relief and a statutory civil penalty of up to $25,000.00 per day of violation.

The Department of Justice will receive, for a period of thirty (30) days from the date of this publication, comments relating to the proposed consent decree. Comments should be addressed to the Assistant Attorney General for the Environment and Natural Resources Division, Department of Justice, Washington, DC 20530, and should refer to *United States* v. *Bank IV Kansas, N.A. and Taylor Crane and Rigging, Inc.*, DOJ Ref. #90–5–2–1–1841.

The proposed consent decree may be examined at the office of the United States Attorney, 500 State Avenue, Suite 360, Kansas City, Kansas 66101; the Region VII Office of the Environmental Protection Agency, 726 Minnesota Avenue, Kansas City, Kansas 66101; and at the Consent Decree Library, 1120 G Street, NW., 4th floor, Washington, DC 20005, (202) 624–0892. A copy of the proposed consent decree may be obtained in person or by mail from the Consent Decree Library, 1120 G Street, NW., 4th floor, Washington, DC 20005. In requesting a copy please refer to the referenced case and enclose a check in the amount of $5.50 (25 cents per page reproduction costs), payable to the Consent Decree Library.

John C. Cruden,

Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 94–10735 Filed 5–4–94; 8:45 am]

BILLING CODE 4410–01–M

DEPARTMENT OF LABOR

Office of the Secretary

FOIA-Requester Community Conference

SUMMARY: On October 4, 1993, President Clinton asked that each Federal department and agency renew its commitment to the Freedom of Information Act (FOIA), its underlying principles of government openness, and its sound administration. Also on October 4, 1993, Attorney General Reno asked the Federal agencies to ensure that the principle of openness in government is applied in every disclosure and nondisclosure decision made under FOIA. Subsequently, in the attached memorandum, all component agencies within the U.S. Department of Labor (DOL) were directed to take the appropriate steps to ensure that they are in compliance with both the letter and the spirit of the Freedom of Information Act. 5 U.S.C. 552.

The Department of Labor is fully committed to these directives, and, in an effort to implement this Administration's policy, is scheduling a conference to discuss the DOL's internal handling and processing of FOIA requests with its FOIA-requester community.

TIME AND PLACE: The meeting will be held on Thursday, May 19, 1994, from 10 a.m. to 12 noon in the Auditorium of the Frances Perkins Department of Labor Building, 200 Constitution Avenue, NW., Washington, DC 20210.

AGENDA: The agenda for the meeting is as follows:

(1) Welcome and introduction of DOL panel and representatives from various components of DOL;

(2) Overview of DOL's process for handling FOIA/PA requests;

(3) Question/Answer Session;

(4) Closing Remarks.

PUBLIC PARTICIPATION: The meeting will be open to the public. Seating, however, is limited and will be available on a first-come, first-served basis. Disabled individuals should contact Barbara Walker on (202) 219–8188, no later than Tuesday, May 9, 1994, if special accommodations are needed. Persons wishing to make presentations to the panel should contact Ms. Walker in advance of the meeting; arrangements can be made for distribution of any written materials by those wishing to address the panel.

FOR FURTHER INFORMATION CONTACT: Miriam McD. Miller, Co-Counsel for Administrative Law, U.S. Department of Labor, Office of the Solicitor, room N–2428, 200 Constitution Avenue, NW., Washington, DC 20210, (202) 219–8188.

Signed at Washington, DC, this 2nd day of May, 1994.

Robert B. Reich,

Secretary of Labor.

Memorandum for the Executive Staff

From: Robert B. Reich.

Subject: The Freedom Information Act.

Date: November 17, 1993.

The President has recently declared his strong commitment to the basic purposes of the Freedom of Information Act (FOIA). Like President Clinton, I believe that this Act is a vital part of a participatory system of government. I enthusiastically join the President and pledge to renew this Department's commitment to openness in government and to the sound administration of the FOIA.

Attorney General Reno has issued the attached memorandum implementing the President's mandate. I have asked the Solicitor of Labor to take the necessary steps to ensure that each

official and employee of this Department reflects this new spirit of government openness and accountability. Specifically, I have asked Solicitor Williamson to do the following:

(1) Provide guidance to all DOL agencies on the President's and Attorney General's memoranda;

(2) Prepare the report, requested by Attorney General Reno, describing the extent of any present FOIA backlog as well as any FOIA staffing difficulties. The Justice Department has asked that this report be submitted by early November; and

(3) Periodically report to me on the progress made by DOL agencies to examine and improve their procedures with the objective of making our handling of FOIA requests more customer-friendly, including enhanced use of electronic information systems.

I ask that each component of the Department cooperate fully with the Solicitor as the first step to renew our efforts to keep the public informed while at the same time protecting information only when it is legally justified and necessary to protect an important Labor Department interest, or the interests of private entities or individuals.

Please join me in reinventing this Department's enhanced communication with the public. Let us commit this Department to seek more ways to distribute information without being requested to do so, to withhold documents only when it is necessary to protect an important interest, and to handle each request for records in a customer-friendly manner.

Attachments

Note: The memorandum from Attorney General Reno is not included in this document.

[FR Doc. 94–10874 Filed 5–4–94; 8:45 am]

BILLING CODE 4510–23–M

NATIONAL SCIENCE FOUNDATION

Collection of Information Submitted for OMB Review

In accordance with the Paperwork Reduction Act and OMB Guidelines, the National Science Foundation is posting a notice of information collection that will affect the public. Interested persons are invited to submit comments by June 3, 1994. Comments may be submitted to:

(A) *Agency Clearance Officer.* Herman G. Fleming, Division of Personnel and Management, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230, or by telephone (703) 306–1243. Copies of materials may be obtained at the above address or telephone.

Comments may also be submitted to:

(B) *OMB Desk Officer.* Office of Information and Regulatory Affairs, ATTN: Dan Chenok, Desk Officer, OMB, 722 Jackson Place, room 3208, NEOB, Washington, DC 20503.

Title: Applicant Survey.

Affected Public: Individuals.

Respondents/Reporting Burden: 11,000 respondents annually: 3 minutes per response.

Abstract: Data are required to ensure compliance with laws cited in 5 USC 7201 and 42 USC 20003–16, 29 CFR 1607 and section 7201 of title 5 of the USC. Data will be used to analyze recruitment and selection practices and/or to defend the Foundation's practices in discrimination cases.

Dated: May 2, 1994.

Herman G. Fleming,

Reports Clearance Office.

[FR Doc. 94–10787 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Special Emphasis Panel in Biological and Critical Systems; Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting.

Name: Special Emphasis Panel in Biological and Critical Systems.

Date and Time: May 26, 1994; 8:30am–5 pm.

Place: National Science Foundation, 4201 Wilson Boulevard, room 380, Arlington, VA 22230.

Type of Meeting: Closed.

Contact Person: John Enderle, Program Director, Biomedical Engineering and Research to Aid Persons with Disabilities, Division of Bioengineering and Environmental Systems, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230, Telephone: (703) 306–1319.

Purpose of Meeting: To provide advice and recommendations concerning proposals submitted to NSF for financial support.

Agenda: To review and evaluate proposals as part of the selection process for awards.

Reason For Closing: The proposals being reviewed include information of a proprietary or confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b(c), (4) and (6) of the Government in the Sunshine Act.

Dated: May 2, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 94–10831 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Special Emphasis Panel in Biological and Critical Systems; Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting.

Name: Special Emphasis Panel in Biological and Critical Systems.

Date and Time: May 24, 1994; 8:30 am–5 pm.

Place: National Science Foundation, 4201 Wilson Boulevard, Room 320, Arlington, VA 22230.

Type of Meeting: Closed.

Contact Person: John Enderle, Program Director, Biomedical Engineering and Research to Aid Persons with Disabilities, Division of Bioengineering and Environmental Systems, National Science Foundation, 4201 Wilson Boulevard, Arlington; VA 22230, Telephone: (703) 306–1319.

Purpose of Meeting: To provide advice and recommendations concerning proposals submitted to NSF for financial support.

Agenda: To review and evaluate proposals as part of the selection process for awards.

Reason For Closing: The proposals being reviewed include information of a proprietary or confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b(c), (4) and (6) of the Government in the Sunshine Act.

Dated: May 2, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 94–10829 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Special Emphasis Panel in Biological and Critical Systems; Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting.

Name: Special Emphasis Panel in Biological and Critical Systems (#1189).

Date and Time: May 25, 1994; 9 am–4 pm.

Place: National Science Foundation, 4201 Wilson Boulevard, room 565, Arlington, VA 22230.

Type of Meeting: Closed.

Contact Person: Edward H. Bryan, Program Director, Environmental Engineering, Division of Bioengineering and Environmental Systems, National Science Foundation, 4201 Wilson Boulevard,

Arlington, VA 22230, Telephone: (703) 306–1318.

Purpose of Meeting: To provide advice and recommendations concerning proposals submitted to NSF for financial support.

Agenda: To review and evaluate Research Initiation Award proposals as part of the selection process for awards.

Reason For Closing: The proposals being reviewed include information of a proprietary or confidential nature, including technical information; financial data, such as salaries; and person information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b(c) (4) and (6) of the Government in the Sunshine Act.

Dated: May 2, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc 94–10830 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Special Emphasis Panel in Cross Disciplinary Activities; Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting.

Name: Special Emphasis Panel in Cross Disciplinary Activities (#1193).

Date and Time: May 24, 1994; 8:30 a.m. to 5 p.m.

Place: Rooms 360 and 360.2.

Type of Meeting: Closed.

Contact Person(s): Tse-yun Feng, Program Director, CISE/CDA, room 1160, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230.

Telephone: (703) 306–1980.

Purpose of Meeting: To provide advice and recommendations concerning proposals submitted to NSF for financial support.

Agenda: To review and evaluate CISE Educational Infrastructure proposals as part of the selection process for awards.

Reason for Closing: The proposals being reviewed include information of a proprietary or confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b(c), (4) and (6) of the Government Sunshine Act.

Dated: May 2, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 94–10832 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Advisory Committee for Education and Human Resources; Meeting

In accordance with the Federal Advisory Committee Act [Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting.

Name: Advisory Committee for Education and Human Resources; Committee of Visitors.

Date and Time: May 24, 1994, 8:30 a.m.–5:30 p.m.

Place: Room #830, 4201 Wilson Blvd., Arlington, VA.

Type of Meeting: Closed.

Contact Person: Duncan McBride, Section Head, ILI, Division of Undergraduate Education, room 835, National Science Foundation, 4201 Wilson Blvd., Arlington, VA.

Telephone: (703) 306–1667.

Purpose of Meeting: To carry out Committee of Visitors (COV) review, including examination of decisions on proposal, reviewer comments, and other privileged materials.

Agenda: To provide oversight review of the Instrumentation & Laboratory Improvement (ILI) Program.

Reason for Closing: The meeting is closed to the public because the Committee is reviewing proposal actions that will include privileged intellectual property and personal information that could harm individuals if they were disclosed. If discussions were open to the public, these matters that are exempt under 5 U.S.C. 552b(c) (4) and (6) of the Government in the Sunshine Act would be improperly disclosed.

Dated: May 2, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 94–10833 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Special Emphasis Panel in Electrical & Communication Systems; Notice of Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting:

Name: Special Emphasis Panel in Electrical & Communication Systems.

Date & Time: May 23, 1994, 8 a.m–5 p.m.

Place: National Science Foundation, 4201 Wilson Blvd., room 530, Arlington, Virginia 22230.

Contact Person: Dr. Paul Werbos, Program Director, Neuroengineering, ECS, room 675, National Science Foundation, 4201 Wilson Blvd.

Telephone: 703/306–1340.

Type of Meeting: Closed.

Purpose of Meeting: To review and evaluate RIA, REG, and Regular proposals for the Neuroengineering Program.

Agenda: To review and evaluate applicants of Research Initiation and Research Equipment proposals.

Reason for Closing: The proposals being reviewed include information of a proprietary confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b(c) (4) and (6) of the Government Sunshine Act.

Dated: May 2, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 94–10834 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Special Emphasis Panel in Electrical & Communication Systems; Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting:

Name: Special Emphasis Panel in Electrical & Communication Systems.

Date & Time: May 24, 1994 8 a.m.–5 p.m.

Place: National Science Foundation, 4201 Wilson Blvd., room 365, Arlington, Virginia 22230.

Contact Person: Dr. Albert B. Harvey, Program Director, ECS, room 675, National Science Foundation, 4201 Wilson Blvd.

Telephone: 703/306–1339.

Type of Meeting: Closed.

Purpose of Meeting: To provide advice and recommendations concerning proposals submitted to NSF for financial support.

Agenda: To review and evaluate applicants of regular research proposals.

Reason for Closing: The proposals being reviewed include information of a proprietary confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b(c) (4) and (6) of the Government Sunshine Act.

Dated: May 2, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 94–10835 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Special Emphasis Panel in Geosciences; Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting:

Name: Special Emphasis Panel in Geosciences.

Date and Time: May 23, 1994; 8:30 am–5 pm.

Place: Room 370, Stafford Place, 4201 Wilson Blvd., Arlington, VA 22230.

Type of Meeting: Closed.

Contact Person: H. Lawrence Clark, Program Director, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230. Telephone: (703) 306–1582.

Purpose of Meeting: To provide advice and recommendations concerning proposals submitted to NSF for financial support.

Agenda: To review and evaluate proposals submitted to address the mechanics and biogeochemistry of coastal air-sea chemical

fluxes as part of the Coastal Ocean Processes (CoOP) initiative.

Reason for Closing: The proposals being reviewed include information of a proprietary or confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b(c), (4) and (6) of the Government in the Sunshine Act.

Dated: May 2, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 94–10836 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Special Emphasis Panel in Mechanical and Structural Systems; Notice of Meetings

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation (NSF) announces the following meeting(s)

Name: Special Emphasis Panel in Mechanical and Structural Systems

Date & Time: May 19, 20, and 21, 1994.

Place: NSF, Rms. 310, 310.2, 340, 360, 360.2, and 330, 4201 Wilson Blvd., Arlington, VA 22230.

Contact: Dr. William Anderson, Program Director, 703–306–1361.

Type of Meeting(s): Closed.

Purpose of meetings(s): To provide advice and recommendations concerning the Northridge Earthquake proposals submitted to NSF for financial support.

Agenda: To review and evaluate proposals submitted to the Division of Civil and Mechanical Systems as part of the selection process for awards.

Name: Special Emphasis Panel in Mechanical and Structural Systems.

Date & Time: May 19 and 20, 1994.

Place: NSF, Rms. 370, 380 and 390, 4201 Wilson Blvd., Arlington, VA 22230.

Contact: Dr. James Whitcomb, Program Director, 703–306–1556.

Type of Meeting(s): Closed.

Purpose of meetings(s): To provide advice and recommendations concerning the Northridge Earthquake proposals submitted to NSF for financial support.

Agenda: To review and evaluate proposals submitted to the Division of Civil and Mechanical Systems as part of the selection process for awards.

Reason for closing: The proposals being reviewed include information of a proprietary or confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b.(c) (4) and (6) of the Government in the Sunshine Act.

Dated: April 29, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 94–10726 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

Advisory Committee for Social, Behavioral and Economic Sciences; Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting:

Name: Advisory Committee for Social, Behavior and Economic Sciences (#1171).

Date and Time: May 23, 1994; 8:30 a.m.–5 p.m. May 24, 1994; 8:30 a.m.–12 p.m.

Place: Room 375, 4201 Wilson Blvd., Arlington, VA 22230.

Type of Meeting: Open.

Contact Person: John E. Jankowski, Jr., Division of Sciences, Resources Studies, Suite 965, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230. Telephone: (703) 306–1777.

Minutes: May be obtained from the contact person listed above.

Purpose of Meeting: To provide advice, recommendations, and oversight concerning support for research, education, and human resources in the areas of the social, behavioral and economic sciences.

Agenda: Role and direction of the NSF Directorate for Social, Behavioral and Economic (SBE) Sciences in the various government-wide initiatives. Special focus on programs in the SBE Research Division and on social accountability issues.

Dated: May 2, 1994.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 94–10837 Filed 5–4–94; 8:45 am]

BILLING CODE 7555–01–M

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–317 and 50–318]

Baltimore Gas and Electric Company; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating License Nos. DPR–53 and DPR–69 issued to Baltimore Gas and Electric Company (the licensee, BG&E) for operation of the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2, located in Calvert County, Maryland.

Environmental Assessment

Identification of Proposed Action

By letter dated November 4, 1993, BG&E requested Technical Specifications (TSs) amendments which would allow the removal of an orifice in the 4-inch containment vent/purge line resulting in greater flow. The Unit 1 containment and the Unit 2 containment each have a separate but identical system. Penetration room exhaust fans in the auxiliary building draw air through an in-containment moisture separator and an in-containment motor-operated value (MOV). The air is passed through the auxiliary building via the vent lines which have an outside containment MOV, flow reducing orifice, a flow monitoring system, a motor-operated butterfly valve, and a set of two high efficiency particular air and two charcoal filters in parallel (the penetration room ventilation system filter bank). The air is then discharged by the fans through the main plant vent. Vented air is replaced through a separate penetration. The use of this system as a containment vent was approved by TS Amendment Nos. 115 and 98 for Unit Nos. 1 and 2, respectively, dated February 20, 1986. The maximum hypothetical accident doses in the Updated Final Safety Analysis Report (UFSAR), Chapter 14.42, were revised to include venting of the containment at the initiation of an accident. The NRC staff's Safety Evaluation (SE) which supported TS Amendment Nos. 115 and 98 also approved the higher calculated offsite dose than was currently described in the USFAR at that time. Subsequently, BG&E identified calculational errors in the offsite dose, which when corrected, indicate an offsite dose higher than that approved in the NRC staff's SE. An orifice plate with a 1-inch opening was installed in each of the vent lines in order to maintain the approved offsite dose levels.

Reanalysis have been performed to support the removal of the orifice plates which indicate that the offsite dose would be increased. Although the consequences of the maximum hypothetical accident would result in an increase in the fission product release, the total dose is well within the limits of 10 CFR part 100, "Factors to be considered when evaluating sites."

Need for the Proposed Action

Restoration of full-flow capability to the 4-inch vent/purge lines by removing the orifice plates will significantly reduce the time required to vent or purge. It now takes 7 times longer to vent a containment than it did with a 4-inch line (28 hours versus 4 hours). In addition, venting now occurs over three operating shifts instead of being completely contained within one shift.

Venting is a manually controlled operation, in that it requires operator attention (the operator opens and closes the valves from the control room). Stretching the venting over three shifts introduces the possibility of additional human error into the venting process. Another consideration is that the probability of an accident occurring during venting decreases with decreased vent time. Reducing the venting time will not increase the number of times BG&E needs to vent, because the starting and ending conditions for venting remain the same. Therefore, the total amount of time the containment vents would be open will be decreased.

Environmental Impacts of the Proposed Action

The environmental impact of allowing increased flow results from consideration of the maximum hypothetical accident (large break loss-of-coolant accident) occurring when a vent is open. Fission products would be released until the in-containment and outside containment isolation valves receive a safety injection actuation signal (SIAS) or a containment radiation signal (CRS) which would close the valves isolating the vent line.

BG&E's reanalysis of the hypothetical loss-of-coolant (LOCA) indicate a dose of 118 rem to the thyroid and 10.6 rem to the whole body at the exclusion area boundary (EAB) and 39.3 rem to the thyroid and 2.7 rem to the whole body at the low-population zone (LPZ) boundary. The previously approved doses in the UFSAR, Chapter 14, are a dose of 124 rem to the thyroid and 3.0 rem to the whole body at the EAB and 33 rem to the thyroid and 0.8 rem to the whole body at the LPZ.

The reanalyses results show a slight dose decrease to the thyroid at the EAB and a slight dose increase to the thyroid at the LPZ. The whole-body doses are increased by approximately 3.5 times at the EAB and LPZ. The 10 CFR part 100 limits are 300 rem to the thyroid and 25 rem to the whole body at both the EAB and LPZ. The increase doses to the whole body are approximately 40% at the EAB and 10% at the LPZ of the 25 rem limit provided in 10 CFR part 100.

The results of the reanalysis are similar to the licensing basis evaluation contained in the Commission's Safety Evaluation Report (SER) dated August 28, 1972. The SER results are 110 rem to the thyroid and 4 rem to the whole body at the EAB and 80 rem to the thyroid and 3.0 rem to the whole body, at the LPZ with no containment venting or purging assumed. It should be noted that the dose estimates in the reanalysis represent an extreme upper bound because the release from the containment was assumed to contain fission products derived from a uniform mixing in the containment atmosphere of the iodines and noble gases specified in TID–14844. Even though the percentage increase in offsite doses is not small, the actual total doses are a fraction of the limits of 10 CFR part 100, as noted above. In evaluating the impact of the increased doses, it is important to view these results in light of the low probability of the accident. This change does not significantly affect the risk of any dominant accident scenario and the effect on overall risk of accident at this facility is insignificant.

With regard to normal environmental releases when venting during power operation with the orifice plates removed, the release limits are controlled by the previously approved TS for each of the Calvert Cliffs units. Therefore, the removal of the orifice plates and reestablishing full flow through the vent lines will result in no additional environmental impact for non-accident releases.

Alternatives to the Proposed Action

The principal alternative to approving the removal of the orifice plates allowing full flow for venting or purging would be to deny the request and retain the limited flow capability. However, this alternative would not significantly enhance the protection of the environment. As noted above, the total doses based on the reanalysis are similar to those in the initial licensing basis SE dated August 28, 1972. The doses represent an extreme upper bound, and the doses are a fraction of the 10 CFR part 100 limits. In addition, the removal of the orifice plates would reduce the required time to vent from 28 hours to 4 hours and the probability of an accident occurring during venting decreases with a decreased vent time.

Alternate Use of Resources

This action does not involve the use of any resources not previously considered in the April 1973 Final Environmental Statement for the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2.

Agencies and Persons Consulted

The NRC staff contacted the State of Maryland, Department of Natural Resources, regarding the environmental impact of this proposed action.

Finding of No Significant Impact

Based upon the foregoing environmental assessment, the NRC staff concludes that the proposed action will not have a significant effect on the quality of the human environment and has determined, therefore, not to prepare an environmental impact statement for the proposed action.

For further details with respect to this action, see the application dated November 4, 1993, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC 20555, and at the local public document room located at Calvert County Library, Prince Frederick, Maryland 20678.

Dated at Rockville, Maryland, this 26th day of April 1994.

For the Nuclear Regulatory Commission.

Robert A. Capra,

Director, Project Directorate I–1, Division of Reactor Projects—I/II, Office of Nuclear Reactor Regulation.

[FR Doc. 94–10827 Filed 5–4–94; 8:45 am]

BILLING CODE 7590–01–M

Fourth Meeting of the CONTAIN Peer Review Committee

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of meeting.

SUMMARY: The CONTAIN Peer Review Committee will meet to review the technical adequacy of the CONTAIN code.

DATES: May 18–20, 1994.

TIME: 8:30 am each day.

ADDRESSES: Energy Research, Inc. 6290 Montrose Road, Rockville, Maryland.

FOR FURTHER INFORMATION CONTACT: A. Notafrancesco, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Telephone (301) 492–3537.

SUPPLEMENTARY INFORMATION: The objective of this effort is to organize and conduct a peer review of the CONTAIN code, light water reactor version. The peer review is to provide an independent assessment of the modeling capabilities and limitations, and adequacy of the CONTAIN code. The results of the peer review are to be documented in a summary report that describes the results of the independent assessment by the peer review participants and the technical acceptability of the code.

A peer review committee has been organized using recognized experts from the national laboratories, universities, CONTAIN user community and independent contractors. Meetings are held to discuss and evaluate the applicability and state of validation of the various CONTAIN phenomenological models. The meeting

schedules for May 18–20, 1994, is the fourth meeting of the CONTAIN Peer Review Committee. The Committee will review the draft summary report.

Dated at Rockville, Maryland, this 26th day of April, 1994.

For the U.S. Nuclear Regulatory Commission.

Farouk Eltawila,

Chief, Accident Evaluation Branch, Division of Systems Research, Office of Nuclear Regulatory Research.

[FR Doc. 94–10828 Filed 5–4–94; 8:45 am]

BILLING CODE 7590–01–M

RAILROAD RETIREMENT BOARD

Agency Forms Submitted for OMB Review

SUMMARY: In accordance with the Paperwork Reduction Act of 1980 (44 U.S. chapter 35), the Railroad Retirement Board has submitted the following proposal(s) for the collection of information to the Office of Management and Budget for review and approval.

Summary of Proposal(s)

(1) *Collection title:* Employer's Deemed Service Month Questionnaire.

(2) *Form(s) submitted:* GL–99.

(3) *OMB Number:* 3220–0156.

(4) *Expiration date of current OMB clearance:* Three years from date of OMB approval.

(5) *Type of request:* Extension of the expiration date of a currently approved collection without any change in the substance or in the method of collection.

(6) *Frequency of response:* Annually.

(7) *Respondents:* Businesses or other for-profit.

(8) *Estimated annual number of respondents:* 450.

(9) *Total annual responses:* 900.

(10) *Average time per response:* .03333 hours.

(11) *Total annual reporting hours:* 30.

(12) *Collection description:* Under section 3(i) of the Railroad Retirement Act (RRA), the Railroad Retirement Board may deem months of service in cases where an employee does not actually work in every month of the year. The collection obtains needed service and compensation information from railroad employers for determining if an employee may be credited with additional deemed months of railroad service.

ADDITIONAL INFORMATION OR COMMENTS: Copies of the form and supporting documents can be obtained from Dennis Eagan, the agency clearance officer (312–751–4693). Comments regarding the information collection should be addressed to Ronald J. Hodapp, Railroad Retirement Board, 844 North Rush Street, Chicago, Illinois 60611–2092 and the OMB reviewer, Laura Oliven (202–395–7316), Office of Management and Budget, room 3002, New Executive Office Building, Washington, DC 20503.

Dennis Eagan,

Clearance Officer.

[FR Doc. 94–10822 Filed 5–4–94; 8:45 am]

BILLING CODE 7905–01–M

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–33980; File No. SR–Amex–94–11]

Self-Regulatory Organizations; Notice of Filing of Proposed Rule Change by American Stock Exchange, Inc. Relating to the Floor Official Zone System

April 28, 1994.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"), 15 U.S.C. 78s(b)(1), notice is hereby given that on April 18, 1994, the American Stock Exchange, Inc. ("Amex" or "Exchange") filed with the Securities and Exchange Commission ("Commission" or "SEC") the proposed rule change as described in Items I, II and III below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange is proposing to amend Amex Rule 22 to delete its references to the Floor Official zone system, and provide that matters which currently require the approval of a majority of the Floor Officials in a zone may be determined by a Floor Official with the concurrence of a Senior Floor Official.[1] The text of the proposed rule change is available at the Office of the Secretary, Amex, and at the Commission.

[1] The Amex has clarified that the proposed rule change will affect both its equity and options trading floors. Telephone conversation between Claudia Crowley, Special Counsel, Legal and Regulatory Policy, Amex, and Beth Stekler, Attorney, Division of Market Regulation, SEC, on April 20, 1994.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of an basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Trading Floor has historically been divided into zones comprised of designated trading posts. Pursuant to Rule 22, the Senior Supervisory Officer assigns Floor Officials to each zone and they are expected to exercise their authority in their assigned zones. In addition, Rule 22(c) provides that a majority of the available Floor Officials in each zone may (i) restrict or ban trading by Registered Traders, (ii) restrict or ban transactions pursuant to off-Floor orders for accounts in which members or member organizations have an interest, (iii) prohibit specialists from accepting stop or stop limit orders, or (iv) restrict or ban the use of hand signals with respect to any or all of the securities in their zone.

Rule 22 was adopted in 1965 at a time when all of the trading posts were located on one main Trading Floor, the Exchange was not trading options, and new types of trading products were not frequently added. Although the zone system was useful when implemented, it is not appropriate in today's environment. As a result of improved technology and the faster pace of trading generally (and particularly in options and other derivatives), members typically require quick resolution of trading questions from Floor Officials. With the expansion of the Trading Floor and changes in its configuration, it is unduly time-consuming and burdensome to attempt to deal only with Floor Officials assigned to a particular zone.

The Exchange is therefore proposing that Rule 22 be amended to (i) delete the references to the zone system and permit Floor Officials to make determinations anywhere on the Floor, and (ii) provide that matters which currently require the approval of a

majority of the Floor Officials in a zone may be determined by a Floor Official with the concurrence of one of the Senior Floor Officials. [2]

2. Statutory Basis

The proposed rule change is consistent with Section 6(b) of the Act in general and furthers the objectives of Section 6(b)(5) in particular in that it is designed to promote just and equitable principles of trade and remove impediments to and perfect the mechanism of a free and open market.

B. Self-Regulatory Organization's Statement on Burden on Competition

The proposed rule change will impose no burden on competition.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 35 days of the publication of this notice in the **Federal Register** or within such other period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) By order approve the proposed rule change, or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C 552, will be available for inspection and copying at the Commission's Public Reference Section, 450 Fifth Street. NW., Washington, DC 20549. Copies of such filing will also be available for inspection and copying at the principal office of the Amex. All submissions should refer to File No. SR–Amex–94–11 and should be submitted by May 26, 1994.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

[FR Doc. 94–10748 Filed 5–4–94; 8:45 am]

BILLING CODE 8010–01–M

[2] Pursuant to Exchange Rule 21(a), Senior Floor Officials include the Floor Governors and those Exchange Officials who were previously Floor Governors and continue to be active on the Floor.

[Release No. 34–33972); File No. SR–CBOE–94–03]

Self-Regulatory Organizations; Order Approving Proposed Rule Change by the Chicago Board Options Exchange, Inc. Relating to Trading Floor Booth Policy and Fee Changes

April 28, 1994.

On February 2, 1994, the Chicago Board Options Exchange, Inc. ("CBOE" or "Exchange") submitted to the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act") [1] and Rule 19B–4 thereunder,[2] a proposed rule change to set forth formally the Exchange's current policy ("Policy") regarding the rental of booths on the CBOE trading floor, and to amend its current Fee Schedule as it pertains to Facility Fees for the rental of Exchange trading floor booths.

The proposed rule change was published for comment in the **Federal Register** on March 16, 1994.[3] No comments were received on the proposed rule change. This order approves the proposal.

The purpose of the proposed rule change is to memorialize for distribution to the CBOE membership the Exchange's policy regarding the rental and use of booth space on the CBOE trading floor by member organizations. The CBOE included with its filing, solely for informational purposes, a sample "Trading Floor Booth Rental Agreement" that would be executed between the Exchange and the member organizations regarding the leasing of trading floor booths. In addition, in connection with the Exchange's elimination of a practice known as "joint leasing," the Exchange has proposed to amend the existing fee structure regarding the rental of trading floor booths.

The CBOE currently has certain space located on its trading floor which it makes available for rental to qualified member organizations. These "booths" are located at various locations on the trading floor adjacent to the trading "pits" or "crowds" where the actual CBOE trading activity takes place. The booths generally are used by member organizations to perform various functions in support of their CBOE trading activities. Over the years, the CBOE has developed certain policies and practices with regard to the rental and use of these trading floor booths by member organizations. The Exchange has determined that it would benefit both the CBOE and the membership to memorialize the Exchange's current policies for distribution to the members.

The Policy addresses several issues pertaining to booth rental, including eligibility requirements, allocation and assignment, and booth usage and rental terms. Specifically, the Policy sets forth the four broad categories of member organizations that, in accordance with current policy, may rent booth space on the floor. These four types of eligible members are: (1) Members of The Options Clearing Corporation ("OCC") that conduct a retail customer business; (2) members of OCC that clear CBOE market-maker and/or floor broker trades; (3) members that operate a public customer and/or broker business in options and meet any financial requirements established at any time by the Exchange; and (4) members that are stock execution service firms approved by the Exchange in accordance with CBOE Rule 6.77.[4] These categories were formulated in order to accommodate member organizations with the greatest need for working space in close proximity to CBOE trading activity, and they encompass almost all major types of CBOE member organizations. Market-maker organizations, the only major category of member organization that cannot obtain a booth under the Policy, customarily obtain booth space through their clearing firms.

To account for the possibility that in the future demand for booth space may exceed availability, the Policy states that the Facilities Committee of the CBOE may establish guidelines with respect to the allocation and assignment of trading floor booths to CBOE member organizations, based upon trading volume, business need, product

[1] 15 U.S.C. 78s(b)(1) (1982).

[2] 17 CFR 240.19b–4 (1993).

[3] *See* Securities Exchange Act Release No. 33745 (March 9, 1994), 59 FR 12388 (March 16, 1994).

[4] A stock execution service is a regular member organization that is registered with the Exchange for the purpose of providing stock execution services to market-makers on the floor of the Exchange. CBOE Rule 6.77.

support, and other reasonable criteria.[5] The CBOE currently has no such guidelines in effect, and does not anticipate the creation of such guidelines in the foreseeable future.

The Policy also sets forth the requirement that all member organizations renting booths execute a lease agreement with the Exchange, which agreement sets forth the contractual terms governing the rental and use of booths by member organizations. Although the Exchange in the past has used a standard form agreement regarding booth rental, that agreement is brief and contains little detail regarding the nature of the contractual relationship between the parties. Any lease agreement executed pursuant to the new Policy would set forth specifically the details of the parties' contractual relationship regarding rental and use of the booths as they have been established by custom and usage in the past.

Finally, the Exchange proposes to eliminate the practice of joint leasing, and to amend the fee structure to account for this change. Previously, the Exchange has permitted two different member organizations to occupy jointly a single trading floor booth and to share the costs associated therewith, believing that such joint leasing would provide a less costly method for smaller member organizations to obtain access to multiple locations adjacent to the trading floor. However, the Exchange states that joint leasing has been used by non-transaction-producing members solely to reduce their booth fees and not to facilitate trading activity. Accordingly, the Exchange has determined to eliminate joint leasing and replace it with a variable fee arrangement which the Exchange anticipates will soften the economic impact on smaller member organizations that the elimination of joint leasing might otherwise have caused. Pursuant to the amended fee schedule, variable booth fees have been reduced in two respects: (1) The $1,250 per booth variable monthly fee has been eliminated for the second booth leased by a member organization; and (2) the $1,250 per booth variable month fee for a third booth has been reduced by 50 percent to $625. The initial booth rental, and all additional booths beyond the third booth, continue to be subject to the full variable fee.

The Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange, and, in particular, with the requirements of Section 6(b)(5).[6] Specifically, the purpose of the proposal is to memorialize existing Exchange policies regarding the rental of trading floor booths to member organizations, including the delineation of eligible lessees and the requirement that members enter into a formal lease agreement.[7] The Policy does not represent a change to current Exchange policies, except the elimination of the CBOE's current policy to permit joint leasing. In this regard, the Exchange states that the purpose behind joint leasing was ultimately to provide small member organizations less costly access to multiple locations adjacent to the trading floor. The Exchange proposes to eliminate this practice because it believes that non-transaction producing member organizations have exploited joint leasing solely to reduce their booth fees and not to facilitate trading activity.

The Commission believes that the Exchange's codification of its existing policy, and the elimination of joint leasing in favor of a variable fee arrangement, is a reasonable exercise of the CBOE's right to determine how it wants to administer its floor booth space. In this regard, the Commission notes that existing joint lessees will continue to have access, as individual lessees, to booth space under the revised Policy. Moreover, the variable fee structure should help to eliminate some of the economic impact of the revised Policy on existing joint lessees. Accordingly, the Commission finds the proposal to be consistent with the Act, in that it promotes just and equitable principles of trade and removes impediments to and perfects the mechanism of a free and open market.

It is therefore Ordered, pursuant to Section 19(b)(2) of the Act,[8] that the proposed rule change (File No. SR-CBOE-94-03) is approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[9]

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 94-10749 Filed 5-4-94; 8:45 am]

BILLING CODE 8010-01-M

[5] Prior to implementing such guidelines, the Exchange represents that it will consult with Commission staff to determine whether such guidelines would have to be filed with the Commission as a rule change and be approved pursuant to Section 19(b) of the Act. Telephone conversation between Dan Schneider, Schiff Hardin & Waite, Joanne Moffic-Silver, CBOE, and Mary Gilhooly, CBOE, and Thomas N. McManus, Division of Market Regulation, SEC, on April 26, 1994.

[6] 15 U.S.C. § 78f(b)(5) (1982).

[7] Although the Exchange included in its filing a sample lease agreement, the Commission by this order is approving only the general requirement referenced in the Policy that a lease agreement be executed between the Exchange and its member organizations. The Commission is taking no position on, and by this order is not approving, the substance of the aforementioned sample lease agreement.

[8] 15 U.S.C. 78s(b)(2) (1988).

[9] 17 CFR 200.30-3(a)(12) (1993).

[Release No. 34-33975; File No. SR-CSE-94-03]

Self-Regulatory Organizations; Notice of Filing and Order Granting Accelerated Approval of Proposed Rule Change and Amendment No. 1 To Extend the Pilot of The Cincinnati Stock Exchange, Inc., Relating to the Preferencing of Public Agency Market and Marketable Limit Orders by Approved Dealers and Other Proprietary Members

April 28, 1994.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934, 15 U.S.C. 78s(b)(1), notice is hereby given that on April 25, 1994, the Cincinnati Stock Exchange, Incorporated ("CSE or Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II and III below, which Items have been prepared by the CSE. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons and to grant accelerated approval of the proposed rule change.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Cincinnati Stock Exchange, Inc. ("CSE" or "Exchange") hereby proposes to extend for an additional 90 days, ending August 6, 1994, the CSE's pilot program regarding preferencing. The pilot was initially approved by the Commission on February 7, 1994.[1] The exchange requests, in Amendment No. 1, that the Commission find good cause, pursuant to section 19(b)(2) of the Act, for approving the proposed rule change prior to the thirtieth day after publication in the **Federal Register**.[2]

[1] Securities Exchange Act Release No. 28866 (February 13, 1991), 56 FR 5854.

[2] See letter from Robert Ackermann, Vice President, Regulation, Cincinnati Stock Exchange to Jill Ostergaard, Attorney, Division of Market Regulation, SEC, dated April 26, 1994 ("Amendment No. 1").

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the CSE included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The CSE has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the rule filing is to extend for 90 days the Exchange's pilot program governing preferenced trading. The Commission originally approved the pilot in February 1991, and subsequently extended the pilot several times. The pilot is currently approved through May 7, 1994.[3]

On February 25, 1994, the CSE filed a rule change containing certain proposals to further enhance the quality of its market, including a proposed prohibition against "auto-quoting" and limitations on the maximum spread which exchange specialists could quote in the stocks in which they make markets.[4] Further, on March 31, 1994, the CSE filed a rule change which would make its preferencing pilot permanent.[5] The Commission's staff has requested that the Exchange seek an interim 90 day extension of the preferencing pilot in order to afford the Commission the opportunity to consider the relationship between the quality of markets proposal and the preferencing program.[6]

Accordingly, this rule filing would extend the existing pilot program form its current expiration date of May 7, 1994 until August 6, 1994. During this interim extension, the pilot will continue to operate in accordance with all existing conditions.[7]

2. Statutory Basis

The proposed rule change is consistent with section 6(b) of the Act in general and furthers the objectives of section 6(b)(5) in particular in that it will promote just and equitable principals of trade and remove impediments to and perfect the mechanisms of a free and open market and a national market system.

B. Self-Regulatory Organization's Statement on Burden on Competition

The CSE does not believe that the proposed rule change will impose any inappropriate burden on competition.

B. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

The CSE solicited comments on the original filing from other Intermarket Trading System participants.[8]

III. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Room. Copies of the filing will also be available for inspection and copying at the principal office of the CSE. All submissions should refer to the file number in the caption above and should be submitted by May 26, 1994.

IV. Commission's Findings and Order Granting Accelerated Approval of Proposed Rule Change and Amendment No. 1

The CSE filed this interim extension at the Commission staff's request to enable the Commission to review the impact of the Exchange's quality of markets filing on the preferencing program. Under the circumstances, the Commission finds that allowing the preferencing pilot to continue for an additional 90 days is necessary.

The Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to the CSE and, in particular, the requirements of section 6(b)(5).

The Commission finds good cause for approving the proposed rule change prior to the 30th day after the date of publication of notice of filing thereof. Accelerated approval will avoid an unnecessary interruption of the preferencing pilot. Accordingly, under these circumstances, the Commission believes the CSE's preferencing pilot should be permitted to continue operating for 90 days, ending August 6, 1994.

It is therefore Ordered, pursuant to section 19(b)(2) of the Act, that the proposed rule change be, and hereby is, approved for an additional period, ending August 6, 1994.

For the Commission by the Division of Market Regulation, pursuant to the delegated authority.[9]

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 94–10750 Filed 5–4–94; 8:45 am]

BILLING CODE 8010–01–M

[Release No. 34–33974; File No. SR–NSCC–94–02]

Self-Regulatory Organizations; National Securities Clearing Corporation; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating to the Clearing Fund Formula

April 28, 1994.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),[1] notice is hereby given that on March 3, 1994, the National Securities Clearing Corporation ("NSCC") filed with the Securities and Exchange Commission ("Commission") the proposed rules change as described in Items I, II, and III below, which Items have been prepared primarily by NSCC.

---

[3] See Securities Exchange Act Release Nos. 29524 (August 5, 1991), 56 FR 38160; 30353 (February 7, 1992), 57 FR 5918; 31011 (August 7, 1992), 57 FR 38704; and 32280 (May 7, 1993), 58 FR 28422.

[4] See SR–CSE–94–01; Securities Exchange Act Release No. 33849 (April 1, 1994), 59 FR 16870.

[5] See SR–CSE–94–01. In its filing for permanent approval, the Exchange requests that two restrictions of the pilot be lifted: first, the number of preferred securities be expanded beyond the current 350 limitation; and second; a lifting of the ban on cash payments to preferencing dealers for preferenced orders.

[6] Conversation between David Colker, Executive Vice President and Chief Operating Officer, Cincinnati Stock Exchange, and Jill W. Ostergaard, Attorney, Division of Market Regulation, SEC, on April 25, 1994.

[7] These conditions include the two cited above regarding the number of preferenced securities and cash payment for order flow, as well as the requirement that the Exchange provides certain information to the Commission.

[8] See File No. SR–CSE–90–6.

[9] 17 CFR 200.30–3(a)(12)(1993).

[1] 15 U.S.C. 78s(b)(1) (1988).

The Commission is publishing this notice to solicit comments from interested persons on the proposed rule change.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The proposed rule change clarifies that the component of the clearing fund formula applicable to usage of NSCC's mutual fund services applies to all NSCC members that use such services.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, NSCC included statements concerning the purpose of and basis for the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. NSCC has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

The proposed rule change consists of a technical amendment to the clearing fund formula to clearly delineate the clearing fund requirements of NSCC's regular clearing members ("clearing members") and NCCC's members that only use the mutual fund services ("mutual fund services members"). All NSCC members that use the mutual fund services are required to make clearing fund deposits relating to their mutual fund services usage. For clearing members, this requirement is in addition to their normal clearing fund requirements. Previously, clearing members' clearing fund requirements for usage of mutual fund services was set forth in NSCC Procedure XV, A. I.(a)(iii). However, in the recently approved File No. SR–NSCC–93–11,[2] NSCC moved this clearing fund requirement to Procedure XV, A.I.(b). Because section A.I.(b) is entitled "Clearing Fund Formula for Mutual Fund Services Members," it is not clear that this requirement applies to both clearing members and members that only use the mutual fund services members even though the mutual fund services clearing formula refers to "Members" (i.e., clearing members) and even though NSCC intended that clearing members remain subject to the mutual fund services clearing fund requirement. Accordingly, the proposed rule change is reinserting into section A.I.(a), "Clearing Fund Formula for Members," the mutual fund services component of the clearing fund formula for the purposes of clarity and is limiting section A.I.(b) to mutual fund services members.

B. Self-Regulatory Organization's Statement on Burden on Competition

NSCC does not believe that the proposed rule change will impose any burden on competition.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were not and are not intended to be solicited with respect to the proposed rule change, and none have been received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to section 19(b)(3)(A)(i) of the Act [3] and subparagraph (e)(1) of Rule 19b–4 thereunder [4] because it involves an interpretation of an existing rule of the self-regulatory organization. At any time within sixty days of the filing of such proposed rule change, the Commission may summarily abrogate such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, NW., Washington, DC 20549. Copies of such filing will also be available for inspection and copying at the principal office of the above-referenced self-regulatory organization.

All submissions should refer to File No. SR–NSCC–94–02 and should be submitted by May 26, 1994.

For the Commission by the Division of Market Regulation, pursuant to delegated authority.[5]

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 94–10751 Filed 5–4–94; 8:45 am]

BILLING CODE 8010–01–M

[2] Securities Exchange Act Release No. 33525 (January 26, 1994), 59 FR 04959, [File No. SR–NSCC–93–11] (order approving a proposed rule change relating to capital and clearing fund requirements for users of mutual fund services).

[3] 15 U.S.C. 78s(b)(3)(A)(i) (1988).

[4] 17 CFR 240.19b–4(e)(1) (1993).

[5] 17 CFR 200.30–3(a)(12) (1993).

[Release No. 34–33973; File No. SR–Phlx–93–64]

Self Regulatory Organizations; Order Approving Proposed Rule Change and Notice of Filing and Order Granting Accelerated Approval of Amendment No. 4 to the Proposed Rule Change by the Philadelphia Stock Exchange, Inc., Relating to the Listing and Trading of Options on the Bid Cap Index

April 28, 1994.

I. Introduction

On January 2, 1994, the Philadelphia Stock Exchange, Inc. ("Phlx" or "Exchange") submitted to the Securities and Exchange Commission ("Commission"), pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act") [1] and Rule 19b–4 thereunder,[2] a proposed rule change to provide for the listing and trading of options on the Phlx Big Cap Index ("Big Cap Index" or "Index"). On January 5, 1994, January 25, 1994, January 28, 1994, and April 7, 1994, the Exchange

[1] 15 U.S.C. 78s(b)(1) (1982).

[2] 17 CFR 240.19b–4 (1993).

filed Amendment Nos. 1,[3] 2,[4] 3,[5] and 4,[6] respectively, to this proposal.

The proposed rule change and Amendment Nos. 1, 2, and 3 thereto were published for comment in the **Federal Register** on February 10, 1994.[7] No comments were received on the proposed rule. This order approves the proposal and its four amendments.

[3] The Phlx amended the proposal to change the name of the index from "Nifty Fifty Index" to "The Big Cap Index." See Letter from Michele R. Weisbaum, Associate General Counsel, Phlx, to Brad Ritter, Office of Derivatives Regulation, Division, SEC, dated January 5, 1994 ("Amendment No. 1").

[4] The Phlx amended the proposal:

(1) To set the exercise prices at five point intervals instead of 2½ point intervals; and

(2) To request accelerated approval of the proposed rule change. See Letter from Michele R. Weisbaum, Associate General Counsel, Phlx, to Richard Zack, Branch Chief, Office of Derivatives Regulation, Division, SEC, dated January 25, 1994 ("Amendment No.2").

[5] The Phlx amended the proposal:

(1) To reflect the new ticker symbol as a result of Amendment No. 1;

(2) To provide that the index will be updated during the trading day at least once every 15 seconds, rather than once every minute;

(3) To specify that the expiration cycle applicable to options on the Index will be three expiration months from the March, June, September, December cycle plus two additional near-term months; and

(4) To clarify the Exchange's obligations with respect to delisting and replacing components of the Index. See Letter from Michele R. Weisbaum, Associate General Counsel, Phlx, to Richard Zack, Branch Chief, Office of Derivatives Regulation, Division, SEC, dated January 27, 1994 ("Amendement No. 3").

[6] The Phlx amended its proposal:

(1) To clarify that all of the stocks comprising the Index are options eligible and have overlying exchange traded options on them;

(2) To note that, if at any time less than 90 percent of the component stocks in the Index, by weight, are eligible for exchange options trading, or if the number of stocks in the Index ever increases to more than 60 or decreases to less than 40, the Exchange would submit a filing to the Commission pursuant to Rule 19b–4 under the Act prior to opening any new series of options on the Index for trading;

(3) To clarify that surveillance procedures currently used to monitor trading in each of the Exchange's other index options also will be used to monitor trading in options on the Index (which procedures include having complete access to trading activity in the underlying securities);

(4) To clarify that the Intermarket Surveillance Group Agreement, dated July 14, 1983, as amended on January 29, 1990, will be applicable to the trading of options on the Index;

(5) To confirm that the Index trading hours will be from 9:30 a.m. to 4:10 p.m.; and

(6) To amend the formula with which the current Index value will be calculated. See Letter from Michele R. Weisbaum, Associate General Counsel, Phlx, to Thomas McManus, Esq., Division of Market Regulation ("Division"), SEC, dated April 7, 1994 ("Amendment No. 4").

[7] Securities Exchange Act Release No. 33579 (February 4, 1994), 59 FR 6320 (February 10, 1994).

II. Description of Proposal

A. Composition of the Index

The Phlx proposes to list for trading options on the Big Cap Index, a stock index to be calculated and maintained by the Phlx. The Index will be composed of 50 of the largest and most widely-held U.S. common stock issues representing a variety of industries, including, but not limited to, technology, manufacturing, and the service industries, 49 of which are listed on the New York Stock Exchange ("NYSE"), and one of which is listed on the Nasdaq National Market. The Phlx will use a capitalization-weighted methodology to calculate the Index.[8]

As of December 1, 1993, the market capitalizations of the individual stocks in the Index ranged from a high of $81.8 billion to a low of $7.4 billion, with the mean and median being $25.6 billion and $20.2 billion, respectively. The market capitalization of all the stocks in the Index was $1.3 trillion. The total number of shares outstanding for the stocks in the Index ranged from a high of 2.3 billion shares to a low of 1.03 million shares. In addition, the average daily trading volume of the stocks in the Index, for the period between June 1, 1992 and January 31, 1994, ranged from a high of 4,179,900 shares per day to a low of 241,900 shares per day, with a mean of approximately 1,168,000 shares. For the same period, the average monthly trading volume of the stocks in the Index ranged from a high of 87,778,300 shares per month to a low of 5,081,800 shares per month, with a mean of approximately 24,523,000 shares. Finally, no one stock comprised more than 6.38 percent of the Index's total value and the percentage weighting of the five largest issues in the Index accounted for 27.62 percent of the Index's value. The percentage weighting of the lowest weighted stock was 0.58 percent of the Index and the percentage weighting of the five smallest issues in the Index accounted for 3.05 percent of the Index's value.

B. Maintenance

The Index will be maintained by the Phlx. The Phlx will make special adjustments to the securities comprising the Index to reflect such events as stock splits or reverse splits, spinoffs, stock dividends, reorganizations, recapitalizations, and similar events, upon their occurrence. In accordance with Phlx Rule 1009A, if any change in the nature of any stock in the Index that is caused by delisting, merger, acquisition, or otherwise, occurs which would change the overall market character of the Index, the Exchange will take appropriate steps to delete this Index component stock from the Index. Such Index component stock would be replaced by another Index component stock which the Exchange in its discretion believes would be compatible with the intended market character of the Index.

If at any time less than 90 percent of the component stocks in the Index, by weight, are eligible for exchange options trading, or if the number of stocks in the Index ever increases to more than 60 or decreases to less than 40, the Exchange would submit a filing to the Commission pursuant to Rule 19b–4 under the Act prior to opening any new series of options on the Index for trading.

C. Calculation of the Index

The Index will be calculated using a capitalization-weighting methodology. The representation of each security in the Index will be proportional to the security's last sale price multiplied by the total number of shares outstanding, in relation to the total market value of all of the securities in the Index. The value of the Index was set to equal 200 on March 31, 1994. As of April 5, 1994, the Index value was 193.12. The formula for calculating the Index value is as follows:

$$\text{Current Index Value} = \frac{\text{Total Capitalization}}{\text{Divisor}}$$

Where:

Total Capitalization = Sum of Market Values (price × shares outstanding) for all component securities

Divisor = The number which, when divided from the total capitalization when the Index was initially calculated (on March 31, 1994), yielded an Index value of 200

The Index divisor will be adjusted for changes in the capitalization of any of the component securities resulting from mergers, acquisitions, delistings, substitutions, and other like corporate events. The formula for adjusting the divisor is as follows:

$$\text{Divisor} = \frac{\text{Total Capitalization (as result of adjustments)}}{\text{Index Value}}$$

Adjustments in the value of the Index which are necessitated by the addition and/or deletion of an issue from the Index are made by adding and/or

[8] See infra Section II.C., entitled "Calculation of the Index," for a description of this calculation method.

subtracting the market value (price × shares outstanding) of the relevant issues.

The Index value will be updated dynamically and disseminated at least once every fifteen seconds during the trading day.[9] The Phlx has retained Bridge Data, Inc. to compute and do all necessary maintenance of the Index. Pursuant to Phlx Rule 1100A, updated Index values will be disseminated and displayed by means of primary market prints reported by the Consolidated Tape Association and over the facilities of the Options Price Reporting Authority. The Index value also will be available on broker/dealer interrogation devices to subscribers of the option information.

The Index value, for purposes of settling outstanding Index options contracts upon expiration, will be calculated based upon the regular way opening sale prices for each of the Index's component stocks on the last trading day prior to expiration. Once all of the component stocks have opened, the value of the Index will be determined and that value will be used as the final settlement value for expiring Index options contracts. If any of the component stocks do not open for trading on the last trading day before expiration, then the last reported sale price of such security will be used in any case where that security does not trade on that day.

D. Contract Specifications

the proposed options on the Index will be cash-settled, European-style options.[10] Standard options trading hours (9:30 a.m. to 4:10 p.m. New York time) will apply to the contracts. The Index multiplier will be 100. Strike prices will be set at 5.0 point intervals in terms of the current value of the Index.[11]

The Exchange will trade consecutive and cycle month series pursuant to Phlx Rule 1101A. Specifically, there will be three expiration months from the March, June, September, December cycle, plus two additional near-term months so that the three nearest term months always will be available.

Index options will expire on the Saturday following the third Friday of the expiration month. Since options on the Index will settle based upon the opening prices of the component stocks on the last trading day before expiration (normally a Friday), the last trading day for an expiring Index option series will be the second to last business day before expiration (normally a Thursday).

E. Position and Exercise Limits, Margin Requirements, and Trading Halts

Position limits for the Index options will be set at no more than 25,000 contracts on the same side of the market, provided that no more than 15,000 of such contracts are in series in the nearest expiration month.[12] Exercise limits will be set at the same level as position limits.[13] Exchange rules applicable to options on the Big Cap Index will be identical to the rules applicable to other broad-based index options for purposes of trading rotations, halts, and suspensions,[14] and margin treatment.[15]

F. Surveillance

The Exchange will use the same surveillance procedures currently utilized for each of the Exchange's other index options to monitor trading in Big Cap Index options. These procedures include complete access to trading activity in the underlying securities. Further, the Intermarket Surveillance Group ("ISG") Agreement, dated July 14, 1983, as amended on January 29, 1990, will be applicable to the trading of options on the Index.[16]

III. Commission Findings and Conclusions

The Commission has reviewed the proposal to list and trade options on the Big Cap Index. As discussed below, the Commission believes that the proposed rule change is consistent with the requirements of section 6(b)(5) of the Act and the rules and regulations thereunder applicable to a national securities exchange. In particular, the Index is broad-based, the proposed options are designed to reduce the potential for manipulation, and the proposal to list and trade options on the Big Cap Index is consistent with the Exchange's obligation to promote investor protection.

The Commission finds that the trading of options on the Index will permit investors to participate in the price movements of the 50 securities on which the Index is based. Further, trading of options on the Index will allow investors holding positions in some or all of the securities underlying the Index to hedge the risks associated with their portfolios. Accordingly, the Commission believes the Big Cap Index options will provide investors with an important trading and hedging mechanism that should reflect accurately the overall movement of 50 of the largest and most widely-held U.S. common stocks. By broadening the hedging and investment opportunities of investors, the Commission believes that the trading of Index options will serve to protect investors, promote the public interest, and contribute to the maintenance of fair and orderly markets.[17]

The trading of options on the Big Cap Index, however, raises several concerns, namely issues related to index design, customer protection, surveillance, and market impact. The Commission believes, for the reasons discussed below, that the Exchange has addressed these concerns adequately.

A. Index Design and Structure

The Commission finds that the Big Cap Index is a broad-based index, and thus it is appropriate to permit Exchange rules applicable to the trading of broad-based index options to apply to the Index options. Specifically, the Commission believes the Index is broad-based because it contains 50 actively-traded stocks representing 25 industry groups, and thus reflects a substantial segment of the U.S. equities market.

The Commission also finds that the large capitalizations, liquid markets,

[9] To the extent that a component stock does not open for trading on a particular trading day, or trading in that component stock is halted during the course of a particular trading day, the last reported sale price of such security will be used for purposes of calculating the current Index value. Telephone conversation between Michele R. Weisbaum, Associate General Counsel, Phlx, and Thomas N. McManus, Division of Market Regulation, SEC, on April 26, 1994.

[10] A European-style option can be exercised only during a specified period before the option expires.

[11] Additional exercise prices will be added in accordance with Phlx Rule 1101A(a).

[12] See Phlx Rule 1001A(a)(i).

[13] See Phlx Rule 1002A.

[14] See Phlx Rule 1047A.

[15] See Phlx Rules 722 and 1000A.

[16] The Exchange is a member of the ISG, which was formed on July 14, 1983, among other things, to coordinate more effectively surveillance and investigative information sharing arrangements in the stock and options markets. See Intermarket Surveillance Group Agreement, July 14, 1983. The most recent amendment to the ISG Agreement, which incorporates the original agreement and all amendments made thereafter, was signed by ISG members on January 29, 1990. See Second Amendment to the Intermarket Surveillance Group Agreement, January 29, 1990. The Commission understands that the ISB Agreement, as amended, covers investigations and inquiries regarding trading activity in options on the Big Cap Index and the underlying component securities.

[17] Pursuant to section 6(b)(5) of the Act, the Commission must predicate approval of any new option or warrant proposal upon a finding that the introduction of such new derivative instrument is in the public interest. Such a finding would be difficult for a derivative instrument that served no hedging or other economic function, because any benefits that might be derived by market participants likely would be outweighed by the potential for manipulation, diminished public confidence in the integrity of the markets, and other valid regulatory concerns. In this regard, the trading of listed options on the Big Cap Index will provide investors with a hedging vehicle that should reflect the overall movement of the 50 component stocks.

and relative weighings of the Index's component stocks significantly minimize the potential for manipulation of the Index. First, the Index represents and consists of the common stock values of 50 actively-traded U.S. companies. Second, as of December 1, 1993, no one stock comprised more than 6.38 percent of the Index's total value and the percentage weighting of the five largest issues in the Index accounted for 27.62 percent of the Index's value. Third, the overwhelming majority of the stocks that comprise the Index are actively-traded, with a mean average daily trading volume and average monthly trading volume of approximately 1,168.000 and 24,523,000 shares, respectively. Fourth, as of December 1, 1993, the market capitalizations of the stocks in the Index were substantial, ranging from a high of $81.8 billion to a low of $7.4 billion, with the mean and median at $25.6 billion and $20.2 billion, respectively. Fifth, the Index is comprised of stocks representing a diverse group of industries, the most heavily represented by Index weight including technology, manufacturing, and telecommunications industries. Sixth, all of the component securities currently are eligible for options trading.[18] Finally, the Commission believes that, as discussed below, existing mechanisms to monitor trading activity in those securities will help deter as well as detect illegal trading activity involving the index option.

B. Customer Protection

The Commission believes that a regulatory system designed to protect public customers must be in place before the trading of sophisticated financial instruments, such as options on the Big Cap Index, can commence on a national securities exchange. The Commission notes that the trading of standardized, exchange-traded options occurs in an environment that is designed to ensure, among other things, that:

(1) The special risks of options are disclosed to public customers;

(2) Only investors capable of evaluating and bearing the risks of options trading are engaged in such trading; and

(3) Special compliance procedures are applicable to options accounts. Accordingly, because the Index options will be subject to the same regulatory regime as the other standardized options currently traded on the Phlx, the Commission believes that adequate safeguards are in place to ensure the protection of investors in options in the Big Cap Index.

C. Surveillance

The Commission generally believes that a surveillance-sharing agreement between an exchange proposing to list a stock index derivative and the exchanges trading the stocks underlying the derivative product is an important measure for the surveillance of the derivatives and underlying securities markets. Such agreements ensure the availability of information necessary to detect and deter potential manipulations and other trading abuses, thereby making the stock index product less readily susceptible to manipulation.[19] In this regard, the NYSE and National Association of Securities Dealers, Inc., which together serve as the primary markets for all of the Index component stocks, are members of the ISG, which provides for the exchange of all necessary surveillance information.[20]

D. Market Impact

The Commission believes that the listing and trading on the Phlx of options on the Big Cap Index will not have an adverse impact on the underlying securities markets.[21] First, as described above, the Index is broad-based and comprised of 50 stocks with no one stock dominating the Index. Second, as noted above, the stocks contained in the Index have relatively large capitalizations and are relatively actively-traded. Third, the 25,000 contract position and exercise limits, along with the 15,000 contract telescoping requirement, will serve to minimize potential manipulation and market impact concerns. Fourth, the risk to investors of contra-party performance will be minimized because the Index options will be issued and guaranteed by The Options Clearing Corporation just like any other standardized option traded in the United States. Fifth, existing Phlx stock index options rules and surveillance procedures will apply to options on the Big Cap Index.

Lastly, the Commission believes that settling expiring Index options based on the opening prices of component securities is reasonable and consistent with the Act. As noted in other contexts, valuing expiring index options for exercise settlement purposes based on the opening prices rather than closing prices may help reduce any adverse effects on the securities underlying options on the Index.[22]

E. Accelerated Approval of Amendment No. 4

The Commission finds good cause for approving Amendment No. 4 to the proposed rule change prior to the thirtieth day after the date of publication on notice of filing thereof in the **Federal Register**. Amendment No. 4 helps to conform the proposal to the Phlx's existing rules governing index options, clarifies certain characteristics of the proposal that were omitted in prior filings, and amends the formula for calculating the current Index value. All of these changes strengthen the proposal and, accordingly, the Commission believes it is consistent with section 6(b)(5) of the Act to approve Amendment No. 4 on an accelerated basis.

Interested persons are invited to submit written data, views, and arguments concerning Amendment No. 4 to the proposed rule change. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street NW., Washington DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street NW., Washington, DC. Copies of such filing also will be available for inspection and copying at the principal office of the above-mentioned self-regulatory organization. All submissions should refer to the file number in the caption

[18] The Exchange's option listing standards, which are uniform among the options exchanges, provide that a security underlying an option must, among other things, meet the following requirements:

(1) The public float must be at least 7,000,000 shares;

(2) There must be a minimum of 2,000 stockholders;

(c) Trading volume must have been at least 2.4 million shares over the preceding twelve months; and

(4) The market price must have been at least $7.50 for a majority of the business days during the preceding three calendar months. See Phlx Rule 1009, Commentary .01.

[19] See Securities Exchange Act Release No. 31243 (September 28, 1992), 57 FR 45849 (October 5, 1992)

[20] See n.16, *supra*.

[21] The Commission notes that, prior to listing Big Cap Index options, the Exchange will be required to provide written representations that both the Exchange and the Options Price Reporting Authority have the necessary systems capacity to support those new series of Big Cap options.

[22] See Securities Exchange Act Release No. 30944 (July 21, 1992), 57 FR 33376 (July 28, 1992).

above and should be submitted by May 26, 1994.

It is therefore ordered, pursuant to section 19(b)(2) of the Act,[23] that the proposed rule change (File No. SR–Phlx–93–64), as, amended, is approved contingent upon the Exchange's submission to the Commission of adequate systems capacity representations.[24]

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[25]

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 94–10752 Filed 5–4–94; 8:45 am]

BILLING CODE 8010–01–M

[Investment Company Act Rel. No. 20255; 811–4650]

The Scandinavia Fund, Inc.; Notice of Application

April 28, 1994.

AGENCY: Securities and Exchange Commission ("SEC").

ACTION: Notice of Application for Deregistration under the Investment Company Act of 1940 ("Act").

APPLICANT: The Scandinavia Fund, Inc.

RELEVANT ACT SECTION: Section 8(f).

SUMMARY OF APPLICATION: Applicant seeks an order declaring that it has ceased to be an investment company.

FILING DATE: The application was filed on September 21, 1990, and amended on March 15, 1994 and April 26, 1994.

HEARING OR NOTIFICATION OF HEARING: An order granting the application will be issued unless the SEC orders a hearing. Interested persons may request a hearing by writing to the SEC's Secretary and serving applicant with a copy of the request, personally or by mail. Hearing requests should be received by the SEC by 5:30 p.m. on May 23, 1994 and should be accompanied by proof of service on applicant, in the form of an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the writer's interest, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request such notification by writing to the SEC's Secretary.

ADDRESSES: Secretary, SEC 450 Fifth Street NW., Washington, DC 20549. Applicant, c/o Allan D. Goodridge, Schnader, Harrison, Segal & Lewis, 330 Madison Avenue, suite 1400, New York, New York 10017.

FOR FURTHER INFORMATION CONTACT: James E. Anderson, Staff Attorney, at (202) 942–0573, or C. David Messman, Branch Chief, at (202) 942–0564 (Division of Investment Management, Office of Investment Company Regulation).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. The complete application may be obtained for a fee from SEC's Public Reference Branch.

Applicant's Representations

1. Applicant is a diversified closed-end management investment company organized as a Maryland corporation. On April 25, 1986, applicant filed a notification of registration pursuant to section 8(a) of the Act and a registration statement pursuant to the Securities Act of 1993. The registration statement became effective, and applicant's initial public offering commenced, on June 17, 1986.

2. On July 29, 1988 and October 1, 1988, applicant's board of directors approved a plan of liquidation and dissolution whereby applicant would be restructured as an operating company by reincorporating it as a Cayman Islands corporation that would engage in the secured lending business. Preliminary proxy materials soliciting shareholder approval of the reorganization were filed with the SEC on August 2, 1988. Amended proxy materials were filed on or about October 11, 1988. A pre-effective amendment was filed on or about November 23, 1988. Proxy materials were mailed to shareholders on or about December 8, 1988. The reorganization was approved by applicant's shareholders at a meeting held on February 3, 1989.

3. On February 21, 1989, applicant transferred all of its assets, which consisted of cash, to a Cayman Islands corporation, The Scandinavia Company, Inc. (the "Company"), in exchange for all of the outstanding shares of the Company's common stock. At the time of the exchange, applicant had outstanding 6,415,810 shares of common stock with a net asset value per share of $8.41. Applicant's shareholders received one share of the Company's common stock for each share of the applicant's common stock.

4. In connection with the liquidation and dissolution of applicant, expenses due and payable before the reorganization were paid by the applicant, and expenses due and payable after the reorganization were paid by the Company. Such expenses were as follows: Legal fees—$447,397; accounting fees—$39,700; printing—$21,084; mailing—$13,633; proxy solicitation fees—$10,500; exchange agency fees—$1,080; and proxy statement filing fee—$8,264; for a total of $541,658.

5. As a result of the liquidation and dissolution, applicant, the Company, the applicant's former director, and applicant's majority shareholder were named as parties to three class action lawsuits filed by applicant's shareholders in the United States District Court for the Southern District of New York. The lawsuits alleged, among other things, that the proxy materials mailed to shareholders in December 1988 were false and misleading, that the conversion of applicant's assets to cash without shareholder approval violated section 13 of the Act, and that the Company violated the Act by adopting a stock option plan and by filing periodic reports with the SEC as an operating company rather than an investment company.

6. On May 20, 1991, the parties signed an agreement settling the suits. The settlement was approved by the court on July 30, 1991, and it became final on August 30, 1991. For purposes of the settlement, all persons who owned shares of common stock of the applicant or the Company (other than the defendants and their affiliates and those persons who submitted valid and timely requests for exclusion) during the period February 1, 1988 through June 30, 1990 were deemed "Settlement Class 1." All persons who owned stock of the Company at the time of the public announcement of the settlement were deemed "Settlement Class 2" (the members of Settlement Class 1 and Settlement Class 2, collectively the "Class Members").

7. Under the terms of the settlement, the Company paid $.085 for each share of applicant's common stock that the members of Settlement Class 1 held as of February 1, 1988 and sold at a loss before December 10, 1988. The Company also paid to Class Members who held shares of applicant's common stock as of February 1, 1988 and sold such shares for less than $6.00 per share during the period from December 10, 1988 to September 26, 1989, an amount equal to $.25 per share. Pursuant to the foregoing, the Company paid claims aggregating approximately $32,500. The Company also agreed to commence an issuer tender offer to purchase 952,500 shares of the Company's common stock at a purchase price equal to the market price increased by a premium of 16% of the market price, but in no event more than $5.25. The offer was commenced on May 24, 1991 at a purchase price of $4.07, and was consummated on July

---

[23] 15 U.S.C. 78s(b)(2) (1988).

[24] See n.21, *supra*.

[25] 17 CFR 200.30–3(a)(12) (1993).

22, 1991, resulting in the purchase by the Company of 609,613 shares of its common stock at an aggregate purchase price of $2,481,125. The Company also paid the legal fees of counsel to the plaintiffs and certain expenses of settlement in the total amount of approximately $280,000.

8. In consideration of the settlement, the Class Members discharged the defendants of any claims arising from conduct relating to the management or operations of applicant or the Company, the use and investment of their assets, the preparation and dissemination during the settlement class period of false or misleading proxy materials and annual or periodic reports, and the failure of the applicant or the Company to conduct their businesses as investment companies.

9. As of the date of the amended application, applicant had no shareholders, assets, or liabilities. Applicant is not a party to any litigation or administrative proceeding. Applicant is not presently engaged in, nor does it propose to engage in, any business activities other than those necessary for the winding up of its affairs.

10. As a condition to the application, applicants expressly agree that all books and records required to be kept pursuant to rule 31a-1 under the Act will be preserved for a period of not less than six years after the date of applicant's liquidation.

For the SEC, by the Division of Investment Management, under delegated authority.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 94–10753 Filed 5–4–94; 8:45 am]

BILLING CODE 8010–01–M

SMALL BUSINESS ADMINISTRATION

Reporting and Recordkeeping Requirements Under OMB Review

AGENCY: Small Business Administration.

ACTION: Notice of reporting requirements submitted for review.

SUMMARY: Under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35), agencies are required to submit proposed reporting and recordkeeping requirements to OMB for review and approval, and to publish a notice in the **Federal Register** notifying the public that the agency has made such a submission.

DATES: Comments should be submitted within 30 days of this publication in the **Federal Register**. If you intend to comment but cannot prepare comments promptly, please advise the OMB Reviewer and the Agency Clearance Officer before the deadline.

COPIES: Request for clearance (S.F. 83), supporting statement, and other documents submitted to OMB for review may be obtained from the Agency Clearance Officer. Submit comments to the Agency Clearance Officer and the OMB Reviewer.

FOR FURTHER INFORMATION CONTACT: *Agency Clearance Officer:* Cleo Verbillis, Small Business Administration, 409 3d Street, SW., 5th Floor, Washington, DC 20416, Telephone: (202) 205–6629.

OMB Reviewer: Gary Waxman, Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, Washington, DC 20503.

Title: Requests from Borrower—Reports, Records, and Financial Statements.

Form No.: SBA 770.

Frequency: On Occasion.

Description of Respondents: Recipients of SBA Loans.

Annual Response: 161,000.

Annual Burden: 281,750.

Dated: May 2, 1994.

Cleo Verbillis,

Chief, Administrative Information Branch.

[FR Doc. 94–10848 Filed 5–4–94; 8:45 am]

BILLING CODE 8025–01–M

[Declaration of Disaster Loan Area #2715]

Texas; Declaration of Disaster Loan Area

Harris County and the contiguous counties of Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller constitute a disaster area as a result of damages caused by a tornado which occurred on April 15, 1994. Applications for loans for physical damage as a result of this disaster may be filed until the close of business on June 30, 1994 and for economic injury until the close of business on January 30, 1995 at the address listed below: U.S. Small Business Administration, Disaster Area 3 Office, 4400 Amon Carter Blvd., suite 102, Ft. Worth, TX 76155, or other locally announced locations.

The interest rates are:

For Physical Damage

Homeowners With Credit Available Elsewhere—7.125%

Homeowners Without Credit Available Elsewhere—3.625%

Businesses With Credit Available Elsewhere—7.125%

Businesses and Non-Profit Organizations Without Credit Available Elsewhere—4.000%

Others (Including Non-Profit Organizations) With Credit Available Elsewhere—7.125%

For Economic Injury

Businesses and Small Agricultural Cooperatives Without Credit Available Elsewhere—4.000%

The number assigned to this disaster for physical damage is 271512 and for economic injury the numbers 825300

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008)

Dated: April 29, 1994.

Erskine B. Bowles,

Administrator.

[FR Doc. 94–10839 Filed 5–4–94; 8:45 am]

BILLING CODE 8025–01–M

[License #06/06–0190]

San Antonio Venture Group, Inc.; License Surrender

Notice is hereby given that San Antonio Venture Group, Inc., ("SAVG"), 2300 West Commerce, San Antonio, Texas 78207, has surrendered its license to operate as a small business investment company under the Small Business Investment Act of 1958, as amended ("the Act"). SAVG was licensed by the Small Business Administration on March 23, 1978.

Under the authority vested by the Act and pursuant to the regulations promulgated thereunder, the surrender of the license was accepted on April 25, 1994, and accordingly, all rights, privileges, and franchises derived therefrom have been terminated.

(Catalog of Federal Domestic Assistance Program No. 59.011, Small Business Investment Companies)

Dated: April 29, 1994.

Robert D. Stillman,

Associate Administrator for Investment.

[FR Doc. 94–10844 Filed 5–4–94; 8:45 am]

BILLING CODE 8025–01–M

Minneapolis/St. Paul District Advisory Council; Public Meeting

The U.S. Small Business Administration Minneapolis/St. Paul District Advisory Council will hold a public meeting at 12 noon on Wednesday, May 25, 1994, at the Jax Cafe, 1928 University Avenue N.E., Minneapolis, Minnesota to discuss such matters as may be presented by members, staff of the U.S. Small Business Administration, or others present.

For further information, write or call Mr. Edward A. Daum, District Director, U.S. Small Business Administration, 610–C Butler Square, 100 North Sixth Street, Minneapolis, Minnesota 55403, (612) 370–2306.

Dated: April 26, 1994.

Dorothy A. Overal,

Acting Assistant Administrator, Office of Advisory Councils.

[FR Doc. 94–10847 Filed 5–4–94; 8:45 am]

BILLING CODE 8025–01–M

[License No. 08/08–0148]

CI Capital Group, Inc.; Issuance of a Small Business Investment Company License

On November 9, 1993, a notice was published in the **Federal Register** (58 FR 59509) stating that an application had been filed by CI Capital Group, Inc., Salt Lake City, Utah, with the Small Business Administration (SBA) pursuant to § 107.102 of the Regulations governing small business investment companies (13 CFR 107.102 (1993)) for a license to operate as a small business investment company.

Interested parties were given until close of business December 9, 1993 to submit their comments to SBA. No comments were received.

Notice is hereby given that, pursuant to section 301(c) of the Small Business Investment Act of 1958, as amended, after having considered the application and all other pertinent information, SBA issued License No. 08/08–0148 on April 15, 1994, CI Capital Group Group, Inc. to operate as a small business investment company.

The Licensee has initial private capital of $4.5 million, and Mr. Timothy Draper will manage the fund. Zions First National Bank owns approximately 89 percent of the stock of the Licensee; the remaining stock is owned by Utah Technology Equity Foundation.

(Catalog of Federal Domestic Assistance Program No. 59.011, Small Business Investment Companies)

Dated: April 20, 1994.

Robert D. Stillman,

Associate Administrator for Investment.

[FR Doc. 94–10846 Filed 5–4–94; 8:45 am]

BILLING CODE 8025–01–M

[License No. 03/03–0195]

CIP Capital, L.P.

Notice is hereby given that CIP Capital, L.P. (CIP), 20 Valley Stream Parkway, suite 265, Malvern, PA 19355, a Federal licensee under the Small Business Investment Act of 1958, as amended (the Act), in connection with the proposed financing of a small concern is seeking an exemption under section 312 of the Act and § 107.903 Conflicts of interest of the SBA Rules and Regulations (the Regulations) governing Small Business Investment Companies (13 CFR 107.903 (1993)). An exemption may not be granted by SBA until Notices of this transaction have been published. CIP proposes to provide equity financing to Bio-Pharm Clinical Services, Inc. (Bio-Pharm), 512 Township Line Road, Blue Bell, Pennsylvania, 19422. The financing is one of the conditions precedent to the consummation of the planned merger of Bio-Pharm into Affinity Biotech, Inc. (Affinity), 34 Mt. Pleasant Drive, Aston, PA 19041. When the merger becomes effective Affinity's name will be changed to IBAH, Inc.

The financing is brought within the purview of § 107.903(b)(1) of the Regulations because Mr. Winston J. Churchill, a General Partner of CIP, is a director of Affinity and owns more than 10% of the total shares of Affinity. The proposed financing will provide expansion capital for IBAH.

Notice is further given that any person may, not later than 15 days from the date of the publication of the Notice, submit written comments on the transaction to the Associate Administrator for Investment, U.S. Small Business Administration, 409 Third Street, SW., Washington, DC 20416.

A copy of this Notice shall be published, in accordance with § 107.903(e) of the Regulations, in a newspaper of general circulation in Philadelphia, PA.

(Catalog of Federal Domestic Assistance Program No. 59.011, Small Business Investment Companies)

Dated: April 21, 1994.

Robert D. Stillman,

Associate Administrator for Investment.

[FR Doc. 94–10845 Filed 5–4–94; 8:45 am]

BILLING CODE 8025–01–M

DEPARTMENT OF TRANSPORTATION

Coast Guard

[CGD 94–038]

Application for Recertification of Prince William Sound Regional Citizens' Advisory Council

AGENCY: Coast Guard, DOT.

ACTION: Notice of availability; request for comments.

SUMMARY: The Coast Guard announces the availability of the application for recertification of the Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) for the period from July 1, 1994 through June 30, 1995. The Coast Guard seeks comments on the application from interested groups. The Coast Guard will be publish a later notice in the **Federal Register** to notify the public of its decision regarding the recertification request.

DATES: Comments must be received on or before June 20, 1994.

ADDRESSES: Comments may be mailed to the Executive Secretary, Marine Safety Council (G–LRA/3406) (CGD 94–038), U.S. Coast Guard Headquarters, 2100 Second Street, SW., Washington, DC 20593–0001, or may be delivered to room 3406 at the same address between 8 a.m. and 3 p.m., Monday through Friday, except Federal holidays. The telephone number is (202) 267–1477. Comments will be available for inspection or copying at room 3406, U.S. Coast Guard Headquarters, between the hours of 8 a.m. to 3 p.m., Monday through Friday, except Federal holidays. Please submit two copies of all comments and attachments in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. Persons wanting acknowledgement of receipt of comments should enclose stamped, self-addressed postcards or envelops.

FOR FURTHER INFORMATION CONTACT: Mrs. Janice Jackson, Marine Environmental Protection Division, (202) 267–0500.

SUPPLEMENTARY INFORMATION: Under the Oil Terminal and Oil Tanker Environmental Oversight and Monitoring Act of 1990 (33 U.S.C. 2732) (the Act), the Coast Guard may certify, on an annual basis, an alternative voluntary advisory group (advisory group) in lieu of Regional Citizens' Advisory councils for Cook Inlet and Prince William Sound, Alaska. The Coast Guard published guidelines on December 31, 1992, to assist groups seeking recertification under the Act (57 FR 62600). The Coast Guard issued a policy statement on July 7, 1993 (58 FR 36505), to certify the factors that the Coast Guard would be considering in making its determination as to whether advisory groups should be certified in accordance with the Act; and the procedures which the Coast Guard would follow in meeting its certification responsibilities under the Act.

The Coast Guard has received an application for recertification of PWSRCAC, the currently certified advisory group for the Prince William

Sound region. In accordance with the review and certification process contained in the policy statement, the Coast Guard now solicits comments from interested groups including oil terminal facility owners and operators, owners and operators of crude oil tankers calling at the terminal facilities, and fishing, aquacultural, recreational and environmental citizens groups, concerning the recertification application of PWSRCAC. At the conclusion of the comment period, the Coast Guard will review all application materials and comments received and will take one of the following actions:

(a) Recertify the advisory groups under 33 U.S.C. 2732(o).

(b) Issue a conditional recertification for a period of 90 days, with a statement of any discrepancies which must be corrected to qualify for recertification for the remainder of the year.

(c) Deny recertification of the advisory group if the Coast Guard finds that the group is not broadly representative of the interests and communities in the area or is not adequately fostering the goals and purposes of the Act.

The Coast Guard will notify PWSRCAC by letter of the action taken on its application. A notice will be published in the **Federal Register** to advise the public of the Coast Guard's determination.

Dated: April 29, 1994.

A.E. Henn,

Rear Admiral, U.S. Coast Guard, Chief, Office of Marine Safety, Security and Environmental Protection.

[FR Doc. 94–10854 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–14–M

Federal Highway Administration

Environmental Impact Statement: Allegan and Ottawa Counties, MI

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of intent.

SUMMARY: The FHWA is issuing this notice to advise the public that an Environmental Impact Statement will be prepared for alternative alignments for a bypass of US–31 from Holland in Allegan County to Grand Haven in Ottawa County.

FOR FURTHER INFORMATION CONTACT: Norman R. Stoner, Program Operations Engineer, Federal Highway Administration, 315 W. Allegan Street, room 211, Lansing Michigan 48933, Telephone: (517) 377–1880 or Mr. Michael O'Malley, Environmental Coordinator, Bureau of Transportation Planning, Michigan Department of Transportation, P.O. Box 30050, Lansing, Michigan 48909, Telephone: (517) 373–2634.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the Michigan Department of Transportation, (MDOT), is preparing an Environmental Impact Statement (EIS) for alternative alignments for a bypass of US–31 from I–196 north of Holland in Allegan County to I–96 north of Grand Haven in Ottawa County. The proposed project is approximately 40 kilometers (25 miles) in length and is needed to alleviate the traffic congestion across the Grand River crossing in Grand Haven and to address operational deficiencies on US–31 in Ottawa County as a result of increased population and commercial development. It is also intended to improve service in this developing area in northern Allegan and Southern Ottawa Counties. Alternatives under consideration include: (1) Taking no action to improve this section of US–31 other than routine maintenance; (2) mass transit; (3) reconstruction of existing US–31 within the existing right-of-way; (4) controlled access boulevard on existing US–31. within the existing right-of-way; (4) controlled access boulevard on existing US–31 alignment; (5) construction of a second bridge for local access across the Grand River in Grand Haven; and (6) bypass alternative east of existing US–31. Scoping of this project began in 1990 and included: meetings with local jurisdictions and representatives from the Townships, cities, counties and the US–31 Advisory Committee. Letters and a scoping document describing the proposed action and soliciting comments will be sent to appropriate federal, State, and local agencies, and to private organizations and citizens who have previously expressed or are known to have interests in this proposal. Although no agency scoping meeting is planned at this time, a pre-study meeting will be held in the near future to provide the public an opportunity to discuss the proposed action. A public hearing will also be held. Public notice will be given of the time and place of the hearing. The Draft Environmental Impact Statement (EIS) is scheduled for completion in September, 1996, and will be made available for public and agency review and comment prior to the public hearing. The U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and the Michigan Department of Natural Resources are requested to be cooperating agencies on this project.

To ensure that the full range of issues related to this proposed action are addressed and all significant issues identified, comments, and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the EIS should be directed to the FHWA at the address provided above.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued on: April 19, 1994.

A. George Ostensen,

Division Administrator, Lansing, Michigan.

[FR Doc. 94–10823 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–22–M

Environmental Impact Statement: Marion and Ralls Counties, Missouri

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of intent.

SUMMARY: The FHWA is issuing this notice to advise the public that an environmental impact statement will be prepared for a proposed project in Marion and Ralls Counties in Missouri.

FOR FURTHER INFORMATION CONTACT: Mr. Donald Neumann, Federal Highway Administration, P.O. Box 1787, Jefferson City, Missouri 65102, Telephone Number 314–636–7104; or Mr. Bob Sfreddo, Design Engineer, Missouri Highway and Transportation Department, P.O. 270, Jefferson City, Missouri 65102, Telephone Number 314–751–2876.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the Missouri Highway and Transportation Department (MHTD), will prepare an environmental impact statement (EIS) on a proposal to relocate U.S. Route 61 in Marion County. MHTD has determined that the relocation of U.S. Route 61 would accomplish several goals: (1) Provide a dual-lane bypass around the city of Hannibal, (2) improve safety and capacity for through-traffic on U.S. Route 61 and reduce local traffic congestion, and (3) promote economic development and planned growth in Marion and Ralls Counties.

1. The proposed highway project begins in the vicinity of the intersection of U.S. Route 24 and U.S. Route 61 and runs generally southeasterly for about 11 miles where it rejoins existing U.S. Route 61 just south of State Route M. The proposed facility would provide a four-lane, limited-access roadway with interchanges at major arterial crossroads.

2. Alternates under consideration include "build" alternatives and "no build" alternative.

3. To date, preliminary information has been issued to local officials and other interested parties. The scoping process will be initiated with Federal, State, and local agencies. Public hearings will be held. To ensure that the full range of issues related to the proposed action are addressed and all significant issues are identified, comments and suggestions are invited from all interested parties. Any comments or questions concerning this proposed action and the EIS should be directed to the FHWA or MHTD at the addresses provided above.

Issued on April 22, 1994.

Donald Neumann,

Program Review Engineer, Jefferson City.

[FR Doc. 94–10824 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–22–M

Maritime Administration

[Docket S–905]

Gulfcoast Transit Company; Notice of Application for Temporary Written Consent Pursuant to Section 506 of the Merchant Marine Act, 1936, as Amended, for the Transfer of the JANIS GUZZLE to the Domestic Coastwise Trade

Notice is hereby given that Gulfcoast Transit Company (Gulfcoast), a U.S. company, by letter of April 15, 1994, requested temporary written consent pursuant to section 506 of the Merchant Marine Act, 1936, as amended (Act), for transfer of the construction-differential subsidy (CDS) built tug, M/V JANIS GUZZLE, to the domestic coastwise trade for not more than six months in the aggregate during the year 1994.

Gulfcoast is the owner and operator of the ARTUBAR integrated tug/barge combination JANIS GUZZLE/MARIE FLOOD. The M/V JANIS GUZZLE was constructed in 1979 pursuant to a CDS agreement, Contract MA/MSB–373, dated September 23, 1976. The barge MARIE FLOOD (Official Number 545015) was constructed in 1972 in Orange, Texas, as a coastwise qualified vessel. Gulfcoast placed the JANIS GUZZLE/MARIE FLOOD into service in 1990. Both vessels have Certificates of Documentation issued by the Coast Guard with coastwise endorsements.

In support of its request, Gulfcoast advises that it provides coastwise transportation for its affiliate company, Tampa Electric Company, under a long term contract for the movement of coal from the New Orleans, Louisiana area to Tampa, Florida. (The coal is utilized by Tampa Electric Company in its power generation facilities.) In addition, Gulfcoast's transportation service for its affiliate company is provided throughout the year, utilizing several coastwise qualified tugs, barges and tug/barge units owned by Gulfcoast.

Any person, firm, or corporation having any interest in the application for section 506 consent and desiring to submit comments concerning Gulfcoast's request must by 5 p.m. on May 18, 1994, file written comments in triplicate, to the Secretary, Maritime Administration, room 7300, Nassif Building, 400 Seventh Street SW., Washington, DC 20590. The Maritime Administration, as a matter of discretion, will consider any comments submitted and take such action as may be deemed appropriate.

Dated: April 29, 1994.

(Catalog of Federal Domestic Assistance Program No. 20.800 Construction-Differential Subsidies (CDSS))

By Order of the Maritime Administrator.

Joel C. Richard,

Assistant Secretary, Maritime Administration.

[FR Doc. 94–10738 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–81–M

National Highway Traffic Safety Administration

[Docket No. NCI 3257]

Motorcycle Helmets Manufactured by Frenchy's Worldwide Helmets; Public Proceeding Scheduled

AGENCY: National Highway Traffic Safety Administration (NHTSA).

ACTION: Notice of public meeting.

SUMMARY: NHTSA will hold a public meeting on June 1, 1994 regarding an initial determination that certain motorcycle helmets manufactured by Frenchy's Worldwide Helmets fail to comply with Federal Motor Vehicle Safety Standard No. 218.

FOR FURTHER INFORMATION CONTACT: John Lee, Office of Vehicle Safety Compliance, National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, DC 20590; 202–366–5299.

SUPPLEMENTARY INFORMATION: Pursuant to section 152(a) of the National Traffic and Motor Vehicle Safety Act of 1966, as amended, 15 U.S.C. 1412(a), NHTSA's Associate Administrator for Enforcement has made an initial determination that certain motorcycle helmets manufactured by Frenchy's Worldwide Helmets, (Frenchy's), do not comply with the requirements of Federal Motor Vehicle Safety Standard (FMVSS) No. 218, "Motorcycle Helmets," 49 CFR 571.218. Compliance tests performed for NHTSA indicate that Frenchy's model "B–13" helmets do not meet the impact attenuation, penetration, and retention system requirements of FMVSS No. 218 and therefore would not provide adequate protection to users in the event of a crash. In addition, the "B–13" helmets fail to comply with the labelling requirements of the Standard.

A public proceeding will be held at 10 a.m., on June 1, 1994 in room 2230, Department of Transportation Building, 400 Seventh Street, SW., Washington, DC, at which time the manufacturer will be afforded an opportunity to present data, views, and arguments to establish that the helmets covered by this initial determination comply with FMVSS No. 218.

Interested persons are invited to participate through written or oral presentations. Persons wishing to make oral presentations are requested to notify Ms. Elaine Beale, Office of Vehicle Safety Compliance, National Highway Traffic Safety Administration, room 6111, 400 Seventh Street, SW., Washington, DC 20590, 202–366–2832, before the close of business on May 25, 1994. Written comments must be submitted to the same address on or before May 27, 1994.

The agency's investigative file in this matter is available for public inspection during working hours (9:30 a.m. to 4 p.m.) in its Technical Reference Library, room 5108, 400 Seventh Street SW., Washington, DC 20590.

Authority: 15 U.S.C. § 1412; delegation of authority at 49 CFR 1.50(a) and 49 CFR 501.8.

Issued on: April 28, 1994.

William A. Boehly,

Associate Administrator for Enforcement.

[FR Doc. 94–10760 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–59–M

[Docket No. 93–79; Notice 2]

Fisher-Price, Inc.; Denial of Petition for Determination of Inconsequential Noncompliance

Fisher-Price, Inc. (Fisher-Price) of East Aurora, New York, determined that some of its child safety seats failed to comply with the flammability requirements of 49 CFR 571.213, "Child Restraint Systems," Federal Motor Vehicle Safety Standard (FMVSS) No. 213, and filed an appropriate report pursuant to 49 CFR Part 573. Fisher-Price also petitioned to be exempted from the notification and remedy requirements of the National Traffic and

Motor Vehicle Safety Act (15 U.S.C. 1381 et seq.) on the basis that the noncompliance was inconsequential as it related to motor vehicle safety.

Notice of receipt of the petition was published on November 9, 1993, and an opportunity afforded for comment (58 FR 59511). This notice denies the petition.

Paragraph S5.7 of FMVSS No. 213 states that "[e]ach material used in a child restraint system shall conform to the requirements of S4 of FMVSS No. 302 (571.302)." Paragraph S4.3(a) of FMVSS No. 302 states that "[w]hen tested in accordance with S5, material described in S4.1 and S4.2 shall not burn, nor transmit a flame front across its surface, at a rate of more than 4 inches per minute."

During the period of January 1988 through the present, Fisher-Price produced approximately 3.3 million child restraint seats with shoulder belt webbing that might not comply with the flammability requirements of FMVSS No. 213.

The Fisher-Price webbing restraint system is manufactured in three phases. First, raw webbing is manufactured by AlliedSignal in Knoxville, Tennessee. Second, the raw webbing is sent to another AlliedSignal plant located in Mexico, which cuts the webbing to length and attaches the buckles. Finally, the webbing/buckle assemblies are sent to Jones and Vining, Inc., in Lewiston, Maine, which attaches them to the "T-Shield," a soft, molded polyurethane cushion. A foam molding process is used to attach the T-Shield to the webbing.

NHTSA took two samples of the harness webbing from a Fisher-Price child safety seat and had them tested by the Detroit Testing Laboratory. The two samples of webbing burned at rates of 4.4 and 4.7 inches per minute, thus failing the test specified in FMVSS No. 213. (NHTSA notes that there was an additional failure on retest of 4.9 inches. These tests formed the basis of agency investigation NCI 3270). When the agency informed Fisher-Price of the test failures, Fisher-Price conducted further tests on the webbing, both in its raw state and in its molded state. AlliedSignal conducted FMVSS No. 302 compliance tests for Fisher-Price on webbing which had gone through the molding process at Jones and Vining (hereinafter "molded webbing"). On April 12, 1993 and May 10, 1993, eleven samples which were tested either self-extinguished or had burn rates from 1.84 to 2.91 inches per minute, thus complying with the standard. On August 19, 1993, AlliedSignal tested seven raw webbing samples, all of which either did not ignite or self extinguished, resulting in a burn rate of zero, and twelve molded webbing samples, yielding burn rates of 2.0 to 5.8 inches per minute. (NHTSA notes a slight inaccuracy in the petition. Data supplied during the course of the investigation indicate that the lowest burn rate rounded to the nearest tenth was 3.0 inches, rather than 2.0).

Fisher-Price supported its petition for inconsequential noncompliance with the following rationale, as well as webbing test photographs, test data, a videotape of the tests, and the professional resumes of two fire experts which are available for review in the NHTSA docket. In addition, Fisher-Price met with NHTSA officials to reemphasize some of the points that it presented in its petition. A record of this meeting is contained in the NHTSA docket.

Fisher-Price commissioned two fire experts, James H. Shanley, Jr., P.E., a licensed fire protection engineer, and Patrick M. Kennedy, an experienced fire investigator, to conduct a study to assess the impact on motor vehicle safety of the noncompliance. The study consisted of conducting tests to compare the webbing with typical children's clothing, to compare the webbing with other interior elements of a typical motor vehicle, to search available literature and databases for instances where the webbing in a child safety seat contributed to a fire, and to determine whether the noncompliance would have an impact on an individual's ability to evacuate a burning motor vehicle.

Among the tests which compared the burn rates and ignition temperatures of typical children's clothing to that of the noncompliant webbing, the first test, American Society for Testing and Materials (ASTM) D1929, "Standard Test Method for Ignition Properties of Plastics," was to determine ignition temperatures. The ignition temperature of the molded webbing was 796° Fahrenheit (F), ignition temperature of a 100 percent cotton "T" shirt was 571°F, and ignition temperature of 50 percent cotton/50 percent polyester sweatpants was 676°F. The study concluded that the molded webbing is "manifestly more resistant to ignition than typical children's clothing."

The second test, 16 CFR 1610 or ASTM D1230, "Standard Test Method for the Flammability of Apparel Textiles," was to determine the relative flammability of each of the three above-mentioned materials. This test determines the time it takes the sample to burn a distance of five inches while suspended at a 45° angle. In this test, the molded webbing took 13.51 times longer to burn than is allowed by the standard. Further, the "T" shirt and the sweatpants burned at rates that were three and 2.2 times faster, respectively, than the molded webbing.

The third test, ASTM 3659, "Standard Test Method for Flammability of Apparel Fabrics by Semi-Restraint Method," measures the burn rates in a vertical configuration. The average vertical burn rates of the materials were as follows: molded webbing—6.36 inches per minute; sweatpants—19.79 inches per minute; and "T" shirt—30.41 inches per minute. From these results, the study concluded that the molded webbing is significantly less flammable than typical children's clothing.

Finally, a series of tests were conducted to determine the relative ease or difficulty of igniting each of the three materials using ignition sources most typically expected to be found in a motor vehicle: A lit cigarette; a paper match and a butane lighter. None of the materials ignited using a smoldering cigarette placed on top of the horizontally suspended material sample. The "T" shirt ignited in one-fifth the time (3 seconds), and the sweatpants ignited in slightly less than one-fourth the time (4 seconds) it took the molded webbing to ignite (15 seconds) using a paper match flame. The "T" shirt ignited in slightly less than one-sixth the time (2.5 seconds), and the sweatpants ignited in nearly one-fifth the time (3 seconds) it took to ignite the molded webbing (14.4 seconds) using a butane lighter flame.

Messrs. Kennedy and Shanley concluded that, based on these tests and on their expertise in this area, when compared to the relative ease of ignition of typical children's clothing, the molded webbing material presents no risk to the safety of the occupant of the Fisher-Price car seat.

Messrs. Shanley and Kennedy also examined how the webbing would contribute to a vehicle fire in comparison with the other interior elements of a typical motor vehicle. They found that the molded webbing contained in the Fisher-Price child safety seats comprises 0.019 percent of the combustible material in the interior of the average motor vehicle; it weighs approximately 0.06 pound and the total combustible material in the average motor vehicle weighs 337 pounds. From this, they concluded that the molded webbing comprises an inconsequential percentage of material when compared to the total amount of combustible material contained in a typical motor vehicle's interior. Mr. Shanley concluded that "the removal of this material would have no effect on any

interior motor vehicle fire and, conversely, that its presence in the vehicle would not, to any degree, increase the risk, of an interior vehicle fire."

Messrs. Shanley and Kennedy also searched all available databases and source materials for information relating to the involvement of child car seats in interior motor vehicle fires. Their research focused on the possibility of an interior motor vehicle fire originating in a child car seat, especially where it appeared that the shoulder belt webbing may have been the original fuel source. Their search did not reveal any instances where an interior motor vehicle fire originated in a child car seat or where a car seat contributed in any way to an interior motor vehicle fire.

With regard to the occupants of a motor vehicle having sufficient time to evacuate the vehicle in the event it caught fire, Mr. Shanley stated that:

It is a basic principle of fire protection that the ability of a person to evacuate and survive a fire is strictly dependent upon two conditions:

(1) The severity or magnitude of the fire, and

(2) The time of exposure to the fire. In a motor vehicle fire situation, the threat to life is the inhalation of smoke and hot gases (asphyxiation) and exposure to the heat of the fire (burns). The design of most motor vehicles ensures that unimpaired occupants can evacuate quickly. Therefore, the goal of fire protection efforts must focus on reducing the severity of the fire. The severity of a fire is determined by its physical size, the quantity of available fuel, the total quantity of heat released, and the rate at which that heat is released. A complete assessment of the fire threat must include an assessment of all of these factors.

Limiting the flame spread rate of a motor vehicle's combustible interior materials, as measured and specified by FMVSS 302, does not suffice for a complete fire hazard assessment. The 0.06 lbs (sic) (30.2 grams) of webbing material used in Fisher-Price car seats is an insufficient quantity of material to produce a potentially lethal fire threat to the occupants of a motor vehicle. *Therefore, the time available for an occupant to safely evacuate and survive a motor vehicle fire is not influenced to any degree by a material, such as the molded webbing, which comprises a mere 0.019% of the total combustible material in a motor vehicle's interior* (emphasis original).

Fisher-Price argued that:

A remedial action campaign would not further the purposes of the Traffic and Vehicle Safety Act (the "Act"), 15 U.S.C. 1391 et seq. (1982), in promoting the marketing of safe motor vehicles and their accessories, such as child car seats. The dominant theme of the regulations propounded in furtherance of the Act is that accessories such as car seats be safe; indeed, the stated basis in the Act for the granting of an exemption from the remedial action requirements of the Act is that the noncompliance would have only an inconsequential impact on the safety of motor vehicles. 15 U.S.C. 1417; 49 CFR 556.1, 556.2.

Child safety advocates, automobile safety advocates and the NHTSA all acknowledge the negative impact of a remedial action campaign based on a technical noncompliance with a particular regulation that does not, as a practical matter, have any effect on the safety of the occupants of a motor vehicle. The NHTSA itself has reported that many child car seat owners ignore car seat recalls that they do not view as posing a serious problem or threat. See Transcript, "The 1993 Child Passenger Safety Symposium Public Comment Session On Child Safety Seat Recalls," March 14, 1993.

Fisher-Price also argued that a negative consequence of a remedial action campaign resulting from what it feels is a technical noncompliance, would be a general lack of confidence in child car seats. It feels that there is a danger that parents of young children might discontinue the use of child car seats out of concern that child car seats are not safe, in spite of the fact that all states currently have laws on their books mandating the use of such seats for specified child groups.

Fisher-Price concluded that:

The tests performed by Messrs. Kennedy and Shanley clearly demonstrate that a noncompliance with the requirements of FMVSS 302 as it applies to the molded webbing used in the Fisher-Price car seats is inconsequential as it relates to motor vehicle safety. The empirical data gathered from these tests establish that, to the extent a child occupant of a car seat faces a risk of injury from fire, that risk arises as a result of the clothing the child wears, not from the flammability of the molded webbing material. In addition, the webbing constitutes only an inconsequential percentage (0.019%) of the total combustible material located in the interior of the average motor vehicle and therefore has no impact on the fire safety of a motor vehicle or on the ability of an individual to safely evacuate a burning motor vehicle. Of equal import, research has revealed no reported instance in which the shoulder belt webbing of a child car seat has been the material first ignited in a motor vehicle fire or in which a single child was burned as a result of a fire originating in the shoulder belt webbing of a child car seat.

No comments were received on the petition.

NHTSA has given careful consideration to the petitioner's arguments. There is no disagreement that a noncompliance has occurred. Molded webbing as used in completed child restraint systems has burned at a rate that significantly exceeds the maximum limit imposed by the standard. The average burn rate in the two initial tests and one retest conducted by NHTSA is 4.67 inches. In the twelve tests on molded webbing conducted by AlliedSignal, there were only four tests in which the burn rate was less than 4 inches. The average burn rate for the eight failing tests was 4.71 inches (and for all twelve tests, 4.21 inches).

NHTSA believes that flammability requirements for child restraints should be stringently adhered to for the following reasons. The test requirement of not more than 4 inches a minute is justified by the need "to prevent injury to occupants from rapidly spreading interior fires, to allow sufficient time for the driver to stop the vehicle, and, if necessary, for occupants to leave it before injury occurs" (36 FR 10817). This is even more critical in the case of child restraints as a typical small child is not capable of exiting a vehicle without help. Therefore, some additional time is required for another person to remove the child. Moreover, the child most often is in the rear seat and the adult is in front, adding to the time factor. Finally, because the webbing rests against the child's body, noncompliant webbing has great potential for injuring the child if ignited.

In issuing FMVSS No. 302 in 1971 (36 FR 289), the agency cited matches, cigarettes or short circuits in interior wiring as examples of sources for fires occurring in the interior of vehicles. The agency believes that there are situations where the straps could become ignited. One example is children in the back seat of a car, playing with matches, a cigarette lighter, or other ignition source near a child restrained in a Fisher-Price seat.

In point of fact, had the tests been conducted under real life circumstances, the results could have been worse. Webbing samples are tested horizontally, but webbing is worn vertically. If a fire begins at the bottom of webbing, it will travel upward at a faster rate than it would in a horizontal placement.

The petitioner attaches importance to its arguments that there is a higher risk of injury to a child through ignition of its clothing rather than from the webbing material, that the webbing constitutes only a very small percentage of the total combustible material located in the interior compartment, and that there is no reported instance in which injuries are attributable to ignition of shoulder belt webbing.

NHTSA does not consider these arguments well taken. In any motor vehicle fire, whether or not involving children, there is likely to be higher risk to an occupant from ignition of clothing

than from ignition of interior components. That is because Standard No. 302 (and Standard No. 213) does not set fire retardant standards for clothing. The aim of NHTSA's standards is to reduce the likelihood of ignition of interior components, or to limit their burn rate if they ignite, and this is to be accomplished within the parameters of NHTSA's jurisdiction over motor vehicles and motor vehicle equipment. With respect to child restraints, it is important to inhibit or delay combustion so that, as NHTSA has noted above, the driver can pull to the side of the road, stop, exit the vehicle, and remove the child from it. Although the chance of ignition of shoulder webbing may not be as great as other components of child seating systems that present a broader fabric face for flame to travel across, all components must comply with the standard, and it is not impracticable for manufacturers to assure that they do so.

The statement that consumers ignore recalls because of their number and frequency is unsubstantiated. Further, NHTSA views it equally unlikely that, because of campaigns, consumers would conclude that child restraints are unsafe and decline to use them. Indeed, the opposite is more likely the case. Responses to safety notifications depends on factors including the type of noncompliance or defect, the type and extent of the notification campaign, media coverage, and the efforts of manufacturers.

Future campaigns are more likely to be effective than past ones. FMVSS No. 213 has been amended to provide for the registration of child restraints. The purpose of the program is to increase the effectiveness of campaigns to recall child seats. It requires manufacturers to take steps that will increase their ability to inform owners of particular child restrains about problems in these restraints and by encouraging owners to register their child seats.

For the foregoing reasons, the petitioner has failed to meet its burden of persuasion that the noncompliance herein described is inconsequential as it relates to motor vehicle safety, and its petition is denied.

(15 U.S.C. 1417; delegations of authority at 49 CFR 1.50 and 49 CFR 501.8)

Issued on March 22, 1994.

Barry Felrice,

Associate Administrator for Rulemaking.

[FR Doc. 94–10860 Filed 5–2–94; 2:46 pm]

BILLING CODE 4910–59–P

[Docket No. 94–08; Notice 2]

Determination That Nonconforming 1989 Peugeot 405 Passenger Cars Are Eligible for Importation

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.

ACTION: Notice of determination by NHTSA that nonconforming 1989 Peugeot 405 passenger cars are eligible for importation.

SUMMARY: This notice announces the determination by NHTSA that 1989 Peugeot 405 passenger cars not originally manufactured to comply with all applicable Federal motor vehicle safety standards are eligible for importation into the United States because they are substantially similar to a vehicle originally manufactured for importation into the sale in United States and certified by its manufacturer as complying with the safety standards (the U.S.-certified version of the 1989 Peugeot 405), and they are capable of being readily modified to conform to the standards.

DATES: The determination is effective as of the date of its publication in the **Federal Register.**

FOR FURTHER INFORMATION CONTACT: Ted Bayler, Office of Vehicle Safety Compliance, NHTSA (202–366–5306).

SUPPLEMENTARY INFORMATION:

Background

Under section 108(c)(3)(A)(i) of the National Traffic and Motor Vehicle Safety Act (the Act), 15 U.S.C. 1397(c)(3)(A)(i), a motor vehicle that was not originally manufactured to conform to all applicable Federal motor vehicle safety standards must be refused admission into the United States on and after January 31, 1990, unless NHTSA has determined that the motor vehicle is substantially similar to a motor vehicle originally manufactured for importation into and sale in the United States, certified under section 114 of the Act, and of the same model year as the model of the motor vehicle to be compared, and is capable of being readily modified to conform to all applicable Federal motor vehicle safety standards.

Petitions for eligibility determinations may be submitted by either manufacturers or importers who have registered with NHTSA pursuant to 49 CFR part 592. As specified in 49 CFR 593.7, NHTSA publishes notice in the **Federal Register** of each petition that it receives, and affords interested persons an opportunity to comment on the petition. At the close of the comment period, NHTSA determines, on the basis of the petition and any comments that it has received, whether the vehicle is eligible for importation. The agency then publishes this determination in the **Federal Register.**

G&K Automotive Conversion, Inc. of Santa Ana, California (Registered Importer R–90–007) petitioned NHTSA to determine whether 1989 Peugeot 405 passenger cars are eligible for importation into the United States. NHTSA published notice of the petition on January 27, 1994 (59 FR 3920) to afford an opportunity for public comment. The reader is referred to that notice for a thorough description of the petition. No comments were received in response to the notice. Based on its review of the information submitted by the petitioner, NHTSA has determined to grant the petition.

Vehicle Eligibility Number for Subject Vehicles

The importer of a vehicle admissible under any final determination must indicate on the form HS–7 accompanying entry the appropriate vehicle eligibility number indicating that the vehicle is eligible for entry. VSP 65 is the vehicle eligibility number assigned to vehicles admissible under this determination.

Final Determination

Accordingly, on the basis of the foregoing, NHTSA hereby determines that a 1989 Peugeot 405 not originally manufactured to comply with all applicable Federal motor vehicle safety standards is substantially similar to a 1989 Peugeot 405 originally manufactured for importation into and sale in the United States and certified under section 114 of the National Traffic and Motor Vehicle Safety Act, and is capable of being readily modified to conform to all applicable Federal motor vehicle safety standards.

Authority: 15 U.S.C. 1397(c)(3)(A)(i)(I) and (C)(ii); 49 CFR 593.8; delegations of authority at 49 CFR 1.50 and 501.8.

Issued on: April 29, 1994.

William A. Boehly,

Associate Administrator for Enforcement.

[FR Doc. 94–10761 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–59–M

[Docket No. 94–32; Notice 1]

Receipt of Petition for Determination That Nonconforming 1992 Mercedes-Benz 190E Passenger Cars Are Eligible for Importation

AGENCY: National Highway Traffic Safety Administration, DOT.

ACTION: Notice of receipt of petition for determination that nonconforming 1992 Mercedes-Benz 190E passenger cars are eligible for importation.

SUMMARY: This notice announces receipt by the National Highway Traffic Safety Administration (NHTSA) of a petition for a determination that a 1992 Mercedes-Benz 190E that was not originally manufactured to comply with all applicable Federal motor vehicle safety standards is eligible for importation into the United States because (1) it is substantially similar to a vehicle that was originally manufactured for importation into and sale in the United States and that was certified by its manufacturer as complying with the safety standards, and (2) it is capable of being readily modified to conform to the standards.

DATES: The closing date for comments on the petition is June 6, 1994.

ADDRESSES: Comments should refer to the docket number and notice number, and be submitted to: Docket Section, Room 5109, National Highway Traffic Safety Administration, 400 Seventh St., SW., Washington, DC 20590. [Docket hours are from 9:30 am to 4 pm.]

FOR FURTHER INFORMATION CONTACT: Ted Bayler, Office of Vehicle Safety Compliance, NHTSA (202–366–5306).

SUPPLEMENTARY INFORMATION:

Background

Under section 108(c)(3)(A)(i) of the National Traffic and Motor Vehicle Safety Act (the Act), 15 U.S.C. 1397(c)(3)(A)(i), a motor vehicle that was not originally manufactured to conform to all applicable Federal motor vehicle safety standards shall be refused admission into the United States on and after January 31, 1990, unless NHTSA has determined that the motor vehicle is substantially similar to a motor vehicle originally manufactured for importation into and sale in the United States, certified under section 114 of the Act, and of the same model year as the model of the motor vehicle to be compared, and is capable of being readily modified to conform to all applicable Federal motor vehicle safety standards.

Petitions for eligibility determinations may be submitted by either manufacturers or importers who have registered with NHTSA pursuant to 49 CFR part 592. As specified in 49 CFR 593.7, NHTSA publishes notice in the Federal Register of each petition that it receives, and affords interested persons an opportunity to comment on the petition. At the close of the comment period, NHTSA determines, on the basis of the petition and any comments that it has received, whether the vehicle is eligible for importation. The agency then publishes this determination in the Federal Register.

J.K. Motors, Inc. of Kingsville, Maryland ("J.K.") (Registered Importer No. R–90–006) has petitioned NHTSA to determine whether 1992 Mercedes-Benz 190E (Model ID 201.029) passenger cars that were not originally manufactured to comply with all applicable Federal motor vehicle safety standards are eligible for importation into the United States. The vehicle which J.K. believes is substantially similar is the 1992 Mercedes-Benz 190E that Daimler Benz AG manufactured for importation into and sale in the United States, and certified as conforming to all applicable Federal motor vehicle safety standards.

The petitioner stated that it has carefully compared the non-U.S.-certified 1992 Mercedes-Benz 190E to its U.S.-certified counterpart, and found the two vehicles to be substantially similar with respect to most applicable Federal motor vehicle safety standards.

J.K. submitted information with its petition intended to demonstrate that the non-U.S.-certified 1992 Mercedes-Benz 190E, as originally manufactured, conforms to many Federal motor vehicle safety standards in the same manner as its U.S.-certified counterpart, or is capable of being readily modified to conform to those standards.

Specifically, the petitioner claims that the non-U.S.-certified 1992 Mercedes-Benz 190E is identical to its U.S.-certified counterpart with respect to compliance with Standards Nos. 102 Transmission Shift Level Sequence * * *, 103 Defrosting and Defogging Systems, 104 Windshield Wiping and Washing Systems, 105 Hydraulic Brake Systems, 106 Brake Hoses, 107 Reflecting Surfaces, 109 New Pneumatic Tires, 113 Hood Latch Systems, 116 Brake Fluid, 124 Accelerator Control Systems, 201 Occupant Protection in Interior Impact, 202 Head Restraints, 203 Impact Protection for the Driver From the Steering Control System, 204 Steering Control Rearward Displacement, 205 Glazing Materials, 207 Seating Systems, 209 Seat Belt Assemblies, 210 Seat Belt Assembly Anchorages, 211 Wheel Nuts, Wheel Discs and Hubcaps, 212 Windshield Retention, 216 Roof Crush Resistance, 219 Windshield Zone Intrusion, and 302 Flammability of Interior Materials.

Petitioner also contends that the vehicle is capable of being readily modified to meet the following standards, in the manner indicated:

Standard No. 101 Controls and Displaying: (a) Substitution of a lens marked "Brake" for a lens with an ECE symbol on the brake failure indicator lamp; (b) recalibration of the speedometer/odometer from kilometers to miles per hour.

Standard No. 108 Lamps, Reflective Devices and Associated Equipment: (a) Installation of U.S.-model headlamp assemblies which incorporate sealed beam headlamps and front sidemarkers; (b) installation of U.S.-model taillamp assemblies which incorporate rear sidemarkers; (c) installation of a high mounted stop lamp.

Standard No. 110 Tire Selection and Rims: Installation of a tire information placard.

Standard No. 111 Rearview Mirrors: Replacement of the passenger side rearview mirror, which is convex but does not bear the required warning statement.

Standard No. 114 Theft Protection: Installation of a buzzer microswitch in the steering lock assembly, and a warning buzzer.

Standard No. 115 Vehicle Identification Number: Installation of a VIN plate that can be read from outside the left windshield pillar, and a VIN reference label on the edge of the door or latch post nearest the driver.

Standard No. 118 Power Window Systems: Rewiring of the power window system so that the window transport is inoperative when the ignition is turned off.

Standard No. 206 Door Locks and Door Retention Components: Replacement of rear door locks and retention components with U.S.-model parts.

Standard No. 208 Occupant Crash Protection: (a) Installation of an ignition switch-actuated seat belt warning buzzer; (b) installation of a factory-supplied knee bolster to augment the vehicle's airbag-based automatic restraint system. The petitioner claims that the airbag supplied on the vehicle is identical to that found on its U.S.-certified counterpart.

Standard No. 214 Side Impact Protection: Installation of reinforcing beams in doors.

Standard No. 301 Fuel System Integrity: Installation of a rollover valve in the fuel tank vent line between the fuel tank and the evaporative emissions collection canister.

Additionally, the petitioner states that the bumpers on the non-U.S.-certified 1992 Mercedes-Benz 190E must be reinforced to comply with the Bumper Standard found at 49 CFR part 581.

Interested persons are invited to submit comments on the petition described above. Comments should refer to the docket number and to submitted

to: Docket Section, National Highway Traffic Safety Administration, room 5109, 400 Seventh Street, SW., Washington, DC 20590. It is requested but not required that 10 copies be submitted.

All comments received before the close of business on the closing date indicated above will be considered, and will be available for examination in the docket at the above address both before and after the date. To the extent possible, comments filed after the closing date will also be considered. Notice of final action on the petition will be published in the **Federal Register** pursuant to the authority indicated below.

Authority: 15 U.S.C. 1397(c)(3)(A)(i)(I) and (C)(iii); 49 CFR 593.8; delegations of authority at 49 CFR 1.50 and 501.8.

Issued on: April 29, 1994.

William A. Boehly,

Associate Administrator for Enforcement.

[FR Doc. 94–10762 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–59–M

[Docket No. 94–33; Notice 1]

Receipt of Petition for Determination That Nonconforming 1988 Volkswagen Golf Rallye Passenger Cars Are Eligible for Importation

AGENCY: National Highway Traffic Safety Administration, DOT.

ACTION: Notice of receipt of petition for determination that nonconforming 1988 Volkswagen Golf Rallye passenger cars are eligible for importation.

SUMMARY: This notice announces receipt by the National Highway Traffic Safety Administration (NHTSA) of a petition for a determination that a 1988 Volkswagen Golf Rallye that was not originally manufactured to comply with all applicable Federal motor vehicle safety standards is eligible for importation into the United States because (1) it is substantially similar to a vehicle that was originally manufactured for importation into and sale in the United States and that was certified by its manufacturer as complying with the safety standards, and (2) it is capable of being readily modified to conform to the standards.

DATES: The closing date for comments on the petition is June 6, 1994.

ADDRESSES: Comments should refer to the docket number and notice number, and be submitted to: Docket Section, room 5109, National Highway Traffic Safety Administration, 400 Seventh St., SW., Washington, DC 20590. [Docket hours are from 9:30 am to 4 pm]

FOR FURTHER INFORMATION CONTACT: Ted Bayler, Office of Vehicle Safety Compliance, NHTSA (202–366–5306).

SUPPLEMENTARY INFORMATION:

Background

Under section 108(c)(3)(A)(i) of the National Traffic and Motor Vehicle Safety Act (the Act), 15 U.S.C. 1397(c)(3)(A)(i), a motor vehicle that was not originally manufactured to conform to all applicable Federal motor vehicle safety standards shall be refused admission into the United States on and after January 31, 1990, unless NHTSA has determined that the motor vehicle is substantially similar to a motor vehicle originally manufactured for importation into and sale in the United States, certified under section 114 of the Act, and of the same model year as the model of the motor vehicle to be compared, and is capable of being readily modified to conform to all applicable Federal motor vehicle safety standards.

Petitions for eligibility determinations may be submitted by either manufacturers or importers who have registered with NHTSA pursuant to 49 CFR part 592. As specified in 49 CFR 593.7, NHTSA publishes notice in the **Federal Register** of each petition that it receives, and affords interested persons an opportunity to comment on the petition. At the close of the comment period, NHTSA determines, on the basis of the petition and any comments that it has received, whether the vehicle is eligible for importation. The agency then publishes this determination in the **Federal Register**.

G&K Automotive Conversion, Inc. of Santa Ana, California ("G&K") (Registered Importer No. R–90–007) has petitioned NHTSA to determine whether 1988 Volkswagen Golf Rallye passenger cars are eligible for importation into the United States. The vehicle which G&K believes is substantially similar is the 1988 Volkswagen Golf GTI. G&K has submitted information indicating that Volkswagenwerke A.G., the company that manufactured the 1988 Volkswagen Golf GTI, certified that vehicle as conforming to all applicable Federal motor vehicle safety standards and offered it for sale in the United States.

The petitioner claims that it carefully compared the 1988 Volkswagen Golf Rallye to the 1988 Volkswagen Golf GTI, and found the two vehicles to be substantially similar with respect to compliance with most Federal motor vehicle safety standards.

G&K submitted information with its petition intended to demonstrate that the 1988 Volkswagen Golf Rallye, as originally manufactured, conforms to many Federal motor vehicle safety standards in the same manner as the 1988 Volkswagen Golf GTI, or is capable of being readily modified to conform to those standards.

Specifically, the petitioner claims that the 1988 Volkswagen Golf Rallye is identical to the certified 1988 Volkswagen Golf GTI with respect to compliance with Standards Nos. 102 Transmission Shift Lever Sequence * * *, 103 Defrosting and Defogging Systems, 104 Windshield Wiping and Washing Systems, 105 Hydraulic Brake Systems, 106 Brake Hoses, 107 Reflecting Surfaces, 109 New Pneumatic Tires, 113 Hood Latch Systems, 116 Brake Fluid, 124 Accelerator Control Systems, 201 Occupant Protection in Interior Impact, 202 Head Restraints, 203 Impact Protection for the Driver From the Steering Control System, 204 Steering Control Rearward Displacement, 205 Glazing Materials, 206 Door Locks and Door Retention Components, 207 Seating Systems, 209 Seat Belt Assemblies, 210 Seat Belt Assembly Anchorages, 211 Wheel Nuts, Wheel Discs and Hubcaps, 212 Windshield Retention, 216 Roof Crush Resistance, 219 Windshield Zone Intrusion, and 302 Flammability of Interior Materials.

Petitioner also contends that the vehicle is capable of being readily modified to meet the following standards, in the manner indicated:

Standard No. 101 Controls and Displays: (a) Substitution of a lens marked "Brake" for a lens with an ECE symbol on the brake failure indicator lamp; (b) recalibration of the speedometer/odometer from kilometers to miles per hour.

Standard No. 108 Lamps, Reflective Devices and Associated Equipment: (a) Installation of U.S.-model headlamp assemblies which incorporate sealed beam headlamps and front sidemarkers; (b) installation of U.S.-model taillamp assemblies which incorporate rear sidemarkers; (c) installation of a high mounted stop lamp.

Standard No. 110 Tire Selection and Rims: installation of a tire information placard.

Standard No. 111 Rearview Mirror: replacement of the passenger side rearview mirror, which is convex but lacks the required warning statement.

Standard No. 114 Theft Protection: installation of a buzzer microswitch in the steering lock assembly, and a warning buzzer.

Standard No. 115 Vehicle Identification Number: installation of a VIN plate that can be read from outside

the left windshield pillar, and a VIN reference label on the edge of the door or latch post nearest the driver.

Standard No. 208 Occupant Crash Protection: (a) installation of a seat belt warning buzzer; (b) replacement of the existing Type 1 rear seat belts with U.S.-model belts equipped with retractors.

Standard No. 214 Side Door Strength: installation of reinforcing beams.

Standard No. 301 Fuel System Integrity: installation of a rollover valve in the fuel tank vent line between the fuel tank and the evaporative emissions collection canister.

Additionally, the petitioner states that the bumpers on the 1988 Volkswagen Golf Rallye must be reinforced to comply with the Bumper Standard found in 49 CFR part 581.

Interested persons are invited to submit comments on the petition described above. Comments should refer to the docket number and be submitted to: Docket Section, National Highway Traffic Safety Administration, room 5109, 400 Seventh Street, SW., Washington, DC 20590. It is requested but not required that 10 copies be submitted.

All comments received before the close of business on the closing date indicated above will be considered, and will be available for examination in the docket at the above address both before and after that date. To the extent possible, comments filed after the closing date will also be considered. Notice of final action on the petition will be published in the **Federal Register** pursuant to the authority indicated below.

Authority: 15 U.S.C. 1397(c)(3) (A)(i)(I) and (C)(ii); 49 CFR 593.8; delegations of authority at 49 CFR 1.50 and 501.8.

Issued on: April 29, 1994.

William A. Boehly,

Associate Administrator for Enforcement.

[FR Doc. 94–10763 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–59–M

[Docket No. 94–34; Notice 1]

Receipt of Petition for Determination That Nonconforming 1971 Rolls Royce Corniche Passenger Cars Are Eligible for Importation

AGENCY: National Highway Traffic Safety Administration, DOT.

ACTION: Notice of receipt of petition for determination that nonconforming 1971 Rolls Royce Corniche passenger cars are eligible for importation.

SUMMARY: This notice announces receipt by the National Highway Traffic Safety Administration (NHTSA) of a petition for a determination that a 1971 Rolls Royce Corniche that was not originally manufactured to comply with all applicable Federal motor vehicle safety standards is eligible for importation into the United States because (1) it is substantially similar to a vehicle that was originally manufactured for importation into and sale in the United States and that was certified by its manufacturer as complying with the safety standards, and (2) it is capable of being readily modified to conform to the standards.

DATES: The closing date for comments on the petition is June 6, 1994.

ADDRESSES: Comments should refer to the docket number and notice number, and be submitted to: Docket Section, room 5109, National Highway Traffic Safety Administration, 400 Seventh St., SW., Washington, DC 20590. [Docket hours are from 9:30 a.m. to 4 p.m.]

FOR FURTHER INFORMATION CONTACT: Ted Bayler, Office of Vehicle Safety Compliance, NHTSA (202)–366–5306).

SUPPLEMENTARY INFORMATION:

Background

Under Section 108(c)(3)(A)(i) of the National Traffic and Motor Vehicle Safety Act (the Act), 15 U.S.C. 1397(c)(3)(A)(i), a motor vehicle that was originally manufactured to conform to all applicable Federal motor vehicle safety standards shall be refused admission into the United States on and after January 31, 1990, unless NHTSA has determined that the motor vehicle is substantially similar to a motor vehicle originally manufactured for importation into and sale in the United States, certified under section 114 of the Act, and of the same model year as the model of the motor vehicle to be compared, and is capable of being readily modified to conform to all applicable Federal motor vehicle safety standards.

Petitions for eligibility determinations may be submitted by either manufacturers or importers who have registered with NHTSA pursuant to 49 CFR Part 592. As specified in 49 CFR 593.7, NHTSA publishes notice in the **Federal Register** of each petition that it receives, and affords interested persons an opportunity to comment on the petition. At the close of the comment period, NHTSA determines, on the basis of the petition and any comments that it has received, whether the vehicle is eligible for importation. The agency then publishes this determination in the **Federal Register**.

J.K. Motors of Kingsville, Maryland ("J.K.") (Registered Importer R–90–006) has petitioned NHTSA to determine whether 1971 Rolls Royce Corniche passenger cars are eligible for importation into the United States. The vehicle which J.K. believes is substantially similar is the 1971 Rolls Royce Corniche that was manufactured for importation into and sale in the United States and certified by its manufacturer, Rolls Royce Motors, Inc., as conforming to all applicable Federal motor vehicle safety standards.

The petitioner stated that it carefully compared the non-U.S. certified version of the 1971 Rolls Royce Corniche to its U.S. certified counterpart, and found that the two vehicles are substantially similar with respect to compliance with most applicable Federal motor vehicle safety standards.

J.K. submitted information with its petition intended to demonstrate that the non-U.S. certified 1971 Rolls Royce Corniche, as originally manufactured, conforms to many Federal motor vehicle safety standards in the same manner as its U.S. certified counterpart, or is capable of being readily modified to conform to those standards.

Specifically, the petitioner claims that the non-U.S. certified 1971 Rolls Royce Corniche is identical to its U.S. certified counterpart with respect to compliance with Standards Nos. 102 Transmission Shift Lever Sequence * * *, 103 Defrosting and Defogging Systems, 104 Windshield Wiping and Washing Systems, 105 Hydraulic Brake Systems, 106 Brake Hoses, 107 Reflecting Surfaces, 109 New Pneumatic Tires, 111 Rearview Mirrors, 113 Hood Latch Systems, 116 Brake Fluid, 124 Accelerator Control Systems, 201 Occupant Protection in Interior Impact, 202 Head Restraints, 203 Impact Protection for the Driver From the Steering Control System, 204 Steering Control Rearward Displacement, 205 Glazing Materials, 206 Door Locks and Door Retention Components, 207 Seating Systems, 208 Occupant Crash Protection, 209 Seat Belt Assemblies, 210 Seat Belt Assembly Anchorages, 211 Wheel Nuts, Wheel Discs and Hubcaps, 212 Windshield Retention, 216 Roof Crush Resistance, 219 Windshield Zone Intrusion, and 302 Flammability of Interior Materials.

Additionally, the petitioner states that the 1971 Rolls Royce Corniche complies with the Bumper Standard found in 49 CFR part 581.

Petitioner also contends that the 1971 Rolls Royce Corniche is capable of being readily modified to meet the following standards, in the manner indicated:

Standard No. 101 Controls and Displays: (a) Substitution of a lens marked "Brake" for a lens with an ECE symbol on the brake failure indicator

lamp; (b) installation of a seat belt warning lamp; (c) recalibration of the speedometer/odometer from kilometers to miles per hour.

Standard No. 108 Lamps, Reflective Devices and Associated Equipment: (a) Installation of U.S.-model headlamp assemblies which incorporate sealed beam headlamps and front sidemarkers; (b) installation of U.S.-Model taillamp assemblies which incorporate rear sidemarkers: (c) installation of a high mounted stop lamp.

Standard No. 110 Tire Selection and Rims: installation of a tire information placard.

Standard No. 114 Theft Protection: installation of a buzzer microswitch in the steering lock assembly, and a warning buzzer.

Standard No. 115 Vehicle Identification Number: installation of a VIN plate that can be read from outside the left windshield pillar, and a VIN reference label on the edge of the door or latch post nearest the driver.

Standard No. 118 Power Window Systems: installation of a relay in the power window circuit so that the window transport is inoperative when the ignition is switched off.

Standard No. 301 Fuel System Integrity: installation of a check valve and factory-supplied gas cap to prevent any fuel loss in the event of a 30 mph front or rear impact.

Interested persons are invited to submit comments on the petition described above. Comments should refer to the docket number and be submitted to: Docket Section, National Highway Traffic Safety Administration, room 5109, 400 Seventh Street, SW., Washington, DC 20590. It is requested but not required that 10 copies be submitted.

All comments received before the close of business on the closing date indicated above will be considered, and will be available for examination in the docket at the above address both before after that date. To the extent possible, comments filed after the closing date will be considered. Notice of final action on the petition will be published in the **Federal Register** pursuant to the authority indicated below.

Authority: 15 U.S.C. 1397(c)(3)(A)(i)(I) and (C)(ii); 49 CFR 593.8; delegations of authority at 49 CFR 1.50 and 501.8.

Issued on: April 29, 1994.

William A. Boehly,

Associate Administrator for Enforcement.

[FR Doc. 94–10764 Filed 5–4–94; 8:45 am]

BILLING CODE 4910–59–M

DEPARTMENT OF THE TREASURY

Internal Revenue Service

[Delegation Order No. 60 (Rev. 7)]

Delegation of Authority

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Delegation of Authority.

SUMMARY: Authority to settle cases docketed in the Tax Court.

EFFECTIVE DATE: May 5, 1994.

FOR FURTHER INFORMATION CONTACT: Rebecca Harrigal, CC:DOM:FS:FI&P, room 4043, 1111 Constitution Avenue, NW., Washington, DC 20224, (202) 622–7870 (not a toll-free call).

With respect to cases docketed in the United States Tax Court, the authority vested in the Commissioner of Internal Revenue by 26 CFR 301.6020–1, 26 CFR 301.6201–1, 26 CFR 301.7701–9, and Treasury Department Order No. 150–10 is hereby delegated and pursuant to the authority vested in Chief Counsel for the Internal Revenue Service by General Counsel Legal Division Order No. 4 it is hereby delegated:

1. Chief Counsel's delegate (hereinafter Counsel) will have exclusive jurisdiction over any case docketed in the Tax Court if the notice of deficiency, liability or other determination was issued by Appeals officials; if the notice of deficiency, liability or other determination was issued after appeals consideration of all petitioned issues by the Employee Plans and Exempt Organizations function; if the notice of deficiency, liability or final adverse determination letter was issued by a district director and is based upon a National Office ruling or National Office Technical Advice in that case involving a qualification of an employee plan or tax exemption and/or foundation status of an organization (but only to the extent the case involved such issue); or, except as provided in paragraph 3, if the case was docketed under Internal Revenue Code sections 6110, 7477, or 7478. Jurisdiction will vest with Counsel at the time such cases are docketed with the Court.

2. Appeals will have exclusive jurisdiction to settle in whole or part, (but no later than the receipt of the trial calendar in regular cases and no later than 15 days before the calendar call in S cases) cases docketed in the Tax Court, except cases described in paragraph 1 of the Delegation Order. If Appeals concludes that the case is not susceptible of settlement, Counsel will have jurisdiction over the case.

3. The Associate Chief Counsel (Domestic) will have settlement jurisdiction over cases in his/her jurisdiction for any case docketed in the Tax Court under Internal Revenue Code section 7478. The Associate Chief Counsel (Domestic) and the Associate Chief Counsel (International) will have settlement jurisdiction over cases in his/her jurisdiction for any case docketed in the Tax Court under Code section 6110.

4. The authority of Chief Counsel's delegate to redelegate is contained in Chief Counsel's Order No. 1030.1B, issued July 2, 1978.

5. To the extent that the authority previously exercised consistent with this Order may require ratification, it is hereby approved and ratified.

6. Delegation Order No. 60 (Rev. 6), effective May 12, 1986, is superseded.

Dated: April 11, 1994.

David L. Jordan,

Acting Chief Counsel.

Dated: April 16, 1994.

Michael P. Dolan,

Deputy Commissioner.

[FR Doc. 94–10863 Filed 5–4–94; 8:45 am]

BILLING CODE 4830–01–U

Sunshine Act Meetings

Federal Register
Vol. 59, No. 86
Thursday, May 5, 1994

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 59 FR 22216, April 26, 1994.

PREVIOUSLY ANNOUNCED TIME AND DATE OF MEETING: 2:00 p.m. (Eastern time), Tuesday, May 10, 1994.

CHANGE IN THE MEETING:

Closed Session

The closed session of the meeting has been cancelled.

CONTACT PERSON FOR MORE INFORMATION: Frances M. Hart, Executive Officer on (202) 663–4070.

Dated: May 3, 1994.

Frances M. Hart,

Executive Officer, Executive Secretariat.

[FR Doc. 94–10999 Filed 5–3–94; 3:04 pm]

BILLING CODE 6750–06–M

FEDERAL ELECTION COMMISSION

"FEDERAL REGISTER" NUMBER: 94–10460.

PREVIOUSLY ANNOUNCED DATE AND TIME: Thursday, May 5, 1994, 10:00 a.m., Meeting Open to the Public.

THE FOLLOWING ITEM WAS ADDED TO THE AGENDA: Congressman Thomas' Request.

DATE AND TIME: Tuesday, May 10, 1994 at 10:00 a.m.

PLACE: 999 E Street, N.W. Washington, D.C. (Ninth Floor.)

STATUS: This Meeting Will Be Closed to the Public.

ITEMS TO BE DISCUSSED:

Compliance matters pursuant to 2 U.S.C. § 437g.
Audits conducted pursuant to 2 U.S.C. § 437g, § 438(b), and Title 26, U.S.C.
Matters concerning participation in civil actions or proceedings or arbitration
Internal personnel rules and procedures or matters affecting a particular employee

DATE AND TIME: Wednesday, May 11, 1994 at 10:00 a.m.

PLACE: 999 E Street, N.W., Washington, D.C.

STATUS: This Meeting Will Be Open to the Public.

ITEMS TO BE DISCUSSED:

Correction and Approval of Minutes
Status of Regulations Projects
Future Meetings
MCFL Rulemaking: Summary of Comments and Draft Final Rules (continued from meeting of April 18, 1994)
Administrative Matters

PERSON TO CONTACT FOR INFORMATION: Ron Harris, Press Officer, Telephone: (202) 219–4155.

Delores Hardy,

Administrative Assistant.

[FR Doc. 94–1099 Filed 5–3–94; 8:45 am]

BILLING CODE 6715–01–M

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

FEDERAL REGISTER CITATION OF PREVIOUS ANNOUNCEMENT: 59 FR 22046, April 28, 1994.

PREVIOUSLY ANNOUNCED TIME AND DATE OF THE MEETING: 11:30 a.m., Monday, May 2, 1994.

CHANGES IN THE MEETING:

(1) One of the items announced for inclusion at this meeting was consideration of any agenda items carried forward from a previous meeting; the following such closed item(s) was added: Proposals regarding a uniform code of conduct and financial disclosure forms for Federal Reserve Bank personnel. (This item was originally announced for a closed meeting on April 27, 1994.)

(2) Addition of the following closed item to the meeting (that commenced at 11:30 a.m.): Proposed personnel policy.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452–3204.

Dated: May 2, 1994.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 94–10899 Filed 5–2–94; 4:51 pm]

BILLING CODE 6210–01–P

FEDERAL RETIREMENT THRIFT INVESTMENT BOARD

TIME AND DATE: 9:00 a.m.—May 16, 1994.

PLACE: 4th Floor, Conference Room, 1250 H Street, N.W., Washington, D.C.

STATUS: Open.

MATTERS TO BE CONSIDERED:

1. National Finance Center recordkeeping and agency liaison.
2. Benefits administration.
3. Investments.
4. Participant communications.
5. Approval of the minutes of the last meeting.
6. Thrift Savings Plan activities report by the Executive Director.
7. Annual financial audit presentation.
8. Approval of the update of the FY 1994—FY 1995 budgets.
9. Investment policy review.
10. Review of additional Thrift Savings Plan funds.
11. Status of audit recommendations.

CONTACT PERSONS FOR MORE INFORMATION: Tom Trabucco, Director, Office of External Affairs, (202) 942–1640.

Dated: May 2, 1994.

Roger W. Mehle,

Executive Director, Federal Retirement Thrift Investment Board.

[FR Doc. 94–10967 Filed 5–3–94; 3:01 pm]

BILLING CODE 6760–01–M

SECURITIES AND EXCHANGE COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: [59 FR 21801 April 26, 1994].

STATUS: Closed meeting.

PLACE: 450 Fifth Street, N.W., Washington, D.C.

DATE PREVIOUSLY ANNOUNCED: April 26, 1994.

CHANGE IN THE MEETING: Deletion.

The following item was not considered at a closed meeting scheduled for Tuesday, April 26, 1994, at 3:00 p.m.

Settlement of injunctive action.

Commissioner Schapiro, as duty officer, determined that Commission business required the above change and that no earlier notice thereof was possible.

At times, changes in Commission priorities require alterations in the scheduling of meeting items. For further information and to ascertain what, if any, matters have been added, deleted or postponed, please contact: Brian Lane (202) 272–2300.

Dated: April 29, 1994.

Jonathan G. Katz,

Secretary.

[FR Doc. 94–10964 Filed 5–3–94; 3:00 pm]

BILLING CODE 8010–01–M

SECURITIES AND EXCHANGE COMMISSION

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Pub. L. 94–409, that the Securities and Exchange Commission will hold the following meeting during the week of May 2, 1994.

A closed meeting will be held on Friday, May 6, 1994, at 11:00 p.m.

Commissioners, Counsel to the Commissioners, the Secretary to the Commission, and recording secretaries will attend the closed meeting. Certain staff members who have an interest in the matters may also be present.

The General Counsel of the Commission, or his designee, has certified that, in his opinion, one or more of the exemptions set forth in 5 U.S.C. 552b(c) (4), (8), (9)(A) and (10) and 17 CFR 200.402(a) (4), (8), (9)(i) and (10), permit consideration of the scheduled matters at a closed meeting.

Commissioner Schapiro, as duty officer, voted to consider the items listed for the closed meeting in a closed session.

The subject matter of the closed meeting scheduled for Friday, May 6, 1994 at 11:00 p.m. will be:

Institution of administrative proceedings of an enforcement nature.
Settlement of administrative proceedings of an enforcement nature.
Institution of injunctive actions.
Opinions.

At times, changes in Commission priorities require alterations in the scheduling of meeting items. For further information and to ascertain what, if any, matters have been added, deleted or postponed, please contact: Bruce Rosenblum (202) 272–2300.

Dated: April 29, 1994.

Jonathan G. Katz,

Secretary.

[FR Doc. 94–10965 Filed 5–3–94; 3:00 pm]

BILLING CODE 8010–01–M

SECURITIES AND EXCHANGE COMMISSION

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Pub. L. 94–409, that the Securities and Exchange Commission will hold the following meetings during the week of May 9, 1994.

An open meeting will be held on Monday, May 9, 1994, at 10 a.m. A closed meeting will be held following the open meeting on Monday, May 9, 1994.

Commissioners, Counsel to the Commissioners, the Secretary to the Commission, and recording secretaries will attend the closed meeting. Certain staff members who have an interest in the matters may also be present.

The General Counsel of the Commission, or his designee, has certified that, in his opinion, one or more of the exemptions set forth in 5 U.S.C. 552b(c)(4), (8), (9)(A) and (10) and 17 CFR 200.402(a)(4), (8), (9)(i) and (10), permit consideration of the scheduled matters at a closed meeting.

Commissioner Schapiro, as duty officer, voted to consider the items listed for the closed meeting in a closed session.

The subject matter of the open meeting scheduled for Monday, May 9, 1994, at 10:00 a.m. will be:

Consideration will be given to whether to propose for public comment rule 17f–6 under the Investment Company Act of 1940. Rule 17f–6 would permit registered management investment companies to use futures commission merchants and commodity clearing organizations as custodians in connection with commodity transactions regulated under the Commodity Exchange Act. For further information please contact Elizabeth Krentzman at (202) 942–0687.

The subject matter of the closed meeting scheduled for Monday, May 9, 1994 following the open meeting will be:

Institution of administrative proceedings of an enforcement nature.
Settlement of administrative proceedings of an enforcement nature.
Institution of injunctive actions.
Settlement of injunctive actions.
Formal order of investigation.

At times, changes in Commission priorities require alternation in the scheduling of meeting items for further information and to ascertain what, if any matters have been added, deleted or postponed, please contact: John Walsh (202) 272–2000.

Dated: April 29, 1994.

Jonathan G. Katz,

Secretary.

[FR Doc. 94–10966 Filed 5–3–94; 3:00 pm]

BILLING CODE 8010–01–M

UNITED STATES ENRICHMENT CORPORATION

Board of Directors

TIME AND DATE: 11 a.m. Monday, May 9, 1994.

PLACE: USEC Corporate Headquarters, 6903 Rockledge Drive, Bethesda, Maryland 20817.

STATUS: The meeting will be closed to the public.

MATTERS TO BE CONSIDERED:

- Review of commercial, financial and internal personnel issues of the Corporation.

CONTACT PERSON FOR MORE INFORMATION: Barbara Arnold, 301–564–3354.

Dated: May 2, 1994.

William H. Timbers, Jr.,

President and Chief Executive Officer.

[FR Doc. 94–10941 Filed 5–3–94; 2:59 pm]

BILLING CODE 8720–01–M

federal register

Thursday
May 5, 1994

Part II

Environmental Protection Agency

40 CFR Parts 52 and 81

Approval and Promulgation of State and Federal Implementation Plans; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[FRL-4848-4]

Approval and Promulgation of State and Federal Implementation Plans; California—Sacramento and Ventura Ozone; South Coast Ozone and Carbon Monoxide; Sacramento Ozone Area Reclassification

AGENCY: U.S. Environmental Protection Agency (EPA).

ACTION: Notice of Proposed Rulemaking (NPRM).

SUMMARY: Under the authority of section 110(c)(1) of the Clean Air Act (CAA or "the Act"), EPA today proposes federal implementation plans (FIPs) to attain, by the applicable statutory deadlines, the national ambient air quality standards (NAAQS) for ozone in the Sacramento and Ventura nonattainment areas, and to attain the NAAQS for ozone and carbon monoxide in the South Coast nonattainment area. EPA's final FIPs must be signed by the EPA Administrator no later than February 1995. EPA requests comment on these proposed FIPs.

EPA expects the California Low Emitting Vehicle (LEV) program will substantially reduce emissions from cars and light trucks, compared to the federal standard. In addition, for motor vehicles, EPA requests comment on an enhanced in-use compliance program to provide extra emissions.

The FIP proposes a federal enhanced motor vehicle inspection and maintenance (I/M) program. If California adopts an approvable enhanced I/M program, EPA will either withdraw or refrain from promulgating this federal program.

The FIP proposes stringent emission standards for heavy-duty vehicles and provisions to limit usage of older and dirtier heavy-duty trucks within the State and the FIP areas.

The FIP describes federal rulemakings in progress for both light and heavy-duty categories of nonroad engines, and proposes additional measures in the FIP areas.

The proposed FIP includes innovative control programs to reduce emissions associated with airports and, particularly within the South Coast, emissions from locomotives, ships, and ports.

EPA proposes rules, specific to each area, for industrial and commercial sources, and proposes to implement on a statewide basis federal rules for architectural coatings, consumer products, aerosol spray paints, and pesticides. EPA also proposes an "emissions cap" program, which allows sources the flexibility to develop their own compliance approach in order to achieve the needed annual emissions reductions.

Finally, EPA proposes to approve in part and disapprove in part the proposed South Coast CO State Implementation Plan (SIP) revision designed to address CO requirements of the 1990 Amendments to the Act.

DATES: Written comments on the proposal will be accepted throughout the public comment process. EPA expects to hold public hearings in early July 1994, and expects that the deadline for written comments will be approximately 30 days after the public hearings. EPA will give notice in the **Federal Register** of the public hearings and public comment deadline as soon as possible, but at least 30 days prior to the hearing dates.

ADDRESSES: Written comments on the proposed FIP and SIP promulgations must be received by EPA at the address below on or before the close of the public comment period. Comments should be submitted (in duplicate, if possible) to: EPA Air Docket Section, Attn: Docket No. A-94-09, Environmental Protection Agency (Mail Code—6102), Waterside Mall, Room M-1500, 401 M Street SW., Washington, DC 20460 (phone 202-260-7549).

Docket No. A-94-09, containing material relevant to this NPRM, is located at the above address. The docket is available for public inspection between 8:30 a.m. and 12 noon, and between 1:30 p.m. and 3:30 p.m. EPA may charge a reasonable fee for copying.

A copy of the docket is also available for review at: Regional Administrator, Attention: Office of Federal Planning (A-1-2), Air and Toxics Division, Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901. Interested persons may make an appointment with Ms. Virginia Petersen at (415) 744-1265, to inspect the docket at EPA's San Francisco office on weekdays between 9 a.m. and 4 p.m.

Copies of this NPRM, the technical support document, and the regulatory impact analysis, are also available for review at the addresses listed below:

California Air Resources Board, 2020 L Street, Sacramento, California
Sacramento Metropolitan Air Quality Management District, 8411 Jackson Road, Sacramento, California
Sacramento Area Council of Governments, 3000 S Street, Suite 300, Sacramento, California
El Dorado County Air Pollution Control District, 2850 Fair Lane Court, Bldg. C, Placerville, California
Feather River Air Quality Management District, 463 Palora Avenue, Yuba City, California
Placer County Air Pollution Control District, 11464 B Avenue, Auburn, California
Yolo-Solano County Air Pollution Control District, 1947 Galileo Court, Suite 103, Davis, California
South Coast Air Quality Management District, 21865 E. Copley Drive, Diamond Bar, California
South Coast Air Quality Management District, Colton Office, 851 S. Mt. Vernon Avenue, Colton, California
Southern California Association of Governments, 818 W. 7th Street, Los Angeles, California
Southern California Association of Governments, Inland Empire Office, 3600 Lime Street, Riverside, California
Ventura County Air Pollution Control District, 702 County Square Drive, Ventura, California

Electronic Availability

This document is available May 5, 1994 as an electronic file on EPA's Technology Transfer Network (TTN).. For 1200 bps or 2400 bps modems, use 919-541-5742; for 9600 bps use 919-541-1447. The FIP NPRM will be under the Clean Air Act Amendments (CAAA) board, in a section for "Recently Signed Rules." Users should check the initial CAAA announcement screen for updates on file availability. Because of its size, the FIP NPRM will be divided into several pieces, and stored in the compressed "ZIP" archive format. The file names will begin with "FIP." If you need help in accessing the system, call the systems operator by phone at (919) 541-5384 in Durham, North Carolina.

FOR FURTHER INFORMATION CONTACT: For stationary and area source issues and general information on the FIPs, call EPA's FIP Hotline (415) 744-1151 or Julia Barrow (415) 744-2434, at the Office of Federal Planning (A-1-2), Air and Toxics Division, U.S. EPA, Region IX, 75 Hawthorne Street, San Francisco, California 94105-3901.

For mobile source issues, call EPA's FIP Hotline (313) 668-4361 or Jane Armstrong (313) 668-4471, at the Office of Mobile Sources, Motor Vehicle and Fuels Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, Michigan 48105.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Executive Summary

A. Introduction
B. EPA's Goals
1. Provide for the emissions reductions needed to meet EPA's obligations
2. Develop the FIPs in a manner which encourages and assists the

implementation of air quality measures by State and local agencies
3. Minimize federal intrusion into state and local affairs
4. Minimize adverse socio-economic impacts
5. Ensure fairness with respect to impacts on population as a whole and on individual air pollution sources
6. Ensure that the federal government does its part to contribute to the solution
C. Summary of the FIP Contents
1. Required emission reductions
2. Selection of control strategies
3. Specific control measures
a. Stationary/area source measures
b. Mobile source measures
D. Role of State and Local Agencies
1. SIP responsibilities
2. State and local opportunities
E. Public Involvement
1. Public participation in the development of the FIPs
2. Public meetings prior to proposal
3. Process for post-proposal public involvement
4. Solicitation of comment
II. Background and Proposed SIP Actions
A. Description of Affected Areas
1. Sacramento
2. Ventura
3. South Coast
B. SIP Status
1. Introduction
2. Sacramento
3. Ventura
4. South Coast
5. State of California
C. Proposed Action on South Coast SIP Revisions
1. CO Plan
a. Statutory provision and General Preamble requirements
b. Procedural requirements
c. Emissions inventory
d. Reasonably available control measures
e. Attainment demonstration
f. Quantitative milestones and RFP
g. Adoption of mandatory measures
(1) Enhanced I/M
(2) Oxygenated fuels
(3) Clean-fuel vehicle fleet program
(4) Employee commute options program
h. VMT forecast and contingency measures
i. TCMs to offset growth in VMT
j. Fully adopted and enforceable control measures
k. Implications of EPA's proposed action
2. Ozone Rate of Progress Plan
a. Statutory provisions and General Preamble requirements
b. Description of plan
c. Conditional approval of commitments
d. Implications of EPA's proposed action
III. California FIP
A. Basis for the FIP Actions in Applicable law and EPA policies
1. FIP Obligation
a. Introduction
(1) Passage of the 1990 Amendments
(2) Applicable law
(3) New law applies
b. The FIPs must demonstrate attainment
(1) What attainment deadline governs?
(a) Background
(b) Current law
(2) These FIPs need not address new requirements other than the requirements to demonstrate attainment
(a) Reasonable Further Progress
(b) Reasonably available control measures, including reasonably available control technology
c. FIPs may use new provisions providing additional flexibility
d. Maintenance demonstration for South Coast
2. Other issues relating to EPA's authority
a. Comprehensive FIP authorities under the Clean Air Act
b. EPA authority to charge fees
c. Restrictions on EPA's authority regarding fees
d. Land use
e. Parking management
f. Authority to order the State to implement specific measures requiring the State to legislate or expand money
B. Overview of Components of Each FIP
1. Introduction
a. Control approach
b. FIP enforcement
c. Application of FIP requirements to OCS sources
d. Application of FIP requirements to sources located in Indian country
e. Proposed rules without regulatory text
2. Common elements
a. Mobile source regulations
b. Stationary and area source regulations
(1) Regulations for specific source categories
(2) Regulations imposed statewide
(3) Cap regulations
3. Sacramento Ozone
a. Reduction requirements for 1999 and 2005
b. SIP rules
c. FIP rules for 1999 and 2005
d. 1999 attainment option
(1) Onroad heavy duty trucks
(2) Nonroad growth cap
(3) No drive days
(4) Recreational boat fees or prohibitions
e. EPA's preferred option
(1) EPA authority to initiate bump-up
(2) Rationale for bump-up to "Severe"
(3) 2005 attainment option
f. Summary of 1999 and 2005 attainment options
g. Attainment demonstrations
4. Ventura Ozone
a. Reduction requirements
b. SIP rules
c. FIP rules
d. Attainment demonstration
e. Alternative attainment date discussion
5. South Coast Ozone
a. Reduction requirements
b. SIP rules
c. FIP rules
d. Section 182(e)(5) provisions
(1) statutory provision and General Preamble requirements
(2) need for additional time to develop new technologies
(3) federal role in support of technological development activities
(a) Scope of EPA's responsibilities
(b) Recent national initiatives
(1) Climate Change Action Plan
(2) Technology Innovation Strategy
(3) Clean Car Initiative
(c) SCAQMD Technology Advancement Office
(4) Demonstration that progress requirements for 1990–2000 are met without need for § 182(e)(5) measure reductions
e. Attainment demonstration
f. Alternative attainment date discussion
6. South Coast CO
a. Reduction requirements
b. Attainment demonstration
c. Alternative attainment date discussion
C. Stationary and Area Source Rules
1. Introduction
a. Source category description and significance
b. Selection of control strategies
(1) source-specific RACT rules
(2) traditional stationary source category rules
(3) cap regulations
(4) new technology measures under section 182(e)(5)
c. Future evolution of rules
2. Regulations for specific sources
a. Introduction and rationale for selection of sources
b. Formica Corporation (Placer)
c. Sierra Pine Limited (Placer)
d. Michigan California Lumber Company (El Dorado)
e. Reynolds Metals (Placer)
3. Regulations for specific source categories in the FIP areas
a. Introduction
(1) rationale for selection of rules and reduction rates
(2) relationship to existing and pending SIP provisions
(3) relationship to other applicable FIP provisions
(4) rule structure
b. Solvent cleaning operations (Sacramento, Ventura)
c. Wood products coatings (Sacramento, Ventura)
d. Auto refinishing operations(Sacramento)
e. Adhesives and sealants (Sacramento)
f. Can and coil coating (Sacramento)
g. Commercial bakeries (Sacramento)
h. Municipal waste landfills (Sacramento)
i. Livestock waste management (Sacramento, South Coast, Ventura)
j. Fugitive emissions (Sacramento, South Coast, Ventura)
(1) oil and gas production facilities and pipeline transfer stations
(2) gas processing facilities, refineries, bulk plants, bulk terminals, and chemical plants
k. Service stations (Sacramento, South Coast, Ventura)
l. Waste burning (Sacramento, South Coast, Ventura)
m. Residential water heaters (Sacramento)
n. Stationary internal combustion engines (Sacramento)
o. Industrial, commercial, and institutional boilers, steam generators, and process heaters (Sacramento)
(1) biomass boilers
(2) gaseous/liquid fuel-fired boilers (equal to or greater than 5 mmBTU)
(3) gaseous/liquid fuel-fired boilers (greater than 1 but less than 5 mmBTU)

p. Gas turbines (Sacramento)
4. Regulations imposed statewide
a. Introduction—rationale for statewide control
b. Architectural coatings
(1) relationship to national rule development
(2) relationship to local rules
(3) alternative reduction approaches
(a) fees
(b) corporate average VOC emissions (CAVE) limit
(c) manufacturers bubble
c. Consumer products
(1) FIP promulgation of existing CARB rules
(a) consumer products
(b) antiperspirants and deodorants
(2) aerosol paints
(3) alternative reduction approaches
(4) need for additional reductions
d. Pesticides
(1) Summary and applicability
(2) Specific provisions
(3) Reporting, recordkeeping and test methods
(4) Relationship to State rules
(5) Relationship to FIFRA
5. Cap regulations
a. Introduction
(1) rationale for approach
(2) reduction rate
(3) withdrawal of rules based on SIP progress
(4) relationship to other applicable FIP provisions
(5) implementation and enforcement issues
(a) compliance mechanisms
(b) EPA resources
(c) emission quantification mechanisms
b. Control approach
(1) rule structure
(2) applicability and exemptions
(3) determination of baseline emissions
(4) compliance plans
(5) reporting, recordkeeping, and compliance requirements
(6) penalties
c. Industrial and commercial solvents and coatings
d. VOC emissions associated with the manufacturing of products
e. Disposal of materials containing VOCs
f. Commercial food preparation and/or baking
g. Petroleum and natural gas extraction, processing, and storage
h. NO_X emission sources
(1) Source category description
(2) Issues
i. Alternatives to the FIP cap program
(1) Trading of emissions
(2) Manufacturers bubble for industrial and commercial solvents and coatings
(a) introduction
(b) withdrawal of rules based on SIP progress
(c) relationship with other FIP provisions
(d) implementation date
(e) applicability
(f) exemption limit
(g) conceptual design
(h) recordkeeping and reporting
(i) implementation and enforcement issues
(3) The use of other economic instruments to incentivize emission reductions
D. Mobile Sources
1. Overview of mobile source issues and measures
a. Emissions credit for the California Motor Vehicle Control Program
b. Summary of mobile source FIP measures
(1) Programs for light-duty vehicles
(2) Programs for medium-duty vehicles
(3) Programs for heavy-duty vehicles
(4) Programs for nonroad vehicles and engines
(a) nonroad heavy-duty engines
(b) small nonroad equipment
(5) Programs for national transportation sources and Federal activities
(a) locomotives
(b) commercial aviation
(c) general aviation
(d) military installations
(6) Programs to reduce vehicle miles traveled
(a) employee commute options programs
(b) parking cash out
(7) Special issues for mobile sources
(a) inspection and maintenance
(b) retrofit programs for mobile sources
(c) adjustments based on local control of VMT growth
2. Program for onroad light-duty vehicles and engines
a. Overview
b. Air quality significance
c. Enhanced inspection and maintenance
(1) Introduction
(2) Enhanced I/M
(3) Background
(4) Summary of proposed Federal enhanced I/M program
(a) Applicability
(b) Enforcement
(c) Network type
(d) Test type and procedure
(e) Vehicle coverage and test frequency
(f) Waivers and special warranty protection
(g) Enforcement and oversight
(h) Convenience issues
(i) Onroad testing
(j) Program start date
d. Enhanced in-use compliance programs for light-duty vehicles
e. Onhighway motorcycles
f. Discussion of emission registration and fee systems for light-duty vehicles
g. Parking cash-out
h. Importation of vehicles into California
3. Programs for onroad heavy-duty vehicles and engines
a. Overview
b. Air quality significance
c. Enhanced in-use compliance program for heavy-duty vehicles
4. Programs for nonroad vehicles and engines
a. Overview
(1) Statutory authority
(2) General nonroad background
(3) Sierra Club suit
(4) Rationale for implementing the federal programs in the FIP areas
(5) California's Nonroad Program/ Preemption
b. Federal Nonroad Requirements
(1) Federal Requirements for Compression Ignition Engines at or above 37kw
(a) Applicability
(b) Standards
(c) Compliance Dates
(d) Certification and Test Procedures
(2) Federal Requirements for Spark Ignited Engines at or under 19kw
(a) Background
(b) Overview of Program to Control Emissions from SI Engines under 19 kW
(c) Standards
(d) Regulatory Scheme
(3) Federal Requirements for Spark Ignited Marine Engines
(a) Overview of Requirements for Spark-Ignition Marine Engines
(b) Definition of Spark Ignited Marine Engine
(c) Applicability
(d) Emission Standards
(e) General Enforcement Provisions
(f) Compliance Dates for Certifications
(g) Averaging, Banking, and Trading
c. Special FIP Measures
(1) On-Highway Motorcycles and Nonroad Engines Used in Recreational Vehicles and Nonroad Motorcycles
(a) Overview
(b) Definition of On-Highway and Nonroad Motorcycles
(c) Applicability
(d) Standards
(e) Certification and Test Procedures
(f) Authority
(2) Fees on Marine Pleasure Craft
(3) Nonroad Compression Ignition Engines under 37kw and Nonroad Spark Ignited Engines over 19kw and less than 37kw
d. Enhanced In-Use Compliance Program for Nonroad Engines over 37 kW
e. National Transportation Sources
(1) Introduction
(2) Civil and Military Aviation
(a) General Description of Category
(*1*) Aircraft Operational Classes
(*2*) Related Mobile Sources
(*3*) Need for Control
(*4*) Level of Control
(b) Commercial Aircraft Operations
(*1*) Overview
(*a*) Airline Focus and Specific Sources Covered
(*b*) Geographic Scope
(*c*) Control Period
(*2*) Key Regulatory Elements
(*a*) Summary
(*b*) Pounds per PEU Scheme
(*c*) Fee System
(*d*) Averaging and Trading
(*e*) Reporting and Recordkeeping
(*f*) Exemptions
(*3*) Legal Authority and Regulatory Interactions
(*4*) Ground Access Vehicles Controlled by Other FIP Elements
(*5*) Issues for Comment
(*6*) Aviation Working Group Issues/ Concerns
(c) Military Aviation
(*1*) Overview
(*a*) Military Air Base Operations
(*b*) Control Strategy
(*c*) Geographic Scope
(*d*) Control Period
(*2*) Key Regulatory Elements
(*a*) Summary
(*b*) Baseline Inventory and Emissions Cap
(*c*) Averaging and Trading
(*d*) Annual Compliance Determinations
(*e*) Reporting Recordkeeping

(f) Exemptions
(3) Legal Authority
(4) Issues for Specific Comment
(d) General Aviation
(1) Source Description
(2) Overall Control Strategy
(3) Key Regulatory Elements
(4) Issues for Specific Comment
(e) Public Aviation
(3) Locomotives
(a) Introduction
(b) Freshly Manufactured Locomotives
(c) Remanufactured Locomotives
(1) Option I—National Regulations
(2) Option II—California Only Requirements
(d) Additional Measures for the South Coast
(1) Fleet Average Standard Program
(2) Compliance Program
(3) Authority
(4) Emission Reductions
(5) Other Options
(4) Marine Vessels/Ports
(a) Background and Program Description
(b) Control Strategies—Fee System Based on Emission Levels
(1) Fee Categories
(2) Emission Reduction Technologies
(c) Control Strategies—Discount for Using Port Facilities while Hotelling
(d) Control Strategies—Discount for Staying outside of the Region
(5) Non-Aircraft Military Installations
5. Impact of Economic Incentive Program Rule on Fee Programs in the FIP
a. Introduction
b. Requirements under the EIP
(1) Surplus
(2) Quantifiable
(3) Enforceable
(4) Consistent with SIP attainment and RFP demonstrations
(5) Permanent
(6) Uncertainty Provisions
(7) Auditing
(8) Reconciliation Procedures
(9) Implementation Schedule
(10) Administrative Procedures
E. Fuels Programs
1. Reformulated Fuels
a. Reformulated Gasoline
b. California Reformulated Gasoline (Phase II)
c. California Reformulated Diesel Fuel
F. Severe Area Requirements for Sacramento
1. Introduction
2. Employee commute options program
a. Introduction and statutory requirements
b. Program requirements and implementation approach
c. Employer and compliance plan requirements
d. ECO rule development issues.
3. RACT for 25 ton per year sources
a. Applicable requirements
4. New source review
a. Background
b. Overview of Rule Requirements
(1) BACT
(2) Offsets
(3) Statewide Compliance
(4) Alternative Siting Analysis
c. Existing NSR Rules
d. Changes from Original APCD Rules
(1) Changes to Address Severe Area Requirements
(2) Changes to Address Federal Approvability
(3) Changes to Address Federal Implementation
e. Dual Permit Application and Review
f. Operating Permits
g. Federal Implementation and Delegation to Local Agencies
5. TCMs to offset VMT increases
a. Applicable requirements
b. Demonstration that motor vehicle VOC emissions will not increase from one ozone season to the next
6. Reformulated gasoline
a. Provision satisfied in FIP/SIP actions above
G. § 182(e)(5) New Technology Measures for the South Coast
1. Introduction
2. Commitment to adopt measures and schedule of emission reductions
a. Stationary/area sources
b. Mobile sources
3. Commitment to adopt contingency measures
H. Attainment Demonstrations
1. Introduction
2. Baseline inventories
a. Adjustments to State's emissions inventories
b. Basis for projected emissions inventories
c. Stationary sources
(1) Sacramento
(2) Ventura
(3) South Coast
d. Mobile sources
(1) Highway vehicle emission factors
(2) VMT estimates
(3) Nonroad vehicle and engine emission inventory
(i) Heavy duty engines greater than 50 hp
(ii) Spark ignition engines less than 25 hp
(iii) Recreational marine engines
(iv) Locomotives
(v) Aircraft and airports
(4) Mobile baseline inventory summary
3. Air quality data and modeling analyses
a. Sacramento Ozone
b. Ventura Ozone
c. South Coast Ozone
d. South Coast CO
4. State and local control measures
5. Attainment demonstrations
a. Sacramento Ozone
b. Ventura Ozone
c. South Coast Ozone
d. South Coast CO
I. Transportation Conformity
J. Delegation; FIP Implementation by State and Local Agencies
1. State and local obligation to incorporate FIP requirements in operating permits
2. Full transfer of authority through delegation
3. Full transfer of authority through SIP approval
4. Partial transfer of authority through delegation

IV. Administrative Requirements

A. Executive Order 12866
B. Regulatory Flexibility Act
C. Paperwork Reduction Act
D. Federalism Implications

Appendix I

A. Enhanced In-Use Compliance Program for Light-Duty Vehicles and Trucks
B. Enhanced In-Use Compliance Program for Heavy-Duty Vehicles
C. Enhanced In-Use Compliance Program for Nonroad Engines over 37 kW

Proposed Revisions to CFR

40 CFR 52 Subpart GGG

40 CFR 52.2950—General FIP Provisions and Delegation
40 CFR 52.2951—New Technology Commitments under § 182(e)(5)
40 CFR 52.2952—Stationary and Area Source VOC Cap Rules (Sacramento)
Industrial and Commercial Solvents and Coatings
VOC Emissions Associated with the Manufacturing of Products
Disposal of Materials Containing VOCs
Commercial Food Preparation and/or Baking
Petroleum and Natural Gas Extraction, Processing, and Storage
40 CFR 52.2953—Stationary and Area Source VOC Cap Rules (Ventura)
Industrial and Commercial Solvents and Coatings
VOC Emissions Associated with the Manufacturing of Products
Disposal of Materials Containing VOCs
Commercial Food Preparation and/or Baking
Petroleum and Natural Gas Extraction, Processing, and Storage
40 CFR 52.2954—Stationary and Area Source VOC Cap Rules (South Coast)
Industrial and Commercial Solvents and Coatings
VOC Emissions Associated with the Manufacturing of Products
Disposal of Materials Containing VOCs
Commercial Food Preparation and/or Baking
Petroleum and Natural Gas Extraction, Processing, and Storage
40 CFR 52.2955—Stationary and Area Source NO_X Cap Rules (Ventura)
40 CFR 52.2956—Stationary and Area Source NO_X Cap Rules (South Coast) [Reserved]
40 CFR 52.2957—Consumer Product Rules
(a) Consumer products
(b) Antiperspirants and deodorants
40 CFR 52.2958—Aerosol Paint Rule
40 CFR 52.2959—Architectural Coating Rule
40 CFR 52.2960—Pesticides Rule
40 CFR 52.2961—Stationary and Area Source Rules
(a) Solvent cleaning operations (Sacramento, Ventura)
(b) Wood products coatings (Sacramento, Ventura)
(c) Auto refinishing operations (Sacramento)
(d) Adhesives and sealants (Sacramento)
(e) Can and coil coating (Sacramento)
(f) Commercial bakeries (Sacramento)
(g) Municipal waste landfills (Sacramento)
(h) Livestock waste (Sacramento, South Coast, Ventura)
(i) Fugitive emissions from gas processing facilities, refineries, bulk plants, bulk terminals, and chemical plants (Sacramento, South Coast, Ventura)

(j) Service stations (Sacramento, Ventura, South Coast)
(k) Waste burning (Sacramento, Ventura, South Coast)
(l) Residential water heaters (Sacramento)
(m) Stationary internal combustion engines (Sacramento)
(n) Biomass boilers and steam generators (Sacramento)
(o) Gas turbines (Sacramento)
(p) RACT rule—Formica Corporation (Sacramento)
(q) RACT rule—SierraPine Limited (Sacramento)
(r) RACT rule—Michigan-California Lumber Co. (Sacramento)
(s) RACT rule—Reynolds Metal (Sacramento)
(t) Fugitive emissions from oil and gas production facilities and pipeline transfer stations (Sacramento, South Coast, Ventura)
(u) Large industrial, commercial, and institutional boilers, steam generators, and process heaters (Sacramento)
(v) Small industrial, commercial, and institutional boilers, steam generators, and process heaters (Sacramento)
40 CFR 52.2962—Enhanced In-Use Compliance Program for Motor Vehicles
40 CFR 52.2963—Enhanced I/M Program
40 CFR 52.2964—Importation of Vehicles
40 CFR 52.2965—Requirements for Engines Past Their Useful Life
40 CFR 52.2966—Enhanced In-Use Compliance for Heavy Duty Engines and Vehicles Program
40 CFR 52.2967—Nonroad Vehicles and Engines, On-Highway Motorcycles
40 CFR 52.2970—Civil Aircraft Operations
40 CFR 52.2971—Locomotives
40 CFR 52.2972—Military Aircraft Operations
40 CFR 52.2973—Ships and Ports
40 CFR 52.2975—Enhanced In-Use Compliance Program for Nonroad Engines over 37 kW
40 CFR 52.2999—Employee Commute Options Program Rule (Sacramento)
40 CFR 52.3000—General Permit Requirements (Sacramento)
40 CFR 52.3001—New Source Review (Sacramento)
40 CFR 52.3002—Emissions Reduction Credit Authorization (Sacramento)

Appendix to 40 CFR 52 Subpart GGG

40 CFR 81 Subpart C

40 CFR 81.305—Reclassification of Sacramento Ozone Nonattainment Area

I. Executive Summary

A. Introduction

EPA issues this Notice of Proposed Rulemaking under court orders to propose by February 1994, and promulgate by February 1995, federal implementation plans (FIPs) to attain the ozone National Ambient Air Quality Standard (NAAQS) in the Sacramento and Ventura areas,[1] and to attain both the ozone and carbon monoxide (CO) NAAQS in the South Coast area. These obligations arise from provisions of the Clean Air Act Amendments (CAAA) of 1977 and 1990, from successful citizen suits to compel disapproval of 1982 attainment plans for the three areas, and from district court orders requiring EPA to prepare federal plans demonstrating attainment of the NAAQS.[2]

Specifically, these proposals are the result of the historical inability of each of the three areas to develop adequate state implementation plans (SIPs) under the Clean Air Act of 1977. Because of these failures, EPA was required by law to produce federal plans. The courts have interpreted that this federal responsibility was continued by the U.S. Congress even as it substantially amended the Clean Air Act Amendments of 1990.

Although EPA is issuing this NPRM today because we are legally required to do so, EPA intends to use this opportunity to assist renewed state and local efforts to achieve clean, healthy air for the citizens of California. Therefore, the agency has tried to keep one central principle in mind as we fashioned our approach: EPA wants to do this in conjunction with the ongoing efforts of the local communities, not simply impose federal plans upon them. EPA believes that if these combined efforts are to be successful, the FIP process must both develop appropriate emissions reduction strategies, and support the local-state-federal-public cooperation necessary to attain clean air. These proposals therefore contain not only the specific control strategies necessary to demonstrate attainment in each of the three areas, but also plans to coordinate, to the extent feasible, an expanded public participation process with that of each local air board. This coordination is especially important because each local air board is currently developing its own SIP under the Clean Air Act Amendments of 1990. These SIPs must be adopted and submitted to EPA by November 15, 1994. If they can be approved by EPA, then these local plans can replace proposed federal controls. In light of these ongoing efforts, EPA strongly believes that a coordinated, inclusive process is the best way to address the regulatory, social and economic changes which will be required to achieve clean air.

Looked at collectively, the plans proposed here will directly affect more than 15 million people—almost half of California's population—and virtually all businesses in the South Coast, Sacramento, and Ventura areas. In each FIP area the proposed stationary controls will require emission reductions from small commercial sources such as bakeries and print shops to large industrial sources such as petroleum refineries and large manufacturing operations. Most commercial and industrial activities will be affected. Proposed area source controls may result in cost increases and reformulation of products as diverse as hair spray, deodorant, pesticides and house paint. Mobile source emission reduction requirements for autos, trucks, planes, trains, boats, ships, and off-road equipment may result in higher costs to some and significant changes in the mode of transportation for others.

These reductions are made even more difficult—and costly—because they must come on top of years of significant efforts and reductions. For example, the South Coast area has managed a reduction in peak ozone levels of nearly 75% since its worst days of the mid-1950's. Yet it remains the center of the worst air pollution in the country. Sacramento and Ventura, though not facing the same extreme levels of air pollution as the South Coast, have also made significant strides in reducing ozone levels; but they, too, remain close to the bottom of any urban area ranking of air quality levels.

Taken together, the cost associated with the proposed pollution control strategies necessary to reach attainment in these three areas ranges from $4 billion to $6 billion per year over the next 16 years. While these are not new, additional costs (they were included in the analysis done prior to the passage of the CAAA of 1990), clearly part of developing these plans is coming to terms with the fact—regardless of which governmental body assumes responsibility for the effort—that most of the emission reductions that were easy or inexpensive were achieved in these areas some time ago.

The obvious questions at this point are, "What are the benefits of clean air for these areas? Is it really worth the

[1] EPA is not currently under a district court schedule order for the Ventura FIP. EPA and the plaintiffs have, however, recently negotiated an agreement providing for a proposal and promulgation schedule consistent with those for the South Coast and Sacramento. The settlement agreement will be filed shortly with the court.

[2] In the case of Sacramento, the lawsuit was filed by the Environmental Council of Sacramento and the Sierra Club; see *ECOS* v. *EPA*, No. CIVS 87-0420, slip op. (E.D. Cal. Dec. 2, 1991). The plaintiff in Ventura is Citizens to Preserve the Ojai; see *CPO* v. *EPA*, No. CV 88 00982 HLH. For the South Coast, disapproval of the 1982 attainment plan followed litigation by a private citizen, Mark Abramowitz; see *Abramowitz* v. *EPA*, 832 F.2d 1071 (9th Cir. 1987). The South Coast FIP order resulted from a lawsuit brought by the Coalition for Clean Air and the Sierra Club, Inc.; see *Coalition for Clean Air* v. *EPA* (reported as *Coalition for Clean Air* v. *Southern Cal. Edison*), 971 F.2d 219 (9th Cir. 1992), *cert. denied*, 113 S. Ct. 1361 (1993).

cost?" Ultimately, the second question will be answered by the citizens, and future citizens, who live in these communities. In order to make this judgement, citizens will need to know the answer to the first question. While we have a firm understanding of the many health, economic, and aesthetic benefits of clean air, quantifying these benefits has proved difficult.

What we do know is that the reactivity of ozone causes health problems because it damages lung tissue and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of ozone not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Regular exposure to ozone for 6–7 hours at concentrations *below* the levels in the South Coast, Ventura or Sacramento has been found to significantly reduce lung function in normal, healthy people during periods of moderate exercise. Animal studies have demonstrated that repeated exposure to ozone for months or years can produce permanent structural damage in the lungs and accelerate the rate of lung function loss and aging of the lungs. It is also well accepted that ozone can cause significant crop yield losses, extensive damage to forests, and deterioration of buildings as well.

We also know that exposure to elevated carbon monoxide levels is associated with impairment of visual perception, work capacity, manual dexterity, and learning ability, and with illness and death for those who already suffer from cardiovascular disease, particularly angina or peripheral vascular disease.

What we don't know enough about yet is how to assign a direct monetary value to protection from these air pollutants. Benefits such as reduced health care costs, increased employee attendance and productivity, increased crop yields, reduced materials damage, and a healthier ecosystem clearly have value. The quality of life values associated with more than 15 million people finally being able to breathe air free of unhealthful levels of smog and carbon monoxide must be added to the total as well. On balance, these values—when compared against the costs—were strong enough to compel the U. S. Congress to mandate that all Americans be provided with this public health protection. That is what the Clean Air Act is all about. Ultimately, these federal implementation plans, and the state and local efforts which will coincide with them, are about finally bringing that protection to the citizens of California.

B. EPA's Goals

As the above discussion suggests, we seek to meet several goals as we engage in the development and promulgation of FIPs for these California areas. These goals compel EPA to go beyond normal boundaries of rule development and implementation. EPA views both the SIP and FIP processes as an opportunity to make real progress towards clean air on a variety of fronts. To do that, these FIPs must include more than rules which reduce emissions; they must also involve a concerted effort to make the process of bringing clean air to California work better. This effort will require even better cooperation and coordination among local, state and federal air pollution control agencies, better coordination with the other governmental agencies which must contribute to the solutions, and more public involvement and education. Success demands that everyone work together on creative and innovative solutions to the difficult air pollution problems these areas still face.

1. Provide for the Emissions Reductions Needed To Meet EPA's Obligations

First and foremost, EPA's goal is to meet its obligations under the Clean Air Act and under court orders, to promulgate plans in Sacramento, Ventura, and the South Coast which provide for attainment of the health-based ozone and carbon monoxide standards. Due to historical failures of these three nonattainment areas to develop adequate plans themselves, the courts have determined that the Clean Air Act, as amended in 1990, requires EPA to provide plans now. Although EPA disagreed with the retention of the FIP obligations in the wake of the 1990 amendments, EPA takes its obligations, and their ultimate objective of clean air very seriously.[3] In EPA's view, any efforts to fulfill other goals stated below must complement this ultimate objective of clean air.

2. Develop the FIPs in a Manner Which Encourages and Assists the Implementation of Air Quality Measures by State and Local Agencies

It is most appropriate for state and local agencies to play the lead roles in addressing their own air pollution problems. In fact, that is how Congress, through the Clean Air Act, intended it to work. Traditionally, this approach has placed EPA in the roles of technical advisor, grant officer, and, as a last resort when local or state responsibilities are not met, as a backstop. But the air quality problems faced by these California areas are tremendous, and despite their efforts the state and local governments have been as yet unable to provide a plan for attaining the health standards. It has therefore become necessary, both legally and practically, for EPA to play the backstop role at this time.

As EPA pursues this role, we believe that we must do so in a manner which both encourages and supports the efforts of the state and local governments to meet their continuing air quality related responsibilities, especially regarding the development of the November 15 SIP submittal. In short, this means moving beyond the mere fulfillment of our legal responsibilities toward the establishment of a full working partnership among all parties.

Obviously, the first real test of this new partnership begins now. As has been previously discussed, these FIPs are being proposed at the same time as state and local agencies are preparing to meet many of the Act's most important requirements, including their own plans to address the very same obligation as these FIPs: attainment of the ozone NAAQS.[4] EPA is concerned that issuance of comprehensive regulatory FIPs within the FIP time frame has the potential to disrupt the SIP planning process. State and local agencies will be in the process of designing air quality measures for legislative or board consideration at the same time the federal government is proposing to promulgate measures to cover the very same emission sources. At the very least, these parallel planning processes are likely to create confusion for the public and the regulated community. EPA's goal is to develop the FIPs in a manner that supports effective air

[3] EPA has previously published advance notices of proposed rulemakings (ANPRs) and/or notices of proposed rulemaking (NPRs) for FIPs in the three areas. For Sacramento, ANPRs were published on April 5, 1990 (55 FR 12669) and May 27, 1992 (57 FR 22194). For the South Coast, EPA published an ANPR on December 7, 1988 (53 FR 49494) and an NPR on September 5, 1990 (55 FR 36458). EPA published an NPR for Ventura on January 17, 1991 (56 FR 1754). While the approach of these FIPs is quite different, the reader should consult these notices for an account of the litigation, settlement agreements, modifications to the agreements, regulatory history, and EPA's then-current interpretations of its obligations. For an account of EPA's views on timing and circumstances of these FIP obligations, see especially the executive summary of the South Coast NPR. See also Coalition for Clean Air, 971 F.2d 219 (9th Cir. 1992).

[4] For carbon monoxide, the South Coast is revising its CO SIP which was submitted to EPA in 1992. The South Coast is currently scheduled to submit this revised SIP to EPA in November 1994.

quality planning by the responsible state and local agencies.

3. Minimize Federal Intrusion Into State and Local Affairs

EPA will meet its obligations to prepare federal plans for clean air in these three areas of California, and EPA must, and will if necessary, implement the measures it promulgates. However, EPA firmly believes that clean air is more likely to be achieved faster, and in greater harmony with local economic and community goals, if its own role is minimized by effective state and local actions.

EPA's current challenge to minimize federal intrusion is through the proposal and promulgation of these federal plans—plans which EPA hopes to see replaced by state and local regulations. Consequently, EPA will withdraw or rescind any federal measure it proposes or promulgates as soon as it can approve acceptable SIP measures submitted by the state which provide for commensurate emissions reductions. In fact, EPA hopes these FIPs will become obsolete as a regulatory matter. The remaining value of these FIPs would then be the partnerships and solutions which both minimize federal intrusion and enable the state and local agencies to achieve the clean air goals as the law envisions.

To put this another way, while EPA's goal is to minimize federal intrusion into state and local decision making and implementation authority, only prompt action by California officials—within the timetables of the CAAA and the court ordered deadlines—can significantly diminish the FIPs' impact on the state. EPA intends to assist the state and local agencies in their efforts to adopt and submit ozone SIPs with the requisite emissions reductions and ozone attainment demonstrations. As pointed out earlier in this discussion, successful state and local action will allow EPA to withdraw the regulatory pieces of the federal plan or reduce the scope and stringency of its imposed or impending measures.

4. Minimize Adverse Socio-Economic Impacts

EPA has attempted to fashion these proposed FIPs to meet the attainment obligations while trying hard to avoid unnecessarily severe social and economic impacts, both through the choice of the particular regulations and by the timing of their implementation. Despite these mitigatory approaches, federal regulation sufficient to achieve the NAAQS in these heavily polluted areas has the potential for significant social and economic disruption. This is the inevitable result of the extraordinary emission reductions required, the advanced level of control that already exists, and the constraints on EPA's authority and practical ability to enact and implement many of the most appropriate control approaches for these areas.[5] Current control strategies in these areas, especially in the South Coast, already employ state of the art technology and regulatory design for many pollution sources. To achieve attainment in these areas, in effect, we must do even better. To mitigate the severe impact of further near-term emission reduction requirements, EPA has attempted to identify control options which provide emission sources with flexibility and incentives for technological development, product reformulation and pollution prevention. We will look to the public comments on the proposals to further identify such strategies.

We want to emphasize here again that state and local agencies are in a far better position to tailor plans for the areas that minimize adverse impacts of the attainment obligations. Through proximity they have a better understanding of their emission sources and their local communities. They can also achieve significant mobile source reductions from transportation and land use measures that are beyond EPA's resources and authority to implement directly.

For example, there is a growing body of evidence supporting the use of market-based programs, sometimes incorporating fees, to encourage emissions reductions and transitions to cleaner technologies and processes. Such policies can be effectively designed and implemented at the local level where a specific understanding of local conditions and economies can be integrated into a flexible program and, regarding fee-based programs, where revenues can be redistributed within the community. A well designed program can effectively minimize the disruptive impacts of major emissions reductions. Conversely, federal measures for local implementation must be general enough to provide for enforcement from a distance, and have severe legal restraints relative to local revenue issues. The federal Miscellaneous Receipts Act, for example, requires revenues from any such federal fee-based programs to be deposited in the U.S. Treasury, thereby preventing their redistribution within the local community. In short then, locally designed and implemented plans become the best means of minimizing socio-economic impacts.

5. Ensure Fairness with Respect to Impacts on the Population as a Whole and on Individual Air Pollution Sources

The extent of the air quality problems in these three areas, as well as principles of equity, demand that emission reductions must come from every source of pollution—from cars to refineries to hand-held spray paint. Fairness is an elusive goal—what seems fair to one may not seem fair to another—but there are a few facts to bear in mind as we formulate a plan for clean air: (1) Some emission sources have been required to reduce more than others in the past; (2) Some emissions can be reduced more cheaply than others; (3) Some individuals and sources of emissions can more easily afford to comply with air pollution regulations than others.

Myriad sources comprise the pieces of the air quality problem, and each of these sources must be part of the solution. What part of the solution each will contribute, and how to fashion those contributions into a plan is where the challenge lies. EPA has and will continue to consider the issue of fairness as it develops these FIP strategies. We encourage the regulated community and the public to make sure that the clean air strategies which ultimately get implemented are fair by: (1) Constructively participating in the FIP public involvement processes; and (2) supporting the development of appropriate SIP measures to displace as much of each of the FIPs as possible.

6. Ensure That the Federal Government Does its Part to Contribute to the Solution

The solution to these air quality problems will require the participation of all sectors that can contribute. There are several ways that these FIP proposals embody the federal government's contribution to the solution. First, EPA is meeting its legal obligations to provide plans for attainment in the FIP areas. EPA has proposed plans which, building upon existing state emission control strategies, will meet the ultimate goal of attainment. EPA hopes that this federal effort will, by actually providing a complete plan, leverage state and local efforts to complete their 1994 ozone attainment SIPs.

Second, some of the federal rules proposed today would achieve reductions from emission sources over which the federal government has sole

[5] The proposals in this rulemaking are designed to achieve the substantial emission reductions required in these three areas and are not necessarily appropriate for areas with lesser problems.

jurisdiction. Emissions from sources such as new locomotives, ship engines, aircraft engines, and some farm and construction equipment have not been previously included in state and local efforts to develop comprehensive and complete attainment plans. While EPA believes that these sources are appropriate for regulation, there remain unresolved legal and policy issues regarding the extent to which, if at all, EPA can or should continue to regulate them indefinitely. In other words, should SIPs, such as those due in November 1994, be allowed to take credit for federally-mandated reductions from these types of sources? EPA is requesting comment on this issue.

Third, the FIPs proposed today include reductions from federal facilities such as military bases. EPA intends to continue working with other federal agencies to reduce emissions from their operations in these FIP areas as well as other nonattainment areas.

Finally, as we have stated earlier, EPA views these FIPs as an opportunity to contribute much more than a comprehensive set of regulations. The ultimate goal of clean air requires public support and education, development of new clean technologies, use of environmentally sound modes of transportation, and a fundamental shift to include pollution prevention into our everyday decision making both at home and at work. Along with these proposed FIP rules, EPA as an agency is pursuing a set of initiatives which will contribute to these pieces of the clean air solution. These efforts include implementation of the President's Climate Change Action Plan; an increasing emphasis by the agency on public awareness of environmental issues and solutions and implementation of the National Environmental Education Act; participation in the development and funding of a government-wide Environmental Technology Initiative; and a direct, agency-wide focus on pollution prevention in every rulemaking we undertake. Over time, these efforts will provide significant emissions reductions not only for California, but across America as well.

C. Summary of the FIP Contents

Under the Clean Air Act, nonattainment areas are classified according to the severity of their pollution problem. The attainment deadlines that are then assigned reflect the classification. The current classifications for the three FIP ozone nonattainment areas are set forth below. Also depicted are the attainment deadlines, which are as expeditious as practicable, but not later than the following dates:

Area	Classification	Attainment date
South Coast	Extreme	2010
Ventura	Severe	2005
Sacramento	Serious	1999

For a number of reasons, EPA believes that the control strategies available to the Agency to attain the ozone standard in the Sacramento area by 1999 could result in unacceptable socioeconomic hardship. For example, nitrogen oxides (NO_X) emissions within the Sacramento area are overwhelmingly from mobile sources. And, while significant reductions of mobile source NO_X emissions will result from the scheduled phasing in of cleaner engines and fuels, this changeover to cleaner engines and fuels will take some time (e.g. manufacturing changes, replacement costs, infrastructure changes). This is especially true since owners legitimately want to continue to receive the benefits of a full useful life from their present vehicles and engines. Therefore, in order to get the planned emissions reductions earlier, i.e., before 1999, EPA must either restrict the use of current, dirtier vehicles and engines, or somehow force turnover in the current vehicle and engine fleet. That means considering options like no-drive days, and/or dramatically increasing the costs associated with operating vehicles and engines currently in use.

Moreover, in order to attain by 1999, stationary sources in the Sacramento area would be required to reduce their volatile organic compounds (VOC) emissions by 20% by 1999, which because of the magnitude of reductions could lead to potential production cutbacks or shutdowns. As a result of these negative socioeconomic impacts, EPA is proposing, in addition to the 1999 attainment option, the option of reclassifying the Sacramento area to severe. EPA's reclassification proposal would move the attainment deadline to 2005, and would allow the Sacramento area, for purposes of attainment, to benefit from substantial emissions reductions without the use of more disruptive emissions reduction options. Even with the additional requirements associated with a severe designation (e.g. the Employee Commute Option program, and more stringent New Source Review requirements) the Agency believes that this 2005 deadline can result in attainment without the onerous consequences associated with Sacramento's current classification.

The South Coast is classified as a serious CO nonattainment area and is required to attain the CO NAAQS as expeditiously as practicable, but not later than 2000.

Given these attainment deadlines, the principal technical objectives of the proposed FIPs are to: (1) Determine the pollutant emission reductions needed to attain the NAAQS in each area; (2) select the additional control strategies best suited to achieve these reductions; and (3) develop specific measures for each strategy.

1. Required Emission Reductions

The first task depends on the collection and analysis of critical data relating emissions to ambient concentrations. To the greatest extent possible, EPA's proposed FIPs use data compiled by the California Air Resources Board (CARB) and the responsible local agencies (e.g. the local air pollution control districts and councils of governments) regarding current and future sources and levels of emissions in each area. In order to remain consistent with state and local planning efforts, EPA has made adjustments to these data only where absolutely necessary to correct errors, improve the precision and currency of the data, or analyze more effectively the impact of control measures.

Of necessity, the proposed FIPs rely on air quality measurements and meteorological input from the extensive CARB and district monitoring networks. Finally, in order to relate emissions levels to ambient pollutant concentrations, EPA has chosen to rely on modeling analyses developed cooperatively with the involved state and local agencies and used in their ongoing SIP development activities.

These technical foundations of the FIPs are discussed in section III.H., and further details may be found in the technical support documents accompanying this proposal. The data and analyses will be revised to reflect the final FIP strategies and to conform, to the extent possible, with new information and assumptions used by the state and local agencies in the 1994 ozone SIPs for each area.

The results of these complex technical assessments confirm the need for massive further reductions in emissions of the ozone precursor pollutants in each area.[6] In the most challenging case, current levels of VOC must be reduced

[6] Ground-level ozone, more commonly known as smog, is formed when nitrogen oxides (NO_X) and volatile organic compounds (VOCs) react with high temperatures. Strategies for reducing smog generally require reductions in both VOC and NO_X emissions. Ozone causes health problems by damaging lung tissue and sensitizing the lungs to other irritants.

by 90 percent and NO_X emissions must be reduced by 70 percent to reach attainment of the ozone NAAQS in the South Coast by the target date of 2010. In Ventura, approximately a 40 percent reduction of both VOC and NO_X appears to be necessary for ozone attainment by 2005. The reduction requirements for the Sacramento area are slightly lower, but still amount to roughly 40 percent for VOC and 30 percent for NO_X by 1999 or 2005. Finally, approximately a 45 percent reduction in CO emissions is needed in order to attain the CO standard in the South Coast Air Basin by 2000.

2. Selection of Control Strategies

EPA's selection of control strategies for the FIP areas began with a review of the existing emissions inventories to determine which pollution source categories were present in each area and the extent to which each category contributed ozone precursor (VOC and NO_X) pollutant emissions. All mobile source categories are present in each FIP area with the exception of ocean-going vessels in Sacramento, but the relative importance of individual mobile source categories varies significantly among the three areas. While the South Coast area includes most industrial and commercial source categories, the emissions inventory for the Sacramento area includes very few of these sources. The importance of agriculture in Ventura County is reflected in the unusual proportion of that area's VOC inventory assigned to pesticides use. More details on the inventory profile for each area may be found in sections II.A and III.H.

For stationary sources, EPA next reviewed the extent to which each category was currently controlled under either federal, state, or local regulations. In those few cases where the existing level of control failed to meet existing national requirements for application of reasonably available control technology (RACT), EPA prepared remedial regulations for specific industrial sources identified in section III.C.2., below.

EPA then reviewed the potential for further reductions from each stationary source category in each area, based on upgrading the level of control to match that required by the best existing rules, by further enhancements to existing rules to reflect available technology, or by imposing requirements that could be met through technology transfer from similar sources. From this exercise, EPA selected and prepared most of the industrial and commercial source control measures discussed in section III.C.3.

That brings us to the first decision point where the awkwardness of having the federal government undertaking air quality planning for a particular state or locality becomes obvious. How will the remaining emission reductions be apportioned among mobile sources, factories, and consumer products and services? The choice is best made with both a consideration of the costs and benefits associated with particular control measures and a knowledge of the local impacts that will occur when a specific choice is made. In addition, each locality has a different mix of industries in different states of economic health and with differing capabilities to absorb the costs of emission control.

Lacking detailed, specific information about every emissions source in each FIP area, the choice EPA has made in this proposal is to seek further reductions in all categories of pollution sources generally in the same proportion as their remaining contribution to the problem. Given EPA's distant starting point in this area of regulation (i.e. EPA is not the local air board) this approach is as fair as EPA can be. This means that the FIPs' reductions are generally apportioned in an "equal," across-the-board fashion even though individual pollution sources or source categories may vary substantially in their starting points (the extent to which they have already reduced their emissions) and in their ability to achieve further emission reductions. Local air boards have a greater capacity for developing the kind of detailed, specific information about local emissions sources which can improve and replace these policies. EPA encourages the local boards to do so wherever possible.

As a result, significant further reductions must be achieved by industrial sources, such as petroleum refineries, which may have already invested hundreds of millions of dollars in control equipment. EPA is proposing that these sources reduce their VOC and NO_X emissions still further, not only through conventional, technology-based regulations (for example, the fugitive emissions regulation presented in section III.C.3.j.), but also through market-based "cap" rules, which allow sources the flexibility to select their reduction approach so long as overall emissions are reduced annually (see section III.C.5.).

Area source emissions must also be dramatically reduced through regulations that apply either to individuals or, in some cases, the national manufacturers and distributors of materials whose application, storage, or use contribute evaporative VOC emissions. The category of area sources proposed for new (or further) regulation in the FIPs includes such diverse substances or activities as clean-up solvents, architectural coatings, waste burning, landfills, pesticides, consumer products, livestock waste, and residential water heaters (see sections III.C.3. and III.C.4.).

Certain of the area sources present special challenges both to the regulated community and to the regulator. For example, today's NPRM includes a proposal that manufacturers of pesticides not only continue to comply with existing state and federal rules that address toxics concerns but also reformulate their products sold in California to diminish VOC emissions (section III.C.4.d.). Regulation of other area sources, including most categories of consumer products, involves complex considerations of the extent to which additional reductions can be achieved without negatively affecting the products' quality or its effectiveness.[7]

EPA began its selection process for mobile source control strategies with those measures that were required in all states by the Clean Air Act Amendments of 1990, and those measures being implemented by the State of California and local agencies. EPA considered the impact of these measures as well as the expected benefit of national mobile source rules in process. For example, the California Low Emissions Vehicle program (LEV) relies on advanced emission control technologies, clean gasoline, and an on-board diagnostics system which achieve substantial reductions beyond those which will result from federal cars. As described above, EPA then developed mobile source control strategies such that generally equal, proportional reductions would be achieved in all stationary, area and mobile source categories. EPA developed strategies which, if implemented, would result in cleaner vehicles and engines via further improvements in technology or mobile source users selecting alternatives with lower polluting characteristics. EPA also developed strategies which rely on declining emission limits for other remaining mobile source categories, both to provide sufficient reductions for attainment and to assure that each category of emission source was contributing to the solution.

[7] In the case of consumer products, CARB has already undertaken these analyses and adopted regulations. These FIPs do not include any new requirements for these consumer product categories, but would make the existing state requirements federally enforceable.

In 1990, passenger cars, other highway vehicles, nonroad engines and equipment, and the transportation facilities used in interstate commerce produced from 53 to 63 percent of the total inventory of volatile organic compounds (VOCs) and from 70 to 94 percent of the total inventory of oxides of nitrogen (NO_X) in the FIP areas covered by this proposal. In order to demonstrate attainment of the ozone standard in these areas, EPA is proposing regulations which assure significant reductions in mobile source emissions—beyond those already expected from the continued turnover to newer, cleaner vehicles and engines. The mobile source category covers a very broad range of sizes of equipment, types of fuels, uses and operating modes, and extent of current pollution control. Therefore, there is no one measure or even one uniform type of measure which is proposed across the category to achieve the reductions needed for the attainment plans (see section III.D.1.).

The ozone attainment responsibility also falls on mobile sources that may operate on a national (or even an international) scale. Many of these mobile sources have not previously been controlled and must now undertake for the first time challenging pollution abatement assignments. For example, EPA is proposing that locomotives and large ships work to reduce NO_X and VOC emissions from their respective activities in the FIP areas (see sections III.D.4.e.(3). and (4).). Airline operators, though to some extent previously regulated for air quality purposes, will also be asked to make further emissions reductions from aircraft and other airport activities (see section III.D.4.e.(2).).

In addition, high quality inspection and maintenance (I/M) programs for vehicles remain the single most cost effective and important measure for achieving mobile source emissions reductions. In the FIPs, EPA is proposing a program which follows closely the model for meeting the performance standards for all I/M programs nationwide, and which EPA could effectively implement. EPA and the State of California are continuing to hold discussions on a different enhanced program design which would meet the national enhanced I/M performance standard if implemented by the state. If an agreement is reached, appropriate legislation and regulations are adopted, and an approvable SIP revision is submitted, EPA will withdraw or rescind the FIP I/M program (section III.D.2.c).

One reason that vehicle emissions continue to be such a large portion of total VOC and NO_X emissions—despite increasingly stringent emission standards for vehicles—is because of high growth in vehicle miles traveled (VMT). This VMT increase reflects the simple facts that more cars are on the road today than ever before, and more people are driving more miles than ever before. In order to encourage a reduction in VMT, and in the number of cars on the road, EPA is proposing two programs designed to decrease growth in VMT by targeting single occupant vehicle use. The proposed measures will require increases in average occupancy in personal vehicles in Sacramento and encourage shifts to carpooling and public modes of transportation in all the FIP areas (sections III.F.2 and III.D.2.g). Various other strategies could be used to achieve decreases in VMT. As discussed below and elsewhere in today's NPRM, EPA resources, and statutory authority have constrained our ability to propose these possibly more effective strategies.

In designing these FIPs, EPA has attempted, wherever possible, to structure the proposed FIP rules so that responsible state and local agencies can adopt the rules as part of their SIPs or accept EPA delegation to implement the federal rules (section III.J.). For example, the proposed New Source Review (NSR) regulations for the Sacramento FIP area tracks the existing rule format and terminology shared by the 5 Sacramento area air pollution control districts, rather than following the design of EPA's existing federal NSR regulations (section III.F.4.).

While the emission reduction targets in Sacramento and Ventura are formidable, the overwhelming reductions needed for ozone attainment in the South Coast appear to require that each individual pollution source within the FIP area eventually abate its emissions almost completely. For practically every controllable source category, this ultimate degree of control is beyond a level now foreseeable with existing technology and control techniques.

Congress recognized that this unique South Coast attainment challenge required sustained commitment to seek and apply new technological solutions. EPA's proposed FIP employs the special provision in the 1990 Clean Air Act Amendments, which allows for commitments (rather than fully adopted regulations) as part of the South Coast ozone attainment demonstration. The South Coast FIP includes these commitments and outlines some of the federal activities currently underway to support the development and commercialization of new control technologies or pollution prevention techniques (see section III.B.5.d.).

The state has already submitted a SIP for the South Coast demonstrating attainment of the CO NAAQS by the year 2000. This demonstration relies primarily on existing state programs for clean fuels and vehicles, supplemented by an enhanced motor vehicle inspection and maintenance (I/M) program. Since the state has not yet developed and submitted legislation and regulations to implement an enhanced I/M program, EPA is proposing to complete the state's attainment demonstration with a single federal measure: the contractor-run I/M program discussed in section III.D.2.c. As discussed above, EPA believes that an I/M program is a necessary part of the ozone FIPs as well.[8]

3. Specific Control Measures

a. *Stationary/area source measures.* With few exceptions, industrial and commercial sources in the FIP areas are already subject to air pollution controls that match or exceed the stringency of rules applied elsewhere in the country. In the Sacramento FIP area, however, EPA was able to identify four major industrial facilities (Michigan-California Lumber Company; Formica Corporation; SierraPine Limited; and Reynold's Metals) for which the applicable local regulations do not reflect the minimum level of control required nationally. The state and local air districts remain under an obligation to adopt and submit "RACT" regulations for these sources. Since these agencies (specifically, Placer County and El Dorado County Air Pollution Control Districts) have not yet acted, EPA is today proposing detailed provisions that will contribute to attainment in the Sacramento area by supplementing the applicable regulations to match available control technology. See section III.C.2, and proposed 40 CFR 52.2961(p)–(s).

EPA selected a second set of proposed FIP controls by comparing existing air pollution regulations in each FIP area with the best existing state or local regulation, on a category-by-category basis. Where a more effective control measure that could provide significant reductions already existed (either as an adopted or draft rule), EPA has adapted and proposed the rule for federal administration in the applicable FIP areas. Since existing South Coast controls are generally the most stringent in the country, many of these proposed rules were based on existing SCAQMD

[8] See earlier discussion on I/M.

regulations and are proposed for the Sacramento and Ventura areas. In some cases, the proposed FIP rules newly regulate sources in the area (e.g., commercial bakeries and municipal landfills in the Sacramento FIP area). In other cases, the proposed rules significantly strengthen existing regulatory provisions (e.g., tighter coatings and solvents limits in Sacramento and Ventura). The costs, regulatory strategy, and technical basis of these measures are discussed individually in section III.C.3. The regulations themselves appear in proposed 40 CFR 52.2961(a)–(o) and (t)–(v).

EPA is proposing to enforce on a statewide basis a group of four area source rules. EPA proposes that they be administered on a statewide basis primarily because ensuring compliance only within the FIP areas would be relatively ineffective. EPA's rationale for statewide control appears in section III.C.4.a.

The first of these controls simply proposes CARB's existing consumer product regulations, which regulate products such as detergents, floor finishes and deodorants, and are enforced against manufacturers, distributors, and retailers. While the CARB regulations have been adopted and enforced by the state for several years, California has not yet submitted them to EPA for inclusion in the SIP. The proposed FIP measure would make the measures federally enforceable, and is discussed in sections II.B.1. and III.C.4.c. The proposed regulation is 40 CFR 52.2957.

The second proposed statewide control is based on a draft CARB consumer product rule for the aerosol spray paint category, as well as rules developed by SCAQMD and the Bay Area Air Quality Management District. Proposed rule 40 CFR 52.2958 would limit the VOC content of spray paints that could be sold or used within the state.

The third proposed statewide control deals with one of the largest nonmobile sources of VOC: architectural and industrial maintenance (AIM) coatings, including most primers, paints, lacquers, stains, and specialty coatings used for residential, commercial, and industrial purposes. The proposed rule progressively tightens restrictions on VOC content in three phases of reduction through the year 2003 in order to allow for development of additional VOC reduction strategies. The FIP rule may be amended if appropriate, in the event that EPA issues a national AIM coatings rule.

The fourth rule proposed for statewide application is designed to reduce VOC emissions from agricultural and structural pesticides use. Many other pesticides are subject to CARB's consumer product rule and EPA's proposed 40 CFR 52.2957. The proposed agricultural and structural pesticides rule, 40 CFR 52.2960, is necessarily complex and is discussed extensively in section III.C.4.d. The rule initially requires producers to submit VOC analyses of their pesticides. Following EPA review of the data, EPA will implement a six-step procedure for setting a VOC limit to achieve target VOC reductions.

In order to achieve further necessary reductions from stationary and area sources, EPA proposes declining emission "cap" rules in each of the FIP areas. The cap rules apply to a large portion of the stationary sources of VOC and NO_X. For these sources, the rules require annual reductions in emissions from 2001 through 2005, but allow each source the flexibility to determine how reductions are to be made. If a 1999 attainment option is selected for Sacramento, the Sacramento VOC cap rule would require that all reductions be achieved in the attainment year (i.e., by January 1, 1999). EPA strongly encourages affected sources to identify pollution prevention approaches as the ideal response to this market-based initiative.

The proposed cap rules require sources to submit compliance plans in the year 2000, showing how the mandated reductions will be achieved, using 1990 actual emissions as the baseline but subtracting emissions required to be reduced through any SIP or FIP rules in the period after 1990. EPA is proposing VOC cap rules in each area, with annual reductions of between 4 and 9 percent, depending upon public comment and EPA's final determination of the appropriate and necessary reduction rate. A NO_X cap rule with annual reductions of between 6 and 9 percent is proposed only in Ventura, since further NO_X reductions are not needed in Sacramento, and the South Coast has recently adopted a cap program (RECLAIM) achieving comparable reductions to the proposed FIP NO_X cap rule.

EPA is inviting comment on a number of important issues associated with these innovative rules. The Agency particularly solicits comment on whether a trading component should be added to increase compliance options, and whether it is preferable to establish a manufacturers' "bubble" rule for industrial and commercial solvents and coatings, rather than regulating users (see III.C.5. and 40 CFR 52.2952–52.2955).

b. *Mobile source measures*—(1) Programs for vehicles. Because the magnitude of needed emissions reductions is so great, the FIPs seek to build on reductions already being achieved by the California Low Emission Vehicle (LEV) program. In order to achieve these reductions, EPA is asking for comment on the need for and benefits of adopting an enhanced in-use compliance program which would provide extra in-use emissions reductions beyond the substantial reductions already provided by the California LEV program.

Specifically, EPA is proposing to strengthen the recall program for cars and light and medium duty trucks. Vehicle manufacturer's recall responsibilities will be determined by testing the emissions performance of typical vehicles instead of only vehicles which have been properly maintained. EPA is also proposing to increase manufacturer's liability for repair of vehicle emissions control equipment. Both of these proposals are intended to provide incentives to manufacturers to increase the durability of the emissions control systems in the vehicles they produce (III.D.2.d., Appendix I.A., and 40 CFR 52.2962).

EPA is also seeking comment on a program which would require that on-board diagnostic systems of new vehicles be capable of communicating, to on-road sensors, the operational status of the emission control system. This approach would be intended to particularly target high emitting vehicles, and would remain in effect for the life of the vehicle (III.D.2.d.).

For the South Coast, EPA is also proposing a requirement that certain commercial vehicle fleets make the majority of their purchases from inherently low emitting vehicles (ILEVs),[9] including, for example, natural gas and electric vehicles, 40 CFR 52.2962.

For light-duty vehicles, EPA proposes to prohibit California residents from importing or registering vehicles purchased outside of California that are not certified to meet California's stringent vehicle standards. This prohibition would begin in 1999, and is described in section III.D.2.h. The proposed regulation is 40 CFR 52.2964.

Given the level of emissions reductions necessary to demonstrate

[9] Beyond very low exhaust emissions, these vehicles must have little or no evaporative emissions even when emissions control systems malfunction. In practice this means using fuel sources which have little or no evaporative emissions.

attainment in each of the three FIP areas, EPA believes it is absolutely essential to propose an enhanced inspection and maintenance (I/M) program for vehicles which meets national performance standards. As previously discussed, the structure of the FIP proposal will follow EPA's model program. If the state enacts and submits approvable legislation and regulations for its own enhanced program which meets national performance standards, EPA will withdraw or rescind the FIP I/M program. This issue is described in more detail in sections III.D.1.b.(7).(a). and III.D.2.c. The proposed regulation is 40 CFR 52.2963.

For heavy duty trucks, the FIP proposals include tighter hydrocarbon (HC) and NO_X exhaust standards for model years 1999 and beyond, strict evaporative HC standards to minimize shifting from diesel to gasoline beginning in 1999 as well, and a declining average NO_X level for fleet operators beginning in 2000. Fees for fleet emission averages above the declining NO_X targets are proposed to help maintain turnover to the newer, cleaner engines.

At the option of the fleet owner, interstate trucks may comply with limitations on the number of stops allowed within FIP areas beginning in 1998 rather then complying with the declining NO_X levels. The heavy duty truck proposals are discussed in section III.D.3. and the proposed regulations are in 40 CFR 52.2966.

Finally, for the 1999 attainment date option in Sacramento, EPA is proposing to include an accelerated retirement strategy for on-highway heavy duty engines. This accelerated retirement strategy is discussed in section III.B.3..

(2) Programs for nonroad vehicles and engines. EPA is proposing to regulate a number of categories of nonroad vehicles and equipment: Nonroad heavy duty engines, small nonroad equipment, motorcycles and recreation vehicles, and marine engines. See discussion in section III.D.4.(a)-(d).

For nonroad heavy duty engines (at or above 50 horsepower, 37 kW), a phased approach would begin with a national program targeted for final rulemaking in May 1994. In the next phase, EPA is proposing additional standards for the FIP areas and increased manufacturers liability for repair of emissions control systems to help ensure continued low emission performance. An emissions-based, fleet-average fee system with a declining emission levels is proposed for the FIP areas to maintain turnover to the cleaner engines. For the 1999 attainment date option in Sacramento, EPA is proposing a growth cap for the nonroad heavy equipment category. This cap is discussed in section III.B.3.

For small nonroad equipment (spark ignited engines at or below 25 horsepower, 19kW), EPA is proposing to employ a two-phased strategy of first setting national standards for implementation by 1995, and then employing negotiated rulemaking to achieve still further reductions after 2000 or 2001. This strategy reflects discussions already underway at the national level. The standards EPA will propose in the first phase will be similar to the State of California's regulation for utility and lawn and garden equipment engines manufactured in 1995 and beyond. In both phases, the effect of this action will be to extend regulations to engines which California is currently pre-empted from regulating (III.D.4.b.2.).

The FIP proposals include more stringent exhaust emissions standards for motorcycles and recreational vehicles such as mopeds, dirt bikes, all terrain vehicles (ATVs), and go-karts sold in California after January 1996. The level of stringency may require substitution of 4-stroke nonroad engines for some current 2-stroke applications (III.D.4.c.(1).).

Finally, EPA is proposing to apply national emission standards, scheduled to be proposed in 1994 and finalized by November 1995, to spark-ignited marine propulsion engines such as outboard engines, personal watercraft ("jet-skis," etc.), and sterndrive and inboard engines. These national rules will apply to new spark ignition marine propulsion engines produced after August 1, 1998 and are proposed to be combined with a registration/permitting and fee system for marine engine use in FIP area waters. Marine engines meeting the new national standards would be exempt from the fees which are proposed to begin in 2004 (III.D.4.b.(3). and III.D.4.c.(2).). For the 1999 attainment option in Sacramento, EPA is proposing a fee system or boating restriction to reduce emissions from recreational boating by one-third.

(3) Program for National Transportation Sources and Federal Activities

The litigation which resulted in today's FIP proposals arose in part from the South Coast's concern that emission regulation of "federal sources" such as those associated with interstate transportation or military bases was not keeping pace with controls in other sectors. In order to achieve appropriate emissions reductions in these areas, the FIP proposals include controls for locomotives, airports and aircraft, large marine vessels, and military installations.

For locomotives, EPA is relying on a national regulation that will apply to NO_X emissions from newly manufactured locomotive engines in two phases, first in 2000, then in 2005. Tighter standards for remanufactured locomotive engines are also being proposed and may be implemented either statewide or nationwide. Because the necessary reductions in NO_X emissions are so significant in the South Coast, EPA is proposing a supplemental program for railroads in the South Coast FIP. This program would require that railroads reduce their average emission rate of their fleet by 2010 to a level consistent with the reductions proposed for stationary sources. See discussion in section III.D.4.e.(3) and proposed regulation 40 CFR 52.2971.

As described in section III.D.4.e.(2), EPA is proposing that commercial aviation operations be subject to an environmental performance target in the FIPs, including mobile emissions sources under the direct control of the airline (aircraft, aircraft auxiliary power units, ground service equipment, captive vehicle fleets, and any other airline-operated mobile source). Declining emissions rate targets for these emissions, consistent with the caps proposed for stationary sources, would be set beginning with the ozone season of 2001. This level of allowable emissions would translate into an industry-wide environmental performance factor expressed as an allowable pounds of pollutant per passenger equivalent unit. Airlines which exceed their allowable performance factor would pay a fee based on the amount of excess emissions. In order to provide additional flexibility in meeting these targets, EPA is also proposing intra-airline averaging for airlines with operations at multiple airports within the same FIP area. The Agency is also seeking comment on the establishment of an inter- airline credit and trading program. The proposed regulation is 40 CFR 52.2970.

For general aviation in the FIP areas, EPA is proposing two fee systems in the alternative. One proposal would simply charge a fee for each takeoff sufficient to discourage use without making general aviation prohibitively expensive. The second approach would incorporate an exemption into the fee program for engines that are certified to "clean" emissions levels. EPA also requests comment on differentiation of fees based on airport proprietor's programs for other emissions reductions such as refueling vapor recovery and other

alternative control programs. See discussion in section III.D.4.e.(2).(d). and proposed regulation at 40 CFR 52.2970.

Section III.D.4.e.(2).(c). and (5) describes EPA's proposed military installation bubble for each FIP area encompassing all mobile emission sources under the control of the Department of Defense (DOD), with the exception of military aircraft and vessels. This includes auxiliary power units, ground service equipment, captive vehicle fleets, privately owned vehicles, and any other mobile source operated within the boundaries of the installation. A declining emissions cap would apply similar to the cap imposed on stationary sources within each FIP area. Each installation would be required to determine a baseline inventory from which the reductions will be achieved. The proposed regulation, 40 CFR 52.2972, allows trading among active bases and credit for base closures that generate permanent emission reductions.

Marine vessels are the largest uncontrolled source of emissions of NO_X and sulfur oxides in California. In order to encourage emissions reductions from these vessels in a manner consistent with existing international standards, EPA is proposing a flexible control strategy for the reduction of emissions from ships in port. Specifically, a user fee would be based on the type emission control that a particular ship used. Ship operators would be allowed (and encouraged) to reduce the fees which would be applied by using low emission engines, using electrical onshore power service instead of the ship's engines while in port, and for travelling outside of the Channel Islands. Compliance with all three operational changes would eliminate the fees altogether. Ships that use South Coast ports more frequently would be faced with higher annual fees, and therefore would have a greater incentive to make operational changes and install more efficient emission control devices to reduce or avoid fees.

In Ventura there are no large ports, but marine vessel emissions are still large contributors to the area's NO_X inventory, because of the emissions that are blown onshore from passing ships by the prevailing winds. As mentioned above, the South Coast FIP includes a discount in the proposed fee system to encourage ships to move further out to sea when passing the Ventura coastline. See discussion of marine vessels and ports in section III.D.4.e.(4). and proposed regulation 40 CFR 52.2973.

(4) Programs to Reduce Vehicle Miles Traveled (VMT)

As described earlier, vehicle emissions continue to be a large portion of future total VOC and NO_X emissions inventory, despite increasingly stringent emission standards, because of projections of continued high growth in vehicle miles traveled (VMT). Due to current growth projections, EPA is proposing programs designed to decrease growth in VMT by targeting single occupant vehicle use. The proposed regulations require increases in average occupancy in personal vehicles in Sacramento (for the 1999 attainment option only) and encourage shifts to carpooling and public modes of transportation in all the FIP areas. Various other strategies could be used to achieve decreases in VMT, but most depend on local planning and implementation to be successful. Unfortunately, EPA resources and statutory authority have constrained our ability to propose these possibly more effective strategies. These constraints are discussed generally in section III.A.2.

Finally, for purposes of the 1999 attainment date option for Sacramento, EPA is proposing a restriction on the use of on-road vehicles such that each vehicle in the Sacramento nonattainment area would be prohibited from being driven on one day out of five weekdays. This is, of course, one of the least desirable of mobile source options available to EPA, but, as is described in detail in III.B.3.d.(3), it appears necessary in order to meet the 1999 attainment deadline. It is also one of the main reasons why EPA is recommending the 2005 attainment option.

D. Role of State and Local Agencies

1. SIP Responsibilities

EPA has every intention of using the FIP process to propose and promulgate real solutions to the ozone problems in Sacramento and Ventura, as well as both the ozone and carbon monoxide problems in the South Coast. EPA will implement these solutions as it becomes necessary. However, under the CAAA of 1990, nothing in the FIPs proposed today or to be finalized in February, 1995 releases the state and local governments from their independent legal responsibilities to meet all requirements of the Clean Air Act. Furthermore, failure to meet any of these requirements will subject applicable areas of the state to the mandatory sanctions required by section 179 of the Act.

One of the most important responsibilities that any nonattainment area has under the Clean Air Act is to adopt and submit to EPA in November 1994, comprehensive plans to attain the ozone standard by its applicable attainment date. Regardless of the FIPs, the state must still implement plans sufficient to demonstrate attainment. Nothing in the FIP can relieve them of that responsibility under the law. As discussed earlier, EPA is requesting comment on whether there should be an exception to this requirement. Specifically, comment is requested on whether, as a legal and policy matter, states should be allowed to take credit for emission reductions associated with FIP controls applied to sources over which EPA has sole jurisdiction.

2. State and Local Opportunities

EPA hopes that state and local agencies will take full advantage of the opportunities provided by the FIP development process. EPA believes that the emission reduction strategies proposed today, together with the public involvement process described below, can be used to leverage support for state and local emission reduction strategies. EPA has purposefully chosen to maximize the number of strategies in this proposal that could be adopted wholesale by state and local agencies. In other cases, the necessarily blunt EPA strategies should provide support for better tailored state and local regulation of the same emission sources. Finally, state and local agencies have the ability to adopt innovative emissions growth management, transportation control and land use strategies that EPA cannot propose. These types of strategies adopted at the local level could displace the more onerous strategies in the FIPs.

E. Public Involvement

1. Public Participation in Development of the FIPs

One of the more difficult aspects of developing these FIPs has been to build in meaningful public participation. Sufficient time is at best a luxury in meeting the court-ordered deadlines to promulgate the final FIPs. Conversely, sufficient time is an absolute necessity for full public involvement. An inevitable conflict arises when trying to meet both of these needs.

If community-wide support for the changes necessary to reach attainment were easy to achieve, there would be no need for these FIPs or even the attainment deadlines in the first place. Unfortunately, any level of real public participation in matters this controversial can easily degenerate into

parochial disagreements with no real benefit to anyone involved. Any participation process which facilitates consensus solutions must be designed to minimize these disagreements.

Finally, given the limited resources available to EPA for actually developing the strategies in these FIPs, it is a measure of the Agency's commitment to public involvement that we have and will continue to direct them toward increasing public involvement in this effort.

Irrespective of these difficulties, EPA has and will continue to engage in every possible effort to make the final plans a product of local involvement and consensus. We will do so because we believe strongly that we can best fulfill the goal of the Clean Air Act—that is, clean and healthy air for all Americans—and meet our court-ordered obligations by preparing these plans with the state and local communities, not in spite of them. We are highly cognizant of the fact that each area affected by our rules has its own unique qualities and concerns. We also believe that the only way in which EPA can fully understand those concerns—and take them into account—is through direct participation by the affected interests and communities.

Ultimately we believe that the success of *any* air quality plan—federal, state or local—will be dependent upon the level of understanding and support which exists in the community regarding the need for and benefits of the plan. Without that understanding and support, we are unlikely to meet the difficult challenges which lie ahead.

2. Public Meetings Prior to Proposal

As a result of these beliefs, we have initiated an effort to develop these plans in a manner which encourages local input. First, our plans, and their assumptions, were built with significant input from state and local air agencies, other local and state officials, and representatives of various affected interests. EPA has tried to use the best and most current data that these entities could provide within our FIP proposal timeframe.

Second, our FIP development effort has included eight informal, pre-proposal public meetings (two each in Ventura and Sacramento, and four in the South Coast). The purposes of these meetings were to: (1) Begin the process of education and interaction among the various parties—local, state, federal, and the public; (2) solicit initial thoughts and concerns from the affected communities as we developed the proposals; and (3) solicit suggestions about how best to continue the interactive process through the development of the final plans due in February 1995. The results of these meetings are found throughout these FIP proposals, both in the emission reductions strategies and in the post-proposal process.

Finally, our FIP development process has included numerous staff-to-staff discussions among the local and state air boards and EPA. The results of these discussions, as well, are found throughout the proposals.

3. Process for Post-Proposal Public Involvement

In order to organize and facilitate meaningful community involvement during the period between proposal and the final plans, EPA plans to enhance the normal notice and comment period. Our primary effort in this area will consist of working to coordinate the FIP processes with the ongoing local processes so as to minimize public confusion and coordinate planning resources. This approach is based on comments and requests received in pre-proposal meetings, and will rely—to the greatest extent feasible—on the processes already in place at the local level. Following proposal of the FIPs, EPA will continue to meet with responsible state and local air agencies to coordinate the SIP and FIP public processes, as well as with community groups, environmental and business interests.

A set of conflicts exist though, which may make it necessary for the FIP processes to also follow its own separate track. For example, the local air boards are currently developing plans which not only meet the requirements of the Clean Air Act Amendments of 1990, but also must meet the requirements of the California Clean Air Act. No such California specific requirement exists for the FIPs.

Further, EPA believes that it is necessary for the FIPs to apply many of the controls to all three areas or in some cases, state-wide. Reliance on the various local SIP processes to engage the public on these particular FIP measures would make it difficult for interested parties to participate fully in all aspects of the dialogue, and could lead the public to believe that EPA has the ability to tailor these measures to the conditions of the local areas.

Finally, EPA must meet the mandates of the federal courts and the terms of settlement agreements which require it to promulgate final FIPs by February 1995. This deadline cannot be changed by EPA and means that coordination with ongoing local processes must be constrained to fit within EPA's timeframe.

For these reasons, EPA believes that we should take additional steps outside of the local processes in order to provide an opportunity for productive public input on the proposed FIPs in a timeframe which is consistent with the final promulgation deadline of February 1995. These steps will include:

(a) Following proposal of the FIPs, EPA will convene a public workshop in each FIP area in order to describe in some detail our proposals, to help us identify appropriate issues for in-depth examination, and to encourage local participation and support for issue-specific focus meetings.

(b) Depending on the level of support that exists, issue-specific focus meetings may be held in each FIP area, and possibly a central forum for selected statewide issues, to help develop comments on the FIP issues of greatest concern. The goals of each issue-specific group will be to develop a consensus position, if possible, and to submit consensus comments, if possible, on its set of FIP issues. EPA will also encourage each group to direct its comments to the state and local air agencies which will be developing ozone plans due in November 1994.

(c) EPA will not "select" specific attendees or chairpersons for these focus meetings, but will encourage participation that is sufficiently representative and inclusive so as to make any consensus real and meaningful. To the extent possible, EPA will provide contractor and staff support for the meetings. EPA will encourage the local air districts and the Air Resources Board to provide staff support as well.

(d) All group meetings sponsored by EPA will be open to the public. The number of meetings for each issue area will vary by issue.

(e) Following the workshops and group meetings, formal public hearings will be held in each FIP area, probably in early July 1994. Notice will be given of the formal public hearings in the **Federal Register** thirty (30) days prior to such hearings.

(f) The public comment period will be held open from the publication of the FIP proposals until 30 days after the public hearings.

(g) It is EPA's intention to give great weight to any comments on which local consensus has been reached through this public involvement process. EPA, of course, remains ultimately responsible for the content of the final rule which must meet federal legal requirements and address national policy concerns. Although EPA

encourages all interested parties to participate in focus meetings and workshops, any member of the public who has chosen not to do so has the right to submit written comments and/or testify at the public hearings. EPA will consider all comments received during the public comment period.

EPA realizes that the time constraints involved pose a very real obstacle to achieving consensus on issues as complex and controversial as those raised in developing clean air strategies. The requirement to finalize these FIPs by February 1995 means that EPA, and the public, will need to make very efficient use of this period until the public comment period closes in mid-summer. EPA is realistic about the level of consensus that can be reached in such a short period of time. We have decided to go forward with an expanded public involvement process because we believe that the potential benefits are great—and at a minimum, all parties will benefit from a greater understanding of the air quality problems, the concerns of affected parties, and the range of solutions.

In summary, we see the development of the final federal implementation plans due in February of 1995 as a *real* opportunity for local communities, in conjunction with federal and state authorities, to build air quality plans that can be successfully implemented. Optimally, this process will also provide state and local authorities with workable ideas and strategies that can be incorporated into the 1994 ozone plans, thus facilitating recision of all or significant parts of the FIPs. Through the enhanced notice and comment process each participant—state, local, federal, and every interested member of the public—will have the opportunity to take responsibility where it should be taken, and to work cooperatively where it can be done.

4. Solicitation of Comment

Written comments on the proposals contained in today's NPRM will be accepted throughout the public process described above. EPA expects to hold public hearings in early July, 1994 and expects that the deadline for written comments will be approximately 30 days after the public hearings. EPA will give notice in the **Federal Register** of the public hearings and public comment deadline as soon as possible, but no later than 30 days prior to the hearing dates.

EPA encourages the public to participate both through formal hearing and written comments as well as in the informal workshop and focus meeting forums described above. Workshops will be held in each FIP area in mid to late March 1994. Throughout today's NPRM, EPA has encouraged the public to comment on specific issues and alternatives. We expect that these issues will be appropriate for further examination in informal workshop and focus meeting forums.

II. Background and Proposed SIP Actions

A. Description of the Affected Areas

1. Sacramento Area

The Sacramento area includes all of Sacramento and Yolo Counties, the northeast portion of Solano County, the southern portion of Sutter County, and all of El Dorado and Placer Counties except for the Lake Tahoe area.[10] The population of this area is approximately 1.6 million, and is projected to increase to 1.9 million by 2000 and 2.2 million by 2005.[11] The annual personal income of the area exceeds $30 billion. The economy is dominated by agricultural, commercial, and service sectors, with almost no heavy industry.

Mobile sources, particularly motor vehicles, are the dominant source of VOC and NO_X in the Sacramento area. By 1999, mobile sources will account for approximately 50 percent of VOC emissions and over 90 percent of NO_X emissions. Industrial, commercial, and residential solvents and coatings are also significant sources of VOC, contributing almost 30 percent of VOC emissions in 1999.

Violations of the ozone NAAQS occur in the Sacramento area from as early as April through mid-November, although most violations in recent years have been confined to the warmer months of June through October. The Sacramento ozone design value at the time of classification was 0.16 ppm (based on 1987–1989 data), substantially above the NAAQS for ozone, which is 0.12 ppm, measured as a one-hour average. Over the period 1990–1992, the design value was still 0.16 ppm. For this 1990–1992 measurement period, only four areas had a higher design value: South Coast (.30 ppm); the Southeast Desert area, immediately to the east of the South Coast (.23 ppm); Houston/Galveston (.21 ppm); and San Diego (.17 ppm).

Based on this design value, the Sacramento area was classified as "Serious" under section 181(a) of the Clean Air Act, with an attainment deadline of no later than November 15, 1999. See 56 FR 56728. However, according to EPA's most recent national air quality and emissions trends data (through calendar year 1992), the area also has the eighth largest number of average expected exceedances of the ozone standard in the country (9.0 days).[12] Outside of southern and central California, only the Houston and Philadelphia areas have a greater number of expected exceedances.

This unusual frequency of exceedances—coupled with the absence of easy-to-control pollution sources, the immense emissions reductions needed, the rapid population growth predicted for this area, and the possibility that some of the ozone violations in Sacramento may be due primarily to transport of pollution from the south and southwest—suggest the appropriateness of a bump-up to a "Severe" classification, in accordance with the provisions of section 181(b)(3). See discussion below.

Urban airshed modeling suggests that a 40 percent reduction in current levels of VOC coupled with a 30 percent reduction in NO_X emissions would be needed for attainment. As displayed in a table included in the Sacramento FIP attainment demonstration (see section III.H.3.a.), other combinations of VOC and NO_X reductions also could yield attainment, but in EPA's judgment the 40:30 option appears to have a greater potential to minimize dislocation and inequities among source categories.

2. Ventura Area

The Ventura area includes all of Ventura County, which lies on the California coast between Santa Barbara and Los Angeles Counties. The 1990 population was 660,000 and is projected to increase to 840,000 by 2005. The County ranks third in California in petroleum production and 17th in the Country in agricultural income. Twenty-five percent of the work force commute to jobs in Los Angeles.

Ventura's emissions inventory is less dominated by the mobile source component than is Sacramento's. For the year 2005, mobile sources account for approximately 40 percent of VOC emissions and 70 percent of NO_X emissions. The ozone season extends

[10] At the time EPA's FIP obligation arose, the Sacramento nonattainment area did not include any portions of El Dorado and Sutter Counties. These portions were added in revised designations promulgated in conformance with the 1990 Amendments. See 56 FR 58694, 56726 (November 6, 1991).

[11] Population projections for 2000 and 2005 are based on the latest SACOG data and do not yet include estimates from the northeast portion of Solano County.

[12] The average estimated number of exceedances is the number of days the 0.12 ppm standard was exceeded on average at the site recording the highest second maximum 1-hour concentration, after adjustment for incomplete or missing data days.

from April through November, but very few violations have been recorded before June.

Ventura is classified as a "Severe" ozone area, with a November 15, 2005 attainment deadline.[13] For the period 1990–1992, the design value was .15 ppm. While this design value is the same as Sacramento's for the 1990–1992 period, Ventura had more than twice the number of expected exceedance days (17.6).

Transport of ozone and ozone precursors from Los Angeles, Santa Barbara, and outer continental shelf activity can be significant. However, emissions from Ventura itself can result in ozone standard exceedances independent of transport from other areas. In addition, mountains bordering the Ventura urban areas contribute to a meteorology that favors high ozone concentrations, particularly within the southern portions of the County.

Based on recent urban airshed modeling analyses, EPA has determined that attainment requires 40 percent reductions from current levels of both NO_X and VOC.

3. South Coast Area

The South Coast area (South Coast Air Basin) includes all of Orange County and the more populated portions of Los Angeles, San Bernardino, and Riverside Counties.[14] Ventura County lies to the northwest, the Southeast Desert "Severe" ozone nonattainment area (portions of San Bernardino, Riverside, Kern, and Los Angeles Counties) is to the north and east, and the San Diego "Severe" ozone area is to the south.

The current population of approximately 13 million is expected to grow to more than 18 million by 2010. The South Coast is the largest industrial area in the United States, with a gross domestic product of $300 billion. Practically every commercial and industrial category is represented in the area's economy.

In the year 2010, mobile sources will account for 46 percent of VOC emissions, 81 percent of NO_X emissions, and 97 percent of CO emissions in the South Coast.

The South Coast area has by far the worst ozone levels in the Country and is the only area classified as "Extreme." For the period 1990–1992, the design value was .30 ppm and the average number of actual exceedance days was 134.3. Ozone levels are particularly high during the months of July through October, but violations also occur under warm and stagnant conditions in April, May, June, and November.

The South Coast is one of only three "Serious" CO areas in the Country. Its design value is 16.4 ppm for the period 1991–1992. The average yearly number of exceedances for those years was 38. In recent years, CO violations have occurred only in the months of November, December, January, and February, and at certain monitoring sites in Los Angeles and Orange Counties. No CO violations have been recorded in the Riverside and San Bernardino portions of the South Coast area since the 1970's.

These uniquely high levels of pollution are the result of the massive emissions generated within the area, combined with especially adverse meteorology and topography. A number of factors—sunshine, high temperatures, ocean breezes carrying pollutants into the inland valleys, mountains to the north and east trapping the pollutants within the basin, and prolonged thermal inversion layers—conspire to create ideal conditions for the generation of high ozone levels. Extreme wintertime inversions retard the dispersion of CO emissions from the 9 million motor vehicles within the area. This leads to a buildup of CO concentrations over time, particularly within west-central Los Angeles County. Attainment requires approximately a 45 percent reduction in CO emissions from the baseyear.

B. SIP Status

1. Introduction; Relationship of the FIP to the SIP

At the same time EPA is proposing federal plans for these areas, the responsible State and local agencies have been developing and adopting their own plans and rules to meet the scheduled Clean Air Act requirements. In relation to the FIPs, the most important of these new SIP requirements and submittal deadlines are:

(1) CO plan for the South Coast demonstrating attainment and addressing the provisions of section 187 of the Act—due November 15, 1992;

(2) Ozone 15 percent rate-of-progress plans for each area meeting the requirements of section 182(b)(1)—due November 15, 1993;

and (3) ozone plans for each area demonstrating attainment and satisfaction of the relevant portions of section 182—due November 15, 1994.

EPA has issued preliminary interpretations of the amended Act's provisions applicable to these SIP obligations. See, for example, the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," [see generally 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992)], and "Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans," (EPA–452/R–93–002, March 1993).

Ultimately, EPA expects that SIP measures meeting the requirements of the 1990 amendments and more carefully tailored to the FIP areas will supplant the potentially severe measures EPA is compelled to propose here. EPA understands that this scenario presents facilities with the prospect of changing compliance requirements as the FIP is replaced by SIP measures. In the long term, however, it will better serve the area to have in place measures which are designed by State, regional, and local authorities, who are best situated to minimize any disruption of the local economy and communities.

In the discussion below, the more important completed and pending SIP submittals for the State and each area are briefly described. To the extent that the submittals satisfy, or help to satisfy EPA's obligations under the existing court orders, EPA will approve the SIPs and refrain from promulgating FIP provisions addressing those aspects of the air quality problem.

A submittal from the State and local districts of an approvable[15] SIP demonstrating attainment by the applicable deadline will enable EPA to rescind the FIP in its entirety. EPA believes that this rescission is appropriate even if the SIP for the area has other deficiencies (such as deficient RACT or NSR rules) which trigger separate FIP actions.[16]

[13] Based on a request and supporting information from the State, EPA's designation under the 1990 CAA Amendments divided the Los Angeles Consolidated Metropolitan Statistical Area into four distinct areas with respect to ozone designations and classifications. This action made the entire Ventura County a separate nonattainment area with a "Severe" classification, although the 1988–1990 design value calculated for the area would have supported a "Serious" classification. See 56 FR 56698, 56700, 56731 (November 6, 1991). Prior to this designation, the Ventura ozone nonattainment area included only that portion of the County south of the southern boundary of the Los Padres National Forest.

[14] For a description of the boundaries of the South Coast Air Basin, see 40 C.F.R. 81.305 and 56 FR 56726–56728 (November 6, 1991).

[15] Under section 110(k)(4) of the Act, EPA can conditionally approve a state plan which lacks adopted enforceable measures as long as the state has been made a commitment to adopt the enforceable measures within one year of the conditional approval.

[16] The Act allows states to replace FIP requirements with SIP measures, subject, of course, to EPA's approval of the SIP measures under sections 110(a), (k), and (l) of the Act. The Act provides that EPA is relieved of having to promulgate a FIP at all if the state submits and EPA approves a replacement SIP before the FIP must be promulgated. Section 110(c)(1) of the Act provides:

Continued

EPA wishes to emphasize that all existing and future SIP obligations remain the responsibility of State and local agencies, despite provisions in the FIP that may fulfill, in whole or in part, these obligations. Thus, the State and the applicable areas of the State are subject to the sanctions provisions of section 179 for any failure to submit a required plan or plan element, or upon EPA disapproval of a required plan or plan element.[17]

While EPA's FIP promulgation process unfolds, the responsible State and local agencies in Sacramento, Ventura, and the South Coast are developing their own plans under the schedule provided by the 1990 Amendments. Depending upon the time EPA is able to approve SIP replacement measures submitted by these agencies, EPA may upon approval of such measures either refrain from promulgating, or withdraw the corresponding portions of the FIP. sections 110(c) and 302(y).

As the relationship between the FIPs and the developing SIPs evolves, EPA will confront a number of issues. One question that has been raised is whether the State may claim credit toward meeting progress or attainment requirements for the emissions reductions from FIP measures that apply to a limited category of sources over which State or local control is legally preempted. The issue is whether the State, in its plan, may seek not to replace these FIP measures, but rather continue to rely upon them, at the same time obtaining EPA's full approval for the state plan.

Although EPA has not previously addressed this specific question, a straightforward reading of the Clean Air Act's text and structure suggests that a state plan to be approvable must demonstrate attainment of the relevant standard, without reliance on measures that EPA has promulgated solely pursuant to its FIP authority. (Under this theory, a state could still rely on any measures that EPA has promulgated under its independent authority, such as Title II, as opposed to its authority under section 110(c) to assume California's waiver role under, for example, section 209. See discussion of EPA's FIP authority, section III.A.2.a. To decide otherwise would require the conclusion that Congress intended FIP measures to remain in place, perhaps permanently, without sanctions being imposed on the state—a view arguably at odds with the Act's historic emphasis on the primacy of state responsibility and the role of FIPs as temporary substitutes for state failures.

On the other hand, it may be argued that, for a limited number of sources over which the federal government, when promulgating a FIP, demonstrably has sole legal authority, and over which the state is barred from exerting control, removing the FIP measures and hence requiring the state to compensate for the lack of control of these sources may force it to impose unreasonably and inequitably harsher controls on other sources. Thus, the argument goes, EPA should consider whether there is any basis in law, and justification in policy, for carving out a limited exception to the traditional view.

EPA does not resolve this complex issue here, but intends to continue to analyze and explore it. In this proposal we solicit comment on the legal and policy implications raised by this aspect of the relationship between the FIP and the SIP.

2. Sacramento

On November 15, 1993, the State submitted Sacramento ozone rate-of-progress plans for the Sacramento Metropolitan Area, addressing the Act's 15 percent rate-of-progress plan requirements. The Sacramento area's 15 percent plans involved a coordinated effort by the Sacramento Area Council of Governments (SACOG) and the five local air pollution control agencies. Each of the air agencies developed a plan for their portion of the area.

The reductions in Sacramento's 15 percent plans rely on an enhanced I/M program, measures that the State and local governments have adopted or have committed to adopt, measures that the Federal government will have to develop and implement for the Sacramento area, and substitution of NO_X for VOC reductions. However, an approvable enhanced I/M program has not been authorized by the State legislature, EPA has decided preliminarily that it will not accept commitments for measures for purposes of the Act's 15 percent rate-of-progress provision, and EPA cannot credit NO_X reductions in place of the necessary VOC reductions. Therefore, EPA cannot take action at this time to approve this submittal with respect to the Clean Air Act progress demonstration.

The Sacramento Metropolitan Air Quality Management District (SMAQMD), the Yolo-Solano Air Pollution Control District (YSAPCD), the Placer County Air Pollution Control District (PCAPCD), the El Dorado County Air Pollution Control District (EDCAPCD), the Feather River Air Quality Management District (FRAQMD), SACOG and CARB plan to submit a comprehensive revised ozone attainment SIP on or before November 15, 1994. The local agencies hope to release a draft of this SIP in the Spring of 1994 and to modify it after EPA finalizes the FIP in February 1995. The air quality modeling in the SIP and FIP are based on similar data and should be consistent. There may, however, be significant differences between the regulations included in the two plans to attain the ozone standard.

3. Ventura

On November 15, 1993, the State submitted a Ventura ozone rate-of-progress plan addressing the Act's requirement that a plan be submitted by that date demonstrating creditable VOC reductions of at least 15 percent from 1990 to 1996. The plan describes how this reduction can be accomplished with an enhanced I/M program plus measures that the State committed to adopt and implement by 1996 in Ventura's 1991 Air Quality Management Plan. Many of the promised local measures have already been adopted, but an approvable enhanced I/M program has not been authorized by the State legislature. As in the case of Sacramento, EPA cannot now approve this Ventura plan submittal with respect to the progress demonstration.

"The Administrator shall promulgate a Federal implementation plan at any time within 2 years after the Administrator [makes certain findings or disapproves a SIP] unless the State corrects the deficiency, and the Administrator approves the plan or plan revision, before the Administrator promulgates such Federal implementation plan." Section 302(y) of the Act defines a FIP as "a plan (or portion thereof) promulgated by the Administrator to fill all or a portion of a gap or otherwise correct all or a portion of an inadequacy in a State implementation plan. . . ." If a state fills a gap or cures an inadequacy in its SIP subsequent to EPA promulgating a FIP, the FIP may be rescinded or revised. The U.S. Court of Appeals for the Ninth Circuit recognized this principle in *Coalition for Clean Air v. EPA* (reported as *Coalition for Clean Air v. Southern California Edison*), 971 F.2d 219.

[17] Under section 179 of the Act, two principal sanctions are authorized: a highway funding restriction and an increased offset requirement for major new or modified sources. The highway funding sanction is enforced through an EPA prohibition on approval by the U.S. Secretary of Transportation of projects or grants in the area except where the Secretary has determined that the purpose of the project or grant is to improve a demonstrated safety problem. Section 179(b)(1)(B) also allows the Secretary to exempt certain projects and grants that are intended to minimize air pollution problems. The offset sanction requires that major new or modified sources in the area obtain at least 2 to 1 offsets before construction.

Section 179(a) requires EPA to impose one of these sanctions within 18 months and the remaining sanction within 24 months if: (1) The state has failed to submit a required plan or element; (2) the required submission is deemed incomplete; (3) EPA disapproves the required submission; or (4) an approved SIP provision is not being implemented. Section 110(m) allows EPA to impose these sanctions at any time after EPA has made one of these findings.

The Ventura County Air Pollution Control District (VCAPCD), the Southern California Association of Governments (SCAG), and the CARB plan to submit a comprehensive revised ozone attainment SIP on or before November 15, 1994. VCAPCD hopes to release a draft of this SIP by the Spring of 1994 and to modify it after EPA finalizes the FIP in February 1995. The air quality modeling in the SIP and FIP are based on similar data and should be consistent. As in the case of Sacramento, however, the regulations included in the two plans may be different.

4. South Coast

On December 31, 1992, the State submitted the CO plan for the South Coast. This plan includes a demonstration of attainment by the year 2000 relying on emission reductions from previously adopted regulations as well as from an enhanced I/M program meeting the requirements of sections 182(c)(3) and 187(a)(6). Because the State legislature has not yet enacted legislation authorizing such an enhanced I/M program, EPA proposes to disapprove the CO plan with respect to the requirements for an attainment demonstration, reasonable further progress, reasonably available control measures, and enhanced I/M.

On January 15, 1993, the Agency issued a finding of failure to submit two other mandatory elements of the CO plan: (1) Transportation control measures (TCMs) to offset growth, as required by section 182(d)(1)(A); and (2) adopted contingency measures to be implemented if vehicle miles traveled (VMT) forecasts are exceeded, in accordance with section 187(a)(3). In section II.C.1., below, EPA is proposing to disapprove the CO SIP with respect to these six elements: attainment demonstration, reasonable further progress, reasonably available control measures, provision for an enhanced I/M program, TCMs to offset growth, and contingency measures to be implemented if VMT forecasts are exceeded. EPA is also proposing a partial approval of other portions of the plan that represent an improvement over what is currently in the SIP, do not conflict with proposed FIP provisions, and meet some of the applicable requirements of the Act.

On November 15, 1993, the State submitted a 15 percent rate-of-progress plan for the South Coast. The 15 percent plan relies on reductions from currently adopted rules, but also depends upon a relatively small contribution from 10 SCAQMD measures scheduled for full adoption in 1994 or 1995 and an improved I/M program. As in the case of Sacramento and Ventura, EPA cannot at this time propose to approve this South Coast submittal with respect to the 15 percent rate-of-progress demonstration. However, in section II.C.2., below, for entirely different purposes EPA is proposing to conditionally approve the SCAQMD commitments to adopt rules during 1994 and 1995.

On October 15, 1993, the SCAQMD adopted rules implementing the Regional Clean Air Incentives Market (RECLAIM) program for NO_X and sulfur oxides (SO_X). This innovative program establishes a declining cap "bubble" requirement on most facilities with emissions greater than 4 tons per year of NO_X or SO_X. The program includes emissions allocation and emissions trading components. EPA intends to propose to approve (or conditionally approve) the RECLAIM regulations in separate rulemaking, following SIP submittal. For the purposes of the FIP attainment demonstration, EPA proposes to assign credit to the adopted RECLAIM program, which went into effect on January 1, 1994. If EPA does not finally approve the NO_X RECLAIM rules, EPA would not be able to grant credits for associated reductions, and would need to amend the FIP accordingly. For more details on the RECLAIM rules, see section III.C.5.

The SCAQMD, SCAG, and CARB are currently preparing a comprehensive revision to existing air quality plans, addressing all pollutants and the requirements of both the federal and State Clean Air Acts. SIP submittal of this comprehensive plan (or portions of the plan) is scheduled to occur on or before November 15, 1994. The new plan will include revised 1990 baseyear emissions inventories, and projected inventories for interim years through the year 2020. With respect to motor vehicle emissions, these inventories may be significantly different from those used in the proposed ozone and CO FIPs, because the 1994 plan is expected to rely on new trip modeling input data and revised motor vehicle emissions factors. For ozone, the plan may analyze additional episodes, including a weekend episode.

5. State of California

California's motor vehicle control program (CMVCP) predates the first federal statute regulating motor vehicle emissions, the Motor Vehicle Air Pollution Control Act of 1965. In the Air Quality Act of 1967 (Pub. L. 90–148), Congress allowed California a waiver of the Air Quality Act's preemption section on motor vehicle emissions control because of California's pioneering efforts and unique problems. The 1977 amendments to the CAA expanded the flexibility granted to California in order "to afford California the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare." H.R. Rep. No. 294, 95th Cong., 1st Sess. 301–2 (1977).

So long as California demonstrates that its motor vehicle standards are "in the aggregate" at least as protective of public health and welfare as applicable federal standards, section 209(b) of the Act requires the Administrator to waive the Act's general prohibition on state adoption of standards relating to the control of emissions from new motor vehicles or new motor vehicle engines, unless the Administrator finds that California's determination was arbitrary and capricious, that California does not need the standard to meet "compelling and extraordinary conditions," or that the California standards and accompanying enforcement procedures are not consistent with section 202(a) of the Act.[18] Section 211(c)(4)(B) also provides that a state that has received a section 209 waiver (i.e., California) may prescribe controls or prohibitions respecting fuels or fuel additives.

The 1990 CAAA further expanded the California waiver provisions to cover nonroad vehicles or engines (except for certain preempted engines), and also established a special California clean-fuel vehicle program to be implemented in California (the California Pilot Test Program). See sections 209, 211(c)(4), and 249.

California law reserves to CARB most authorities for adopting and enforcing motor vehicle emission controls (including restrictions on fuels and fuel content) and standards for nonroad engines and consumer products. Under this authority, particularly as strengthened by the California Clean Air Act of 1988 (Chapter 1568, Statutes of 1988), CARB has adopted many new provisions with the potential for vast VOC and NO_X emission reductions. CARB regulations adopted through the first half of 1990 are described at length

[18] In section 209 waiver decisions EPA has explained that California standards are inconsistent with section 202(a) if there is inadequate lead time to permit the development and application of requisite technology, giving appropriate consideration to the cost of compliance within such period. In addition, the Agency has held that to avoid inconsistency with section 202(a), California's procedures may not impose inconsistent certification requirements such that manufacturers would be unable to meet both the California and Federal requirements with the same test vehicle.

in EPA's 1990 proposed FIP for the South Coast. See 55 FR 36470–36479.

More recently adopted State measures include: Low Emissions Vehicles (LEV) and Clean Fuels Program; Utility and Lawn and Garden Equipment Engine Exhaust Emission Standards and Test Procedures; Standards for Consumer Products (CARB regulations adopted thus far cover approximately 30 consumer product categories); and Emission Standards for Construction and Farm Equipment.

EPA is not generally assigning credit in the attainment demonstration for State (or local) regulations that have not already been approved as part of the SIP or are not now undergoing SIP approval. EPA's policy restricts State credit in either their attainment demonstrations or progress plans for reductions from measures that have not been submitted as approvable elements of the SIP.

The principal reason for this policy has been to comply with section 110(a)(2)(A) of the Act, which requires that each SIP "include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this Act * * *."

In general, EPA policy has been to require that reductions used in attainment demonstrations be submitted for incorporation in the SIP, to ensure that the reductions are enforceable directly by EPA in the event that the responsible State and local agencies fail to perform their implementation responsibilities. It is for this reason that EPA is proposing in this NPRM to promulgate consumer product regulations comparable to rules which CARB has previously adopted and already enforces, but which the State has not yet submitted as a SIP revision.

C. Proposed Action on the South Coast SIP Revisions

1. CO Plan

a. Statutory provision and general preamble requirements. The air quality planning requirements for CO nonattainment areas are set out in sections 186–187 of the Act, which pertain to the classification of CO nonattainment areas and to the submission requirements of the SIPs for these areas, respectively. EPA has issued a "General Preamble" describing the Agency's preliminary views on how EPA intends to act on SIPs submitted under Title I of the Act [see generally 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992)]. The reader should refer to the General Preamble for a more detailed discussion of the EPA's preliminary interpretations of Title I. In this proposed rulemaking action, EPA is applying these policies to the proposed South Coast CO SIP, taking into consideration the specific factual issues presented.

Those states containing CO nonattainment areas classified as "Serious" were required under the Act to submit by November 15, 1992, a plan that provides enforceable measures to achieve annual emissions reductions leading to attainment of the NAAQS by December 31, 2000. The Act mandates other specific plan elements, which are discussed below.

In today's action, EPA is proposing to partially disapprove and partially approve the plan for the South Coast, in accordance with the provisions of section 110(k) of the Act governing EPA's review of SIP submittals (see 57 FR 13565–13566). EPA is proposing to approve the plan with respect to procedural requirements, employee commute options (ECO) program, and forecast of VMT. EPA is proposing to disapprove the plan with respect to the attainment demonstration, reasonable further progress (RFP), reasonably available control measures (RACM), enhanced inspection and maintenance (I/M), VMT contingency measures, and TCMs to offset growth in motor vehicle emissions and meet progress and attainment requirements. The State's submission to address the requirements for the clean-fuel vehicle fleet has been conditionally approved in a separate rulemaking. EPA will also act separately on the State's oxygenated fuel program. EPA is proposing to take no action on the plan's emissions inventory for the reasons discussed below.

b. *Procedural requirements.* Section 110(a)(2) of the Act requires states to provide reasonable notice and public hearing before plan adoption. The SCAQMD satisfied this requirement by furnishing proper notice and adopting the plan at a public hearing held on November 6, 1992. Following adoption by the Governing Board of the SCAQMD, the plan was forwarded to CARB, which submitted the CO plan as a proposed revision to the California SIP on December 31, 1992. On April 29, 1993, CARB submitted a letter correcting certain adoption and implementation dates for measures under CARB's jurisdiction.

c. *Emissions inventory.* Section 172(c)(3) of the Act requires that nonattainment plans include a comprehensive, accurate, current inventory of actual emissions from all sources of relevant pollutants in the nonattainment area. The emissions inventory included with the South Coast CO plan generally conforms to applicable EPA guidance (see, for example, Emission Inventory Requirements for Carbon Monoxide State Implementation Plans, EPA–450/4–91–011; Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, Volume I: General Guidance for Stationary Sources, EPA–450/4–91–016; Procedures for Emission Inventory Preparation, Volume IV: Mobile Sources, EPA 450/4–81–026d Revised). This guidance allows approval of California's motor vehicle emissions factors (in this case, the EMFAC7EP update) in place of the corresponding federal emissions factors. The methodologies used to prepare the base year and projected emissions inventories, as described in Chapter 3 of the plan, are acceptable. EPA is not proposing to approve into the SIP the State's emission inventories, however, because a different inventory is employed in the federal attainment demonstration for CO, and a new CO inventory has been developed for use in a South Coast SIP revision scheduled for adoption later this year. EPA hopes to be able to approve the revised inventory in the final SIP action and use this new inventory in the final CO FIP.

Moreover, State and local agencies are preparing comprehensive revisions to the base year and projected inventories for motor vehicles. EPA may use some or all of this revised and updated motor vehicle data to amend the attainment demonstration in the final FIP. If the State submits an approvable CO SIP along with acceptable updated emissions inventories for the South Coast, EPA will be able to approve the revised State plan and inventories and substitute them for the federal plan and federal emissions inventories.

d. Reasonably available control measures (RACM). Section 172(c)(1) requires the plans for all nonattainment areas to provide for the implementation of all RACM (including Reasonably Available Control Technology, or RACT) as expeditiously as practicable. EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in the area as components of the area's attainment demonstration.

The South Coast CO plan's control measures are presented in Chapter 4, Chapter 6, Appendix B, and Appendix

C. The control measures are also discussed below in sections II.C.1.g., h., i., and j. The State and local control measures (with adoption/implementation dates before 2001) are as follows:

M–G–12, Oxygenated Fuels Program (1991/1992);
ARB–4, Improved Certification Requirements for alternative Fuel Retrofit Systems (1992/1992);
M–G–5, Motor Vehicle Buyback Program (1993/1993–1997);
M–G–4, Low-Emission New Fleet Vehicles (1991/1993–2000);
M–G–11, Inspection and Maintenance Program Enhancement (1993/1994);
M–G–1, Zero-Emission Urban Bus Implementation (1992/1994–2000);
ARB–5, Low Emission Vehicles and Clean Fuels Program (1990/1994–2003);
ARB–1, Revised Emission Standards and Test Procedures for Medium-Duty Vehicles and Light Heavy-Duty Engines (1990/1995–1996);
ARB–7, Low Emission Vehicle Standards for Heavy-Duty Engines (1992/1998–2007);
ARB–11, Inspections of Fleet Heavy-Duty Trucks (1992/to be determined);
ARB–12, Control of Off-Cycle Emissions (1993/to be determined);
ARB–16, Retrofit/Operational Requirements for Locomotives (1993/1992–1997);
M–I–7, Eliminate Leaf Blowers (1993/1994);
ARB–13, Emission Standards for Utility Engines (1990/1994–1999);
ARB–15, Emission Standards for Off-Road Motorcycles (1992/1995);
ARB–14, Emission Standards for Construction and Farm Equipment (1992/1995–2000);
ARB–18, Emission Standards for Off-Highway Vehicles (1993/1995–2000);
ARB–17, Emission Standards for Marine Vessels (1993/1997–1999);
P–B–6, Control of Emissions from Petroleum Refinery Flares (1992/1996);
FC–1/2g, Transit Improvements (to be determined/to be determined);
F–2/2f, HOV and Bus Lanes/Roads (to be determined/to be determined);
FC–3/M–H–5(c), Employer-Based Trip Reduction (1993/1994);
FC–4, Additional VMT/VT Reduction Strategies (1989–2000, with SCAQMD backstop 1994/1991–, with SCAQMD backstop 1994);
FC–5/4, Traffic Flow Improvements (1989–2000/1991–);
FC–6/M–G–7, Control Extended Idling (1993/1994);
FC–7/M–G–5, Encourage Removal of Pre-1980 Vehicles (1993/1993);
FC–8, M–G–6, Reduce Cold Start Emissions from Vehicles (1994/1994);
M–H–1, Environmental Review Program (1992/1992);
M–H–2, Trip Reduction for Schools (1993/1993);
M–H–4, Special Activity Centers (1993/1994).

EPA has reviewed the extensive list of scheduled measures and has concluded that the plan would reflect RACM but for the omission of an enhanced I/M program. By this NPRM, EPA is proposing to disapprove the plan with respect to the RACM requirement because of this single deficiency. EPA invites comment on whether other RACM exist for the South Coast CO plan.

e. *Attainment demonstration.* As noted, "Serious" CO nonattainment areas were required to submit a demonstration that the plan will provide for attainment by December 31, 2000. The SCAQMD conducted an attainment demonstration using both areawide (Urban Airshed Model, or UAM) and hotspot (CAL3QHC) modeling analyses. The two modeling analyses and the selection of the design value (23.4 ppm, recorded in 1988 at the Lynwood monitoring station) are discussed in Chapter 4 and Appendix D of the CO plan. The modeling analyses are consistent with EPA's guidance (Guideline for Modeling Carbon Monoxide from Roadway Intersections, User's Guide to CAL3QHC: A Modeling Methodology for Predicting Pollutant Concentrations near Roadway Intersections, and Guideline for Regulatory Application of the Urban Airshed Model for Areawide Carbon Monoxide). The SCAQMD's modeling analyses predict attainment of the 8-hour CO NAAQS by the year 2000, based upon the control strategies included in the plan.

However, since attainment depends upon large CO emissions reductions (587.4 tons per day) assigned to the enhanced I/M program, which has not yet been adopted by the State, EPA proposes to disapprove the attainment demonstration portion of the plan. In the future, the attainment demonstration could be approved if the State submits approvable enhanced I/M legislative authorization and regulations.

f. *Quantitative milestones and reasonable further progress (RFP).* The CO plan must contain measures which demonstrate RFP toward attainment by the applicable attainment date. Reasonable further progress is defined in section 171(1) of the Act as such annual incremental reductions in emissions of the relevant air pollutant as are required by Part D or may reasonably be required by the Administrator for the purpose of ensuring attainment of the NAAQS by the applicable date.

EPA has reviewed the attainment demonstration and control strategy for the area (see Chapter 6 and Appendix C of the CO plan). EPA concludes that the plan would provide for RFP but for the fact that the State legislature has not yet adopted legislation authorizing an enhanced I/M program and California has not submitted implementing regulations for the program. Therefore, EPA proposes to disapprove the RFP provision. Again, however, this defect could be cured by State action to authorize, adopt, and submit an approvable enhanced I/M program.

g. *Adoption of mandatory control measures.* The Act mandates State adoption of four control programs for CO areas such as the South Coast.

(1) Enhanced Inspection and Maintenance (I/M)

Section 187(a)(6) requires implementation of an enhanced I/M program in the nonattainment area's urbanized portions (as defined by the Bureau of Census) with a CO design value greater than 12.7 ppm. EPA's regulations respecting this requirement were issued on November 5, 1992 (57 FR 52950). The reader should refer to section III.D.2.c. for a detailed discussion of the purpose and components of the enhanced I/M program. As noted, the California State Legislature has to date failed to enact legislation that would authorize such a program. While EPA is not now required to propose a FIP enhanced I/M measure (as discussed in section III.A.1.), the Agency has chosen to do so as part of the FIP attainment demonstrations.

(2) Oxygenated Fuels

Sections 211(m) and 187(b)(3) mandate SIP provisions prohibiting the sale of gasoline during winter months containing less than 2.7 percent oxygen by weight. Increasing the oxygen content of gasoline causes motor vehicle engines to run with leaner overall fuel/air mixture, thereby reducing the amount of CO generated during the combustion process.

California's adopted regulations (California Wintertime Oxygenates Program for the years 1992–1995, and Phase 2 Reformulated Gasoline regulation for the years after 1995) provide for the sale of 1.8 to 2.2 percent oxygenated fuels. On October 30, 1992, the CARB applied for a partial waiver from the 2.7 percent level specified in the Act.

EPA intends in a separate NPRM to propose to conditionally approve the waiver under the provisions of section 211(m)(3)(A), which authorizes the Administrator to waive, in whole or in part, this fuel requirement if the State demonstrates that use of oxygenated gasoline would prevent or interfere with the attainment of a NAAQS or a state or local ambient air quality standard.

CARB's waiver petition argues that an oxygen content above an average of 2.0 percent would interfere with attainment of the California standards for ozone, nitrogen dioxide, and particulate matter, because the higher oxygenated fuel levels have the potential to increase emissions of NO_X, which is a precursor to ozone and (in the South Coast) nitrogen dioxide and particulate matter.

(3) Clean-Fuel Vehicle Fleet Program

Section 246 of the Act requires that the CO SIP for the South Coast provide for a Clean-Fuel Vehicle Fleet program by May 15, 1994. Section 182(c)(4) places a similar requirement on the South Coast ozone SIP. The Act mandates SIP provisions requiring the purchase of clean new vehicles, beginning in 1998, for use in centrally fueled fleets of cars and light-duty trucks.

On November 13, 1992, CARB submitted as a SIP revision the State's regulations mandating the availability of clean fuels. At the same time, CARB applied for conditional approval of an opt-out from this requirement based upon a showing that the State's Low-Emission Vehicles (LEV) and Clean Fuels programs (adopted in 1990) qualify as a substitute for the federal clean fleet program. On November 29, 1993 (58 FR 62532), EPA approved the State's clean fuels availability regulations and conditionally approved the opt-out request.[19]

(4) Employee Commute Options Program

Section 187(b)(2) requires SIP submission by November 15, 1992, of an Employee Commute Options (ECO) regulation to reduce commute trips to the worksites of large employers. Section 182(d)(1)(B) mandates that the ECO SIP requirement also applies to "Severe" and "Extreme" ozone nonattainment areas, and this same section establishes minimum program performance levels: the rules must "require that each employer of 100 or more persons in such area increase average passenger occupancy per vehicle in commuting trips between home and the workplace during peak travel periods by not less than 25 percent above the average vehicle occupancy for all such trips in the area at the time the revision is submitted."

In December 1992, EPA issued Employee Commute Options Guidance to assist states in developing approvable ECO SIP revisions. This guidance, and the ECO requirement in the 1990 Amendments, derive in part from the SCAQMD employee trip reduction program, Regulation XV, which was adopted on December 11, 1987, as the Country's first large-scale ECO program.

Regulation XV has undergone several significant revisions since that date to expand the program and address implementation issues. The SCAQMD rule was initially submitted as a SIP revision on February 7, 1989, and CARB submitted an amended Regulation XV on two occasions: March 31, 1991 and May 31, 1993. EPA has reviewed the amended Regulation XV for consistency with the Act and EPA's guidance. This review is available as a Technical Support Document, "EPA Analysis of the Approvability of South Coast Air Quality Management District Regulation XV." Based on this detailed analysis, EPA proposes in this NPRM to approve Regulation XV as meeting the requirements of sections 187(b)(2) and 182(d)(1)(B) of the Act.

While the current Regulation XV meets federal approval criteria, EPA encourages the SCAQMD to continue to evaluate and adjust the program, if necessary, to ensure that the rule is fully and successfuly implemented. Any adjustments to the rule must not jeopardize timely achievement of average passenger occupancy targets and emissions reductions from the rule.

h. *Vehicle miles traveled (VMT) forecast and contingency measures.* Section 187(a)(2)(A) requires the South Coast CO plan to contain a forecast of VMT for each year until attainment. The plan must also provide for annual updates of the forecasts along with annual reports regarding the extent to which the forecasts proved to be accurate. Finally, section 187(a)(3) requires that the plan contain specific contingency measures to be implemented if the annual estimate of actual VMT or a subsequent VMT forecast exceeds the most recent prior forecast of VMT or if the area fails to attain the CO NAAQS by the attainment date. These contingency measures must be adopted and enforceable in the SIP and must take effect without further action by the State or the Administrator.

The required VMT forecasts are included in Table 3–3 and Appendix A of the plan. The forecasts require significant update, and SCAG is now preparing and adopting such an amendment for a new Regional Mobility Plan and an air quality plan revision scheduled for adoption later in 1994. EPA therefore proposes to approve the forecasts, but intends to amend the VMT projections in the FIP when the new VMT numbers are adopted and submitted as a SIP revision. EPA also proposes to approve the responsible agencies' commitments to replace the VMT projections and monitor actual VMT levels in the future.

The State has not yet submitted, however, fully adopted and enforceable contingency measures to meet the requirements of section 187(a)(3). The plan includes three groups of potential controls, identified as contingency measures. The measures, in fact, are surplus rather than contingent. The committal measures achieve reductions beyond those needed for progress and attainment, and they are scheduled for adoption and implementation by fixed dates, which are independent of determinations that VMT levels have been exceeded or that the plan has failed to achieve progress milestones or attainment. Although the measures are not designed to be triggered by excess VMT levels or by a failure to achieve scheduled progress or attainment, the measures could be approved as meeting the contingency requirement if: (1) They are submitted in fully adopted form, and (2) the RFP and attainment deficiencies are resolved by SIP submission of approvable enhanced I/M authorization and regulations.

The first group of "contingency" measures (Table 6–4 of the plan) consists of two stationary source measures: P–B–5, Control of Emissions from OCS Exploration, Development and Production; and P–B–6, Control of Emissions from Petroleum Refinery Flares. Emissions reductions were not estimated for these possible measures. Moreover, neither of the controls have yet been adopted, although the plan scheduled both for adoption in 1992. Thus, the two measures cannot be approved.

The second group (Table 6–5) comprises five measures. One of the measures is assigned to CARB: ARB–8, Fleet Average Standards for Post-2003 Model Years (Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles). The remaining four measures were scheduled for adoption by 1992, but the State has provided no evidence that the measures have in fact been adopted. The four measures are energy conservation programs: E–D–1b, Residential Sector; E–C–1b, Commercial Sector; E–C–2b, Industrial Sector; and E–C–3, Local Government Sector.

Each of the five measures is designed to serve as contingency measures after the year 2000. As such, the measures would be appropriate for SIP submission in the context of a CO maintenance plan. In their present form, they could not serve to meet contingency requirements for the

[19] In Section III.D.2.d.(6), EPA proposes as part of the South Coast FIP a clean fuel fleet program, consistent with EPA's final fleet program rules [see 58 FR 64679 (December 9, 1993)].

attainment plan, since the measures are not designed to remedy plan shortfalls in achieving reasonable further progress before, and attainment by, the year 2000. Moreover, EPA cannot either approve or conditionally approve the measures since the scheduled full adoption date has elapsed without evidence of such adoption. Nevertheless, the measures are important pollution prevention initiatives with multiple benefits, and EPA strongly encourages further progress at the State, regional, and local level to implement the measures fully.

The third group of "contingency" measures (Table 6–6) includes 11 transportation and indirect source measures. The plan requests conditional approval of the measures to allow time to fully develop and adopt the controls, and the resolution of adoption commits the SCAQMD to revise the measures in 1993 to be fully quantifiable as required by the CAA (SCAQMD Board Resolution No. 92–36, Finding 10).

These potentially significant measures are undergoing further revision at the local and regional level, in order to improve the design and quantification of the controls and confirm implementation responsibilities. This is particularly the case with respect to the only two measures to which substantial emissions reductions are assigned: FC–3—Employer-Based Trip Reduction (advances beyond existing Regulation XV), and FC–4—Additional VMT/VT Reduction Strategies. EPA hopes to receive these revised measures as a SIP submittal and will take action to approve or conditionally approve the controls at that time.

The CO plan therefore lacks approvable measures that fulfill the section 187(a)(3) requirements for fully adopted contingency measures to be triggered if estimates of actual VMT exceed the plan's forecasted levels. EPA proposes to disapprove the plan with respect to this requirement. In separate rulemaking, EPA will propose as part of the South Coast ozone and CO FIP/SIP a substitute contingency measure to be implemented automatically in the event actual VMT excesses are monitored.

i. *Transportation control measures (TCMs) to offset growth in emissions from growth in vehicle miles traveled.* Section 187(b)(2) of the Act requires "Serious" CO areas to meet a TCM requirement specified in section 182(d)(1)(A) for "Severe" and "Extreme" ozone areas. The Act provides that all such plans must include specific and enforceable TCMs to offset any growth in emissions from growth in VMT and numbers of vehicle trips, and to achieve reductions in mobile source emissions as necessary in conjunction with other measures to comply with the periodic emissions reduction and attainment requirements of the Act. EPA's preliminary interpretation of this requirement appears in the General Preamble, 57 FR 13521–13523 and 13533–13534 (April 16, 1992).

As mentioned above, Table 6–6 of the South Coast CO plan includes 11 transportation and indirect source "contingency" measures. These measures and the plan's scheduled adoption dates are as follows:

FC–1, Transit Improvements (to be determined by the implementing agency)
FC–2, HOV and Bus Lanes/Roads (to be determined by the implementing agency)
FC–3, Employer-Based Trip Reduction (1993)
FC–4, Additional VMT/VT Reduction Strategies (1989–2000, with an SCAQMD backstop rule adoption in 1994, if necessary)
FC–5, Traffic Flow Improvements (1989–2000)
FC–6, Control Extended Idling (1993)
FC–7, Encourage Removal of Pre-1980 Vehicles (1993)
FC–8, Reduce Cold Start Emissions from Vehicles (1994)
M–H–1, Environmental Review Program (1992)
M–H–2, Trip Reduction for Schools (1993)
M–H–4, Special Activity Centers (1993)

While progress has been made in local and regional adoption and implementation of certain measures (e.g., FC–1, FC–2, FC–4, and FC–5), none of these important measures has been fully adopted and submitted at this time.

Table 3–3 of the CO plan projects VMT and CO emissions for each year through the attainment year. This table shows that CO emissions will decline each year through the year 2000, despite the predicted VMT growth. As a result, the CO plan does not need to include TCMs to offset growth in CO emissions.

As discussed above, the CO plan would meet the attainment demonstration and progress requirements of the Act if the State adopts and submits an approvable enhanced I/M program. Until the attainment and RFP deficiencies are cured, it is not possible for EPA to find that the CO plan includes specific and enforceable TCMs that are sufficient, in conjunction with other measures, to meet the progress and attainment requirements of the Act. EPA therefore proposes to disapprove the plan with respect to the TCM requirement. Approval of an enhanced I/M program in the future would allow EPA to change this section 187(b)(2) disapproval to an approval.

j. *Fully adopted and enforceable control measures.* The attainment demonstration relies upon SCAQMD and CARB stationary, area, and mobile controls adopted before July 1, 1990, and three additional controls: (1) CARB's Low-Emission Vehicles (LEV) and Clean Fuels Program (adopted September 1990); (2) CARB's California Wintertime Oxygenates Program and Phase 2 Gasoline Specifications (adopted November 1991); and (3) an Enhanced I/M Program. Except for the enhanced I/M program, all of the measures included in the attainment modeling analysis are fully adopted and enforceable.

The plan also includes a group of 18 supplemental measures (Tables 4–1 and 4–2). Most of these measures have not yet been adopted in enforceable form, and the attainment demonstration does not claim credit for the potential reductions associated with the controls. If the measures are submitted by the State in approvable form, EPA will propose to approve them and assign them credit in the attainment demonstration.

k. *Implications of EPA's proposed action.* EPA is proposing to disapprove in part the SIP revision submitted by the State of California on December 31, 1992, for the South Coast CO nonattainment area. If finalized, this disapproval would constitute a disapproval under section 179(a)(2) of the Act (see generally 57 FR 13566–13567). As provided under section 179(a) of the Act, the State would have up to 18 months after a final SIP disapproval to correct the deficiencies that are the subject of the disapproval before EPA is required to impose either the highway funding sanction or the requirement to provide two-to-one new source review offsets. If the State has not corrected its deficiency within 6 months thereafter, EPA must impose the second sanction. Any sanction EPA imposes must remain in place until EPA determines that the State has corrected the deficiency.

2. Ozone Rate of Progress Plan

a. *Statutory provisions and General Preamble requirements.* The requirements for the 15 percent rate-of-progress plans appear in section 182(b)(1) of the Act, which describes how ozone nonattainment areas must achieve an actual VOC reduction of at least 15 percent during the first 6 years after enactment of the 1990 CAA Amendments (i.e., up to November 15, 1996). The General Preamble provides an overview of EPA's preliminary policy interpretation of this statutory requirement (see 57 FR 13507–13510,

April 16, 1992). EPA has issued detailed guidance documents on the plan requirements, including: Guidance on the Adjusted Base Year Emissions Inventory and the 1996 Target for the 15 Percent Rate-of-Progress Plans (EPA-452/R-92-005), and Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans (EPA-452/R-93-002).

The CAA requires that the 15 percent rate-of-progress plan be submitted by November 15, 1993. The plan must show an actual reduction in typical ozone season weekday VOC emissions of at least 15 percent for the period 1990-1996.[20] The reduction must be calculated from the 1990 baseline of actual emissions, adjusted in accordance with section 182(b)(1)(B), and must account for any net growth in emissions. Section 182(b)(1)(D) provides that reductions from the federal motor vehicle control program (FMVCP) as promulgated by January 1, 1990, or from the federal 9.0 Reid Vapor Pressure (RVP) gasoline regulation may not count toward meeting the 15 percent reduction target. Also excluded from credit are "fix-ups" to VOC RACT rules or I/M programs to comply with prior statutory and regulatory requirements.

b. *Description of plan.* On November 12, 1993, the SCAQMD adopted its Rate-of-Progress Plan, following reasonable notice and public hearing. CARB submitted the Rate-of-Progress plan as a proposed SIP revision on November 15, 1993. The submitted plan shows a 1990 base year emissions inventory of 1683 tons per day of reactive organic compounds (ROC), an adjusted 1990 inventory of 1450 tons per day (after subtracting FMVCP and RVP reductions of 233), resulting in a 1996 target emissions reductions of 217.5 tons per day. After credit for fully adopted State and local measures and taking into account growth in emissions through 1996, the plan achieves almost all of the reductions needed to meet the target. The plan addresses the small remaining shortfall by commitments to adopt 9 SCAQMD measures in 1994, one SCAQMD measure in 1995, and one CARB measure: the enhanced I/M program. Even after applying an 80 percent rule effectiveness discount (in accordance with EPA's policy), the proposed SCAMQD measures alone would eliminate the shortfall, without the need to count credits assigned to the enhanced I/M program.

Under section 110(k)(4) of the Act, EPA has the authority to conditionally approve the South Coast plan based upon the State's commitment to adopt these measures. However, EPA's current policy does not allow approval of rate-of-progress plans if they depend upon commitments to adopt measures in order to meet the 15 percent reduction requirement. See Memorandum from Michael H. Shapiro, EPA Acting Assistant Administrator for Air and Radiation, "Guidance on Issues Related to 15 Percent Rate-of-Progress Plans," August 23, 1993. As a result, EPA intends not to take action to approve the South Coast Rate-of-Progress Plan at this time.

c. *Conditional approval of commitments.* As discussed above, EPA policy does not allow approval of 15 Percent Rate-of-Progress Plans based on committal measures. In accordance with this policy, EPA does not propose to assign credit to the SCAQMD committal measures and approve the progress plan until all measures are submitted in fully enforceable form. However, commitments that strengthen the existing SIP can be approved, although without assignment of emission reduction credit.

EPA proposes to conditionally approve the SCAQMD commitments to adopt the measures listed below, as strengthening the SIP. EPA has evaluated the commitments to adopt measures and finds that those commitments to adopt rules before 1996 are eligible for conditional approval under section 110(k)(4). EPA cannot propose to conditionally approve commitments to adopt measures with 1996 or later adoption dates because the SCAQMD's commitment may extend beyond one year from the date of the final conditional approval action (see pages 2-4 and 6-2 of the plan, and the SCAQMD Resolution of Adoption).

(1) Commitments to adopt measures to contribute emission reductions in the period 1990-1996. The SCAQMD has committed to adopt fully enforceably controls in 1994 for the following measures:

P-B-7, Further Control of Emissions from Bulk Terminals;
P-C-1, Further Emission Reductions from Rubber Products Manufacturing;
A-B-2, Control of Emissions from Gasoline Transfer: Phase II Improvements;
A-B-3, Control of Emissions from Pleasure Boat Fueling Operations;
A-B-5, Further Control of Emissions from Gasoline Dispensing Facilities;
A-B-6, Control of Emissions from Utility Engine Refueling Operations;
A-B-9, Control of Emissions from Active Draining of Liquid Products;
A-C-2, Control of Emissions from Commercial Charbroiling;
A-C-4, Control of Emissions from Deep-Fat Frying.

The SCAQMD committal measure scheduled for adoption in 1995 is A-F-1, Installation of Best Available Retrofit Control Technology on Miscellaneous Sources. All of the measures are listed in Table 4-1 of the plan, along with the identification of the date for full implementation, the implementing agency, and the 1996 ROC emissions reductions with and without the 80 percent rule effectiveness discount. Appendix A of the plan provides further details on each of the measures, including descriptions of the regulatory history, the proposed method of control, and the calculation of emissions reductions and cost effectiveness.

(2) Commitments to adopt measures before 1996 to contribute emission reductions in the period 1997-2000. The South Coast Rate-of-Progress Plan also includes SCAQMD and ARB committal measures, with adoption and implement schedules, to reduce VOC and NO_X emissions during 1997-2000. The SCAQMD commitments are to adopt the following VOC and NO_X measures by the years shown:

P-A-2, Further Control of Emissions from Auto Assembly Coatings (1995);
A-B-7, Control of Emissions from Over-Filling of Vehicle Fuel Tanks (1994);
A-D-3, Control of Emissions from Residential and Commercial Water Heating (1994);
A-E-1, Control of Emissions from Pesticide Applications (1994);
A-E-2, Control of Emissions from Livestock Waste (1994);
M-G-1, Zero-Emission Urban Bus (1993);
M-G-8, Aerodynamic Devices for Trucks (1994);
M-I-1, Control of Emissions from Ship Berthing Facilities (1995);
M-I-4, Control on Marine Diesel Operations (1995);

This list does not include SCAQMD committal NO_X measures which have now been subsumed in the NO_X/SO_X RECLAIM program, adopted on October 15, 1993.

For the period 1997-2000, the CARB committal measures and adoption dates are:

ARB-7, Low Emission Vehicle Standards for Heavy-Duty Engines (1995);
ARB-15, Emission Standards for Recreational Vehicles (1994);
ARB-16, Retrofit/Operational Requirements for Locomotives (1994);
ARB-17, Emission Standards for Marine Vessels (1994).

In section III of this NPRM, EPA proposes to promulgate as part of the

[20] For the initial progress period (1990-1996), the Act specifies that the SIP must "provide for volatile organic compound emission reductions . . . of at least 15 percent. . . ." Section 182(b)(1)(A). NO_X emission reductions may substitute for VOC reductions in subsequent progress demonstrations, in accordance with section 182(c)(2)(C) of the Act.

FIP attainment demonstration federal measures comparable to some of these SCAQMD and CARB committal measures. If any of the State or local committal measures for these categories are adopted and submitted as a SIP revision and achieve emission reductions comparable to the FIP controls, EPA will approve the SIP rules and modify the FIP rules accordingly. d. Implications of EPA's Proposed Actions.

If EPA issues final conditional approval of the SCAQMD commitments, the SCAQMD must fulfill the commitments to adopt the rules by the date specified in the plan and shown above, and the State must submit these rules to EPA. If the SCAQMD fails to adopt or CARB fails to submit any of the rules to EPA within this time frame, this approval will become a disapproval following EPA written notification to the State.

If the rules are submitted to EPA within the applicable time frame, the SCAQMD commitments will remain a part of the SIP until EPA takes final action approving or disapproving the new submittal. If EPA disapproves the submittal, the measures on which the conditional approval was based will also be disapproved at that time. If EPA approves the submittal, those newly approved rules will become a part of the SIP and will modify or replace the measures on which the conditional approval is based. As discussed above, EPA's proposed conditional approval of the committal measures does not mean that the State has satisfied the initial 15 Percent Rate-of-Progress plan requirements of section 182(b)(1). EPA's current policy would not allow such approval until all necessary measures are submitted in fully adopted and enforceable form.

EPA's final conditional approval of the SCAQMD commitments to adopt measures to achieve minimum progress requirements for the 1990–2000 period will establish a federally enforceably obligation on the part of the SCAQMD to adopt these measures in fully enforceable form according to the committed schedule. It is essential not only that SCAQMD but also CARB and all other responsible agencies follow through on their commitments to meet the Act's near-term progress requirements through expeditious adoption of enforceable regulations to achieve the necessary creditable reductions.

III. California FIP

A. Basis for the FIP Actions in Applicable Law and EPA Policies

1. FIP Obligation

a. *Introduction.* In 1988, in the wake of lawsuits and ensuing court orders, EPA disapproved the 1982 South Coast ozone and CO plans and the Sacramento and Ventura ozone plans on the ground that, among other things, they failed to demonstrate attainment of the NAAQS by the December 1987 statutory attainment date, as required by Section 172(a) of the Act. See 53 FR 1780 (January 22, 1988). In March 1989, EPA entered into a settlement agreement with the South Coast plaintiffs which obligated EPA to promulgate federal plans for the South Coast in final form by February 1991. EPA issued a proposed FIP in September 1990.

For Sacramento, EPA also negotiated settlement agreements containing schedules by which EPA would propose and promulgate a federal plan. Pursuant to these schedules, EPA published Advance Notices of Proposed Rulemakings (ANPRMs) on April 5, 1990 (55 FR 12669) and May 27, 1992 (57 FR 22194).

For Ventura, EPA similarly entered into settlements setting a schedule, and published an NPRM on January 17, 1991.

But as time progressed, it became increasingly clear that the South Coast, Sacramento, and Ventura—all areas with difficult air pollution problems—could not possibly meet the ambitious requirements of the 1977 CAA Amendments without severe economic dislocation.

(1) Passage of 1990 amendments. On November 15, 1990, Congress enacted the Clean Air Act Amendments of 1990. Pub. L. No. 101–549, 104 Stat. 2422–2423. Among other things, Congress completely revised the Part D nonattainment provisions of the Act. In so doing Congress repealed the provisions of Section 172 that had required SIPs for the South Coast, Ventura, and Sacramento to demonstrate attainment by December 31, 1987. Those provisions had formed the basis for EPA's disapprovals of the California SIP submissions for those areas, and thus the 1990 Amendments removed the statutory justification for those disapprovals. Congress replaced the provisions of section 172 with a detailed scheme of new requirements and extended deadlines specifically applicable to ozone and CO nonattainment SIPs. Sections 171–193, 42 U.S.C. 7501–7515.

In particular, the 1990 Amendments established a graduated series of requirements for different areas, depending on the severity of the air quality problem in each. Congress established five classifications of ozone nonattainment areas based on the level of each area's ozone problem—ranging from "Marginal" to "Extreme"—and two classifications of CO nonattainment areas. The Amendments also set new, extended deadlines for the attainment of the primary NAAQS for each classification. Sections 181(a)(1) and 186(a)(1).

Consistent with the new Amendments, EPA issued a regulation classifying Sacramento as a "Serious" area for ozone nonattainment; under the statute, "Serious" areas must attain the ozone standard as expeditiously as practicable but no later than November 15, 1999. 40 C.F.R. 81.305 (1992); CAA section 181(a). Ventura is classified as a "Severe" area for ozone, and must attain as expeditiously as practicable, but no later than November 15, 2005. The South Coast is classified as the only "Extreme" area for ozone, and must demonstrate attainment as expeditiously as practicable but no later than November 15, 2010. For carbon monoxide, the South Coast is classified as a "Serious" area, and must demonstrate attainment as expeditiously as practicable but no later than December 31, 2000.

In the 1990 Amendments Congress also imposed specific and increasingly rigorous requirements for Part D SIPs, depending on the area's nonattainment classification, with new deadlines, ranging from immediately to six years from enactment, for submitting various components of the plans to EPA. Sections 181, 182, 186, and 187. In addition, the 1990 Amendments amended Section 110(c)(l), the principal provision governing EPA's FIP obligation.

EPA concluded that these revisions, directing States to develop SIPs meeting new requirements and deadlines, and to submit SIPs to EPA on specific schedules, demonstrated that EPA's obligation to promulgate FIPs would arise only upon future disapprovals of those newly submitted SIPs. EPA appealed to the courts to determine whether the Amendments had relieved the Agency of its pre-existing FIP obligations.

In Coalition for Clean Air, 971 F.2d 219 (9th Cir. 1992), a divided panel of the Ninth Circuit held that although Section 110(c)(l) had been revised by the 1990 Amendments, the language of section 110(c)(l)(B), which requires EPA to promulgate a FIP within two years

after it "disapproves" a SIP, applies to pre-Amendment disapprovals. Thus, the court ruled that new section 110(c)(l)(B) operates retroactively to retain EPA's preexisting FIP obligation, even though the statutory provisions forming the basis for that obligation have been repealed. In reaching this conclusion, the court declined to indicate whether the requirements of the old law or the 1990 Amendments would govern the contents of this FIP.

The Court acknowledged that "the proper contents of FIPs for the South Coast are not before us," and that "we need not decide whether EPA would be required to meet any additional requirement imposed by the 1990 Amendments in promulgating FIPs for the South Coast," 971 F.2d at 225.

EPA sought, and was denied, a writ of certiorari (113 S.Ct. 1361 (1993)).

(2) Applicable law. Thus, although the Ninth Circuit found that the passage of the Amendments did not release EPA from a FIP obligation arising from a pre-Amendment disapproval, it did not decide whether any requirement of the 1990 Amendments applies to this continuing obligation. In the absence of any guidance from the Court, this task falls to EPA.

The threshold question, then, is what requirements govern the content of a FIP which will take effect after enactment of the Clean Air Act Amendments, but which is based on a plan failure and disapproval arising from pre-Amendment Clean Air Act provisions which have since been repealed. The greatly altered legal regime established by the 1990 Amendments creates a discontinuity between the plan contents required under the new and old acts. Thus, EPA is faced with a choice as to how to design the FIP.

(3) New law applies. It is well settled that "[c]ourts must apply new laws to pending cases, unless such application would result in manifest injustice or be contrary to statutory direction or legislative history." *United States* v. *Ford*, 737 F.2d 1508 (9th Cir. 1984). *See Bradley* v. *School Bd. of Richmond*, 416 U.S. 696, 711 (1974); *DeGurules* v. *INS*, 833 F.2d 861, 863 (9th Cir. 1987); *California Cartage Co.* v. *United States*, 802 F.2d 353, 357 (9th Cir. 1986). In accordance with the principle embodied in these cases, EPA believes that the 1990 Amendments should be applicable to the FIPs arising from EPA's pre-Amendment disapprovals. But an analysis of the new Act's provisions reveals that the new Act does not require this FIP to include each and every pollution control program required of States under the Amendments.

The 1990 Amendments make explicit a principle that was implicit in the preceding Act—that a FIP corrects or fills a void in a deficient state plan. The amended Act defines a FIP as a plan to fill a gap or "correct all or a portion of an *inadequacy* in a State implementation plan." 42 U.S.C. 7602(y) (Supp. II. 1990) (emphasis added). The California SIPs at issue here were rejected by EPA in 1988 because they were "inadequa[te]" to demonstrate attainment under the pre-Amendment deadlines, and thus EPA's obligation under the pre-1990 Act was to promulgate a FIP in order to correct that "inadequacy." Thus EPA's FIP obligation is to fulfill the requirement to demonstrate attainment. Stated differently, what the Ninth Circuit's ruling preserved was EPA's existing FIP obligation to correct the state plan's failure to provide for attainment. That is the inadequacy that EPA must address in this FIP, not any failure that might have arisen under any of the numerous requirements of the new law.

Of course, if the State fails to meet any of the new Act's requirements, that failure would trigger a new FIP obligation in the future, but that would be an entirely different obligation, not the one on which the district court orders under the old Act were premised. And even as to such obligations, the Administrator is not required to promulgate a federal plan until two years after she disapproves a deficient state plan or finds that the state has failed to submit a required plan element. Section 110(c)(l).

With respect to new requirements imposed by the 1990 Amendments, there has either been no state failure, or the 24-month clock for EPA to promulgate a FIP has not yet run. When a state failure giving rise to a new FIP obligation occurs, EPA will address that obligation in a separate FIP NPRM. For example, FIPs addressing state failures to satisfy the VOC RACT catch-up requirement of the new Amendments may become due late in 1994 and in 1995. In the absence of approvable state measures correcting for these deficiencies, EPA will issue separate FIPs to rectify them.

Given EPA's position as to the effect of the new Amendments, one might argue that the logical extension is that since the state has not yet failed to adopt an attainment demonstration under new section 182(c)(2)(A), no attainment demonstration is due. But since the Ninth Circuit conclusively decided that the obligation to promulgate an attainment demonstration survived, EPA must prepare one under the new Act.

For policy as well as legal reasons, this resolution makes sense, and it avoids extreme results. On the one hand, it would be unhelpful for EPA to design the FIP to meet the old law requirements that have since been repealed. And for EPA to impose in 1995 a regulatory regime that became extinct in 1990 would surely not serve Congressional intent or constitute sound regulatory policy. On the other hand, it would equally disserve Congressional intent to compel these FIPs, which are not based on state failures to meet any requirements of the new Act, to meet all those requirements and to cure failures that were not part of the obligation that the Court orders preserved.

In the *Coalition* case, the Ninth Circuit Court itself seemed to imply that EPA's FIP need not address new requirements when it noted that the state could "propose these new measures as revisions to the FIP under the timetables provided in the 1990 Amendments just as the state would be required to do if a FIP had been in effect when those Amendments were adopted". *Coalition for Clean Air*, 971 F.2d at 226.

Indeed, if the FIP were to try to meet all the requirements of the new Act, it would have to anticipate and cure new failures before they had arisen under the new Act, and before the State has had an opportunity to develop and submit plans to comply with the new Act. This would violate the express congressional determination that "air pollution prevention" and "air pollution control at its source is the primary responsibility of States and local governments." Section 101(a)(3).

Thus, EPA has concluded that the FIPs must cure the original failure to demonstrate attainment. But in these FIPs the Agency need not assume additional obligations to meet new requirements as to which no state delinquency has yet been established under the new Act, or as to which EPA's FIP obligation has not yet matured.

b. The FIPs Must Demonstrate Attainment—(1) What Attainment Deadline Governs?

(a) *Background*. The Ninth Circuit last addressed the issue of what attainment deadline applied to a pre-Amendment FIP obligation in *Delaney* v. *EPA*, 898 F.2d 687 (9th Cir. 1990). But at that time the attainment deadline in the then extant Clean Air Act—December 31, 1987—had passed, and Congress had not yet extended it.

In a March 1990 opinion, prior to the passage of the Clean Air Act Amendments, the Ninth Circuit vacated EPA's approval of two Arizona carbon monoxide SIPs, and ordered EPA to

promulgate FIPs consistent with that court's opinion. Interpreting EPA's statutory requirement to develop a FIP in light of the elapsed statutory attainment date of December 31, 1987, the Court concluded that "the national ambient air quality standards must be attained as soon as possible with every available control measure * * *." 898 F.2d at 691. The Court relied upon EPA guidance, subsequently revoked, for the part of its formulation requiring "all possible measures" or "every available measure." 55 FR 36505 (September 5, 1990).

The Court, in formulating this attainment test, made plain that, while it understood that a Congressional re-determination of the attainment deadlines was in the works, the Court was constrained until Congress acted. Thus, at the time the *Delaney* Court and EPA last struggled to define an appropriate FIP attainment deadline, they confronted not only a lapsed attainment deadline, but Congressional silence as to an appropriate replacement.

Quoting from its opinion in *Abramowitz* v. *EPA*, 832 F.2d 1071, 1079 (9th Cir. 1987), the *Delaney* Court stated: "We are informed by counsel for both sides of their expectation that Congress will extend the deadline once again in the near future, but we must apply the law as it now stands, not as it may become. * * * Until the Clean Air Act is further considered * * * the Agency must 'give effect to the unambiguously expressed intent of Congress.' We, and the EPA, are bound by the statutory scheme until Congress alters that scheme." 898 F.2d at 691.

(b) *Current law.* Now, however, Congress has indeed "alter[ed] that scheme", the new law applies, and EPA, in formulating its FIPs, has the benefit of Congressional determination of appropriate attainment dates. With the passage of the Clean Air Act Amendments, Congress has made specific attainment deadline determinations with respect to each type of area. As with other aspects of the new law, EPA believes that the attainment dates of the new law apply. Indeed, even if it were not clear that the new attainment dates apply, it is now impossible to design FIPs to meet the 1987 attainment date that governed the original state plans, and there is a clear expression of Congressional intent as to substitute attainment deadlines.

As noted above, under the new Act, the ozone attainment date must be "as expeditiously as practicable but not later than" November 15, 1999 for Sacramento; November 15, 2005 for Ventura; and November 15, 2010 for the South Coast. Section 181(a). The carbon monoxide attainment date for the South Coast must be "as expeditiously as practicable but not later than" December 31, 2000.

(2) These FIPs need not address new requirements other than the requirement to demonstrate attainment. As shown above, EPA's obligation to design a FIP arose from state failures to demonstrate attainment under the old Clean Air Act. The Amendments imposed for the first time additional, different requirements that were not in effect when EPA disapproved the state plans giving rise to its FIP obligation, and which took effect after EPA's FIP obligation matured. Thus California was given no opportunity to meet these requirements in its previous SIPs, and any failure to meet these requirements would be a new delinquency that was not the subject of EPA's original FIP obligation. EPA therefore has concluded that the FIPs need not address these requirements unless and until California has failed to satisfy them and the time for EPA to promulgate a replacement FIP under the new Act has elapsed.

For example, the Amendments contain new and highly specific targets for Reasonable Further Progress. Section 182(b)(l) in the Amendments requires plans under the Act to provide for VOC emissions reductions of at least 15 percent by 1996, and section 182(c)(2)(B) requires an additional 9 percent emissions reduction every three years after 1996. Each of these sections contains detailed instructions for calculating the creditability of those reductions. Sections 182(b)(1) and 182(c)(2).

While EPA does not believe that these progress requirements are applicable to its FIP obligation, EPA has concluded that it is wise policy to achieve some degree of progress during the time preceding the attainment dates. As a result, the FIPs do establish incremental reduction targets for the purpose of ensuring attainment by the applicable attainment date.

At this time, the State of California has become delinquent in meeting a few requirements in the new Act, thereby giving rise to new EPA FIPs obligations under the new Act's deadlines. FIPs to address these deficiencies, which primarily involve submissions of RACT catch-ups and emission statements, are not yet due. EPA will address these FIPs in separate rulemakings as they become due.

c. FIPs may use new provisions providing additional flexibility. Since EPA has concluded that the new law applies to its FIP obligation, EPA may avail itself of new provisions of the law that furnish additional flexibility in designing implementation plans.

The Ninth Circuit in its opinion recognized that EPA could take advantage of increased flexibility in the new Act. For example, the Court noted that EPA now has authority under new section 182(e)(5) to approve some parts of the South Coast ozone SIP that it had disapproved in 1988. *Coalition for Clean Air*, 971 F. 2d at 226. Similarly, as explained below, EPA believes it may invoke section 182(e)(5) in designing its FIP to obtain greater flexibility to anticipate new control techniques or the improvement of existing techniques. To the extent that EPA invokes such discretionary provisions of the new Act, it will satisfy any new prerequisites prescribed in those sections. For example, as explained below, in order for EPA's FIP to obtain the benefit of the latitude granted by section 182(e)(5) to rely on measures anticipating improvements in technology, the FIP must address progress requirements of that section which otherwise would have been inapplicable.

As described in more detail below, EPA in its FIPs is also applying the new law's classifications for each ozone nonattainment area, and, for Sacramento, the provision for "bumping" up an area to a new classification. As with section 182(e)(5), where EPA relies on a new provision for added flexibility, it intends to fulfill any conditions imposed on the exercise of that authority.

EPA recognizes that its FIPs must weave a complicated path between the old and new laws, and that its FIP obligation is necessarily a hybrid of old and new. This complexity is unavoidable, however, because of the anomalous nature of the task EPA faces: EPA must cure a failure under an old Act, since repealed, but administer the cure under new law.

d. *Maintenance demonstration for the south coast.* EPA's FIP obligations for the South Coast, Sacramento, and Ventura arose from disapprovals of their SIPs solely on the ground of their failure to demonstrate attainment by 1987 or any fixed near-term date. See 53 FR 1280–1281 (January 22, 1988) (South Coast); 53 FR 39087–39088 (October 5, 1988) (Ventura); 53 FR 48535-48536 (Dec. 1, 1988) (Sacramento). The settlement agreements for Ventura and Sacramento describe EPA's FIP obligation solely in terms of promulgating a plan for attainment. The South Coast settlement agreement refers to a plan for attainment and maintenance. Thus, with respect to the South Coast, EPA must determine what requirements apply to maintenance.

As noted above, EPA is applying the new law to its FIP obligation. The 1990 Amendments changed the law with respect to maintenance demonstrations. Under the pre-Amendment Clean Air Act, sections 172(a)(1) and 110(a)(2)(b) required plans to include measures to "insure attainment and *maintenance*". (emphasis added) But the 1990 Amendments revised both the general planning and ozone and CO specific planning provisions to delete the requirement for a maintenance demonstration to be submitted simultaneously with an attainment demonstration.

The Amendments revised section 110(a)(2) to delete any reference to a maintenance demonstration. When we look to Part D for requirements applicable to areas classified "Serious" and above for ozone, and "Moderate" (with a design value greater than 12.7ppm) and above for CO, we find that section 172(c)(1), the closest analog to old section 172(a)(1), also drops any mention of planning for maintenance. Sections 182(c)(2)(A) and 187(a)(7) of the new Amendments, which set forth the specific requirements for ozone and CO nonattainment areas, respectively, to provide for attainment, similarly makes no mention of any maintenance requirement.[21]

Rather, the requirement for nonattainment areas to provide for maintenance in the amended Act is now found in new section 107(d)(3)(E)(iv) and section 175A. These sections provide that maintenance plans must be submitted when an area requests redesignation to attainment. The combination of the amendments to section 172 and the addition of these new maintenance plan provisions indicates that the requirement for a maintenance plan arises only much later, when it must accompany a request for redesignation.

This reflects a Congressional determination to focus on attainment, and to compel maintenance plans only when an area has progressed to the point when it has already attained and is ready to demonstrate attainment. This legal regime and policy has thus superseded any obligation arising out of old section 172(a).

EPA's existing regulation, promulgated under the aforementioned pre-Amendment maintenance provisions, requires SIPs to provide for maintenance for 20 years, or for 10 years upon the making of an appropriate finding. Section 193 of the 1990 Amendments, the "General Savings Clause", provides in pertinent part that each regulation shall remain in effect except to the extent "otherwise provided under this Act, or inconsistent with any provision in effect. * * *"

As demonstrated above, the changes to section 172 and the new requirements of section 175A and related provisions deleted from the Act any requirement to provide for maintenance prior to a request for redesignation. The new Act thus establishes a whole new regime for demonstrating attainment and maintenance, the timing and requirements of which are inconsistent with the old law. Under the Amendments, attainment plans no longer must provide "up front" a plan for maintenance. And when the Act does require submission of maintenance plans (at the time of a redesignation request), such plan need demonstrate maintenance for only ten years instead of twenty.

Although EPA has not yet accomplished the formal rescission of its pre-1990 regulations on maintenance, we consider the rules nullified by operation of Section 193, and therefore no longer applicable. EPA will propose in separate rulemaking to rescind these national regulations, which appear at 40 CFR part 51 subpart D—Maintenance of National Standards. EPA may or may not promulgate a replacement for the regulations.

2. Other Issues Relating to EPA's Authority in Issuing a FIP

a. *Comprehensive FIP authorities under the clean air act.* When forced by a state planning delinquency to promulgate a FIP, EPA has wide-ranging authority under section 110(c) to fill the gaps left by the state failure. EPA's authority to prescribe FIP measures is of three types. First, EPA may promulgate any measure which it is expressly permitted to issue under any circumstances pursuant to pre-existing independent statutory authority—for example, explicit provisions of Title II. That is, EPA may promulgate any measure which it has authority to issue in a non-FIP context, without reliance on section 110(c). Second, EPA may invoke Section 110(c)'s general FIP authority, and act to cure a planning inadequacy in any way not clearly prohibited by statute. Third, under section 110(c), the Courts have held that EPA may exercise all authority that the State may exercise under the Act.

The second type of authority, EPA's general authority under section 110(c), is essentially remedial, and EPA has broad power under that section to cure a defective state plan. Thus, in promulgating a FIP, EPA may exercise its own, independent regulatory authority under the Act in any way not clearly prohibited by an explicit provision of the Act. When EPA promulgates a FIP, courts have not required explicit authority for specific measures: "We are inclined to construe Congress' broad grant of power to the EPA as including all enforcement devices reasonably necessary to the achievement and maintenance of the goals established by the legislation." *South Terminal Corp.* v. *EPA*, 504 F.2d 646, 669. (1st Cir. 1974). See also *City of Santa Rosa* v. *EPA*, 534 F.2d 150, 153–154 (9th Cir. 1976) (upholding the Administrator's authority to promulgate a FIP imposing gas-rationing in Los Angeles on a massive scale). "The authority to regulate pollution carries with it the power to do so in a manner reasonably calculated to reach that end." *Id.* at 155.

In addition, when a State's failure to discharge the primary responsibility to protect its air quality compels EPA to assume this task, the powers of the defaulting State accrue to EPA. As the Ninth Circuit recently held, when EPA acts in place of the State pursuant to a FIP under section 110(c), EPA " 'stands in the shoes of the defaulting State, and all of the rights and duties that would otherwise fall to the State accrue instead to EPA.' " *Central Arizona Water Conservation District* v. *EPA*, 990 F.2d 1531, at 1541 9th Cir. 1993). The First Circuit, in an early FIP case, agreed:

> The Administrator must promulgate promptly regulations setting forth 'an implementation plan for a State should the State itself fail to propose a satisfactory one.' The statutory scheme would be unworkable were it read as giving to EPA when promulgating an implementation plan for a State, less than those necessary measures allowed by Congress to a State to accomplish federal clean air goals. We do not adopt any such crippling interpretation.

South Terminal Corp. v. *EPA*, *supra* at 668.

b. *EPA authority to charge fees.* State Implementation Plans for nonattainment areas are clearly authorized to include emission fees as economic incentives to reduce pollutants. Sections 110(a)(2)(A) (relating to SIPs generally) and 172(c)(6) broadly authorize SIPs to meet the Act's requirements through any "control measures, means, or techniques * * * necessary or appropriate", including "economic incentives such as fees * * *"

[21] Section 110(a)(1) of both the pre-amended and amended Acts requires areas to provide for maintenance (as well as implementation and enforcement) after EPA issues a new or revised NAAQS. But this is not applicable here, since that obligation is past for ozone and CO, and the failure that gave rise to the FIP obligation here was grounded in maintenance provisions of section 172(a) that were repealed in 1990.

EPA interprets the FIP provisions to authorize fees as well, by virtue of both the case law that grants FIPs much the same scope as SIPs, and by the provisions of section 302(y), which defines a FIP to include—

> Enforceable emission limitations or other control measures, means or techniques (including economic incentives, such as marketable permits or auctions of emissions allowances).

EPA interprets this phrase, including the parenthetical reference to economic incentives, as providing authority to impose a broad range of economic incentives, including fees, even if not specifically listed in the provision. Thus, EPA takes the position that a FIP includes authority to impose fees concerning ozone generating emissions or other activities.

c. *Restrictions on EPA's authority regarding fees.* As a legal matter, EPA's authority under section 110(c) and 302(y) to impose fees is limited only to the extent that the fees must be enforceable, and must provide an incentive that may result in a reduction in ozone generating emissions or other activities. As a practical matter, because only quantifiable emissions reductions may be credited in the attainment demonstration, EPA may limit the types or amounts of fees imposed to those that assure quantifiable emissions reductions.

The Clean Air Act includes no provision directing that FIP fees collected by EPA remain at EPA's disposal; as a result, in general, EPA must deposit any FIP fees it collects in the Treasury, under 31 U.S.C. 3302(b) (the Miscellaneous Receipts Act). The prohibition against retaining fees applies as well against directing how those fees are spent. For example, EPA could (by itself or through a contractor, described below) establish an I/M program and charge fees for conducting the inspection, but the Miscellaneous Receipts Act precludes EPA from rebating those fees to car owners who failed the inspection and elected to scrap their vehicles.

Under certain circumstances, fees relating to services or products provided by a contractor may be retained by that contractor to defray its costs. *See* 61 Comp. Gen. 285 (1982) (contractor may charge and retain fees to offset costs of providing public microfilm copies of Federal Election Commission reports).

d. *Land use.* Section 131 of the Act states: "Nothing in this Act constitutes an infringement on the existing authority of counties and cities to plan or control land use, and nothing in this Act provides or transfers authority over such land use." This language merely preserves in general terms the existing authority of counties and cities to plan or control land use. However, this language could be interpreted as a constraint on EPA's authority under section 110(c). This could happen if, for example, the FIP proposes to regulate certain air emissions, which indirectly has the effect of narrowing or restricting a district's or locality's zoning or land use planning choices. However, any FIP actions taken by EPA would be for the purpose of regulating air emissions, not local land use or zoning requirements that are unrelated to air quality. As such, they would not infringe on the authority of local governments to control land use; rather they, at best, would restrain the ability of certain entities to engage in activities that cause certain air quality problems. This interpretation is confirmed by the House Conference Committee Report which states:

> Depending on the nature of the air pollution problem in a State and the control options available to the State, the measures required [to attain the NAAQS] may or may not include measures involving land use requirements. New section [131] clarifies that if land use requirements are necessary to meet the requirements of the Clean Air Act, nothing in the Act should be construed to affect State laws regarding the appropriate entities to adopt and implement such land use requirements * * * [nor to authorize] air pollution control agencies to override individual project-specific land use decisions made by a city or county.

See H.R. Re. No. 490, 101st Cong., 2d Sess. 401 (1990) (analyzing section 706 of H.R. 3030, which added section 131 [mistakenly identified as section 130]).

e. *Parking management.* FIP fees imposed with respect to parking management are subject to additional limitations under section 110(c)(2)(B) and (D)—such a fee is not permissible if it constitutes a "parking surcharge". A parking surcharge is defined to include—

> Any tax, surcharge, fee, or other charge on parking spaces, or any other area used for the temporary storage of motor vehicles.

This provision effectively eliminates a variety of parking management fees, such as surcharges designed to increase parking costs. Several such measures were included in the 1973 FIP setting forth transportation control plans for several areas in California, 38 FR 31232, 31236–31237, 31247–31248 (Nov. 12, 1973), but the parking measures were withdrawn when a provision to preclude them was included in the Energy Emergency Act of 1973, 39 FR 1848 (Jan. 15, 1974). (Although the Energy Emergency Act of 1973 ultimately was not enacted, 110(c)(2) was enacted as part of the Energy Supply and Environmental Coordination Act, June 22, 1974, Pub.L. 93–310, S 4, 88 Stat. 256.)

f. *Authority to order the state to implement specific measures requiring the state to legislate or expend money.* EPA's authority to promulgate measures in a FIP which require the State to enact legislation or expend state funds may be somewhat limited under prior case law. In general, EPA may require the State to implement FIP measures, including requirements for legislation and expenditure of funds, if the measures affect the pollution-creating activities of the State. However, in *Brown* v. *EPA*, 521 F.2d 827 (9th Cir. 1975), *vacated on other grounds*, 431 U.S. 99 (1977) (*Brown I*"), the court held that Section 113 of the Clean Air Act did not provide statutory authority for EPA to bring an enforcement action against the state (or other municipal authority) for failing to implement a motor vehicle inspection and maintenance program. The court reasoned that the Act authorized federal enforcement if the State did not implement regulations to control its own pollution creating activities, "but not against a state that chooses not to govern polluters as the Administrator directs." *Id.* at 832. In a subsequent decision, the court rejected EPA's argument that ownership of the roads and highways made the State responsible for the pollution created from their use. *Brown* v. *EPA*, 566 F.2d 665 (9th Cir. 1977), *vacated on other grounds*, 431 U.S. 99 (1977).

The same court, however, held in *City of Santa Rosa* v. *EPA*, 534 F.2d 150 (9th Cir. 1976), that the EPA may require gas rationing under its FIP authority. The court found that the Administrator of EPA has authority to limit gas delivery to retail outlets and may require the citizens of the State to curtail their gas usage. The FIP measure in *City of Santa Rosa* did not require the State to implement the gas rationing scheme, and the court distinguished *Brown* because the petitioners had challenged the effect of gas rationing, not EPA's authority to order rationing. *Id.* at 155.

The *Brown* holding was similarly distinguished and limited by the Sixth Circuit Court of Appeals in *United States* v. *Ohio Department of Highway Safety*, 635 F.2d 1195 (6th Cir. 1980). The court upheld EPA's enforcement against the State under Section 113 of the Act for registering motor vehicles which did not pass an inspection and maintenance program promulgated by EPA. The court held that the State was interfering with EPA's implementation of a measure that had been promulgated

under its federal authority. See also *Pennsylvania* v. *EPA*, 500 F.2d 246 (3d Cir. 1974).

The court in *Brown* did not reach constitutional issues raised under the commerce clause. It is unclear, but unlikely, that requiring the State to implement FIP measures which mandate legislation and expenditure of funds would be struck down under the commerce clause. See *Garcia* v. *San Antonio Metropolitan Transit Authority*, 469 U.S. 528 (1985) (holding that the federal government may require states to pay minimum wages and overtime pursuant to the Fair Labor Standards Act). However, even assuming that the commerce clause poses no such obstacle, nothing in the enactment of the 1990 Amendments casts doubt on the continued vitality of the *Brown* holdings with respect to the statutory limits on EPA's FIP authority. Thus, the constraints discussed above still apply. In short, EPA may require the state to legislate or expend funds that affect the state's own pollution creating activities. Although EPA may not require the state to legislate or spend money to govern the pollution creating activities of others, EPA may promulgate and implement such measures directly in a FIP and the State may not interfere with EPA's enforcement of those measures.

B. Overview of Components of Each FIP

1. FIP Control Strategy

a. *Introduction.* This NPRM addresses EPA's FIP obligations to prepare attainment demonstrations for ozone in Sacramento and Ventura, and for both ozone and carbon monoxide in the South Coast. EPA's task requires the Agency to complete four fundamental air quality planning activities: (1) Preparation of information on current and projected emissions of each precursor pollutant; (2) modeling assessment of the levels of these pollutants that must be reached for each area to attain the relevant NAAQS; (3) identification of control options sufficient to achieve the necessary reductions in emissions; and (4) drafting of federally enforceable regulations adequate to secure the reductions.

In this section of the NPRM, EPA summarizes information used in establishing the technical foundations of the attainment demonstration: the sources of data on existing and future emissions, EPA adjustments to that data, and modeling analyses used to simulate the ambient consequences of emissions changes and to set the overall reduction targets for each precursor pollutant.

The bulk of this section, however, presents the complete set of federal regulations for each area. The regulations themselves appear at the end of the NPRM, and they are further explained, in many cases, by technical support documents which are available as part of the docket for this NPRM.

For each set of regulations, EPA has attempted to: (1) Specify clearly which sources are subject to the rule's requirements, and which are exempt; (2) describe in simple terms the most important source obligations, whether procedural or emissions related; (3) identify possible compliance options and estimated costs per unit of pollution reduced; and (4) characterize the emissions reduction benefits associated with the rule in each applicable FIP area.

Because many of the FIP rules are unprecedented in their regulatory targets or approach, EPA has reserved portions of the rules for later development, and seeks full input from affected sources on the best ways to fill in these implementation details before the compliance deadlines of each rule approach.

In other cases, EPA must complete ongoing technical projects, including further emissions sampling and analysis, to finalize important rule implementation elements, such as protocols for use in the stationary and area source cap rules. Ideally, EPA would undertake these projects in coordination with affected industry and State and local air pollution control agencies in the FIP areas. These additions to the FIP rules may be proposed as actual regulations or they may be issued as supplementary guidance materials that expand on practical compliance issues.

EPA encourages readers to provide information and regulatory suggestions to allow EPA to improve the proposed rules' clarity and compliance certainty, provide for least-cost compliance approaches, and tailor the rules more precisely to fit local circumstances and foster program transfer to the State or local level.

In many cases, affected sources are already subject to existing State and local emission reduction requirements, and the responsible State and local agencies may be developing further regulatory initiatives, as part of their ongoing SIP efforts. EPA has attempted to craft FIP rules which, to the extent possible, match the format of State or local regulations and minimize conflict between the federal regulatory regime and current or proposed State and local requirements. To reduce compliance costs and duplication of effort by sources and the enforcing agencies, EPA will consider future FIP rule amendments for the purpose of harmonizing federal and State controls and eliminating any jeopardy of the regulated community for inadvertent violations of similar but not identical federal and State rules.

b. *Enforcement.* As described in section III.A.2.a of this NPRM, the FIP requirements contained in sections 52.2950–52.3002 are proposed pursuant to section 110(c) and other sections of the Clean Air Act. If finalized, these requirements will be subject to Federal enforcement under section 113(a)(3) of the Act. Pursuant to section 113(a)(3), EPA may pursue the following actions against any person who violates a requirement of the final FIP rules:

(1) Administrative penalty order. EPA may issue an administrative order assessing a civil administrative penalty of up to $25,000 per day per violation.

(2) Compliance order. EPA may issue an order to comply with any requirement of the FIP.

(3) Civil action. EPA may commence a civil action for permanent or temporary injunction and/or assess a civil penalty of up to $25,000 per day per violation.

(4) Criminal action. EPA may request that the Attorney General commence a criminal action against any person who knowingly violates any requirement of the FIP.

Owners and operators of sources subject to the FIP rules should be aware that compliance with the FIP requirements does not generally relieve them of the obligation to comply with other applicable federal requirements or with their obligations under State law and regulations, or local air pollution control rules.

c. *Application of FIP Requirements to OCS Sources.* Section 328 of the 1990 CAA Amendments required EPA to establish requirements to control air pollution from Outer Continental Shelf (OCS) sources to attain and maintain federal and state ambient air quality standards and to comply with part C of title I of the CAA. EPA promulgated the new OCS air regulations at 40 CFR part 55 ("Part 55") on September 4, 1992 (57 FR 40792).

As required by section 328 of the Act, OCS sources located within 25 miles of states' seaward boundaries,[22] must meet requirements that are the same as the requirements that would be applicable if the OCS source were located in the corresponding onshore area ("COA").[23]

[22] The state seaward boundary of California extends three miles from the coastline.

[23] Part 55 also establishes federal requirements for sources located beyond 25 miles from state seaward boundaries. However, there currently are no OCS

These include, but are not limited to, all applicable federal, state, and local requirements for control technology, permitting, monitoring, reporting, compliance and fees. New OCS sources must comply with the requirements of Part 55 immediately and existing sources must comply by September 4, 1994.

Both VCAPCD and SCAQMD are designated as the COA for several OCS facilities located within 25 miles of the State seaward boundary. These OCS sources will be required to meet all the applicable requirements of the FIP when the FIP requirements are incorporated into part 55. The OCS rule establishes a "consistency update" procedure at 40 CFR 55.12 to amend part 55 to include new federal, state, and local regulations when they are adopted.

The OCS rule also establishes procedures for EPA to delegate implementation and enforcement of the requirements of part 55 to state and local agencies. Thus, any FIP requirements applicable to the affected OCS sources can be implemented by VCAPCD and SCAQMD when they are delegated authority for part 55. The reader is referred to the preamble of the OCS regulation for further background and information on part 55.

d. *Application of FIP Requirements to Sources Located in Indian Country.* As described below, the CAA empowers EPA to apply the FIP requirements to affected air pollution sources in Indian country.[24] Thus, EPA is also proposing to apply the FIP requirements to all affected air pollution sources located on Tribal lands. This means that the proposed FIP rules will apply with equal force to State and Tribal lands.

Congress has authorized EPA to make Indian Tribes partners in Clean Air Act implementation in the same manner as States. See section 301(d)(2) of the Act. As a prerequisite, EPA must identify provisions of the CAA for which it is appropriate to treat Tribes in the same manner as States. EPA may provide by regulation other means by which it will directly administer any other provisions of the CAA not identified, to achieve the appropriate purpose. See section 301(d)(4).

The overarching purpose of the Clean Air Act is, among other things, "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." See section 101(b)(1) of the CAA (emphasis added). The NAAQS are one of the fundamental CAA benchmarks by which public health and welfare protection is measured.

EPA has not yet issued rules under section 301(d)(2) authorizing Tribes to submit NAAQS-related CAA programs for EPA approval in the same manner as States. Sections 110(c)(1) and 301(d)(4) of the Act nevertheless evince Congressional intent to authorize EPA to directly protect public health and welfare where States or Tribes fail to submit such CAA programs or lack authority to do so. Federal implementation on Indian lands is especially appropriate in these particular exigencies where federal action will prevent voids in public health and welfare protection. See *Phillips Petroleum Co.* v. *EPA*, 803 F.2d 545, 555–56 (10th Cir. 1986) (affirming EPA's authority to directly implement Safe Drinking Water Act Underground Injection Control program on Indian lands in Oklahoma where concluding otherwise would contradict the meaning and purpose of the Act by creating "a vacuum of authority over underground injections on Indian lands, leaving vast areas of the nation devoid of protection from groundwater contamination).

It is not necessary for EPA to determine to what extent at the local level the State or certain Indian Tribes would have authority over specific geographic areas within the scope of the FIPs. The State has failed to make required SIP submittals to protect the NAAQS and any affected Tribes lack authority to make such submittals at this time. In these circumstances the CAA empowers EPA to protect air quality *throughout* the affected areas. *Id.* at 553 ("the underground drinking water provisions of the SDWA apply throughout the country, border to border, ocean to ocean").

2. Common Elements

a. *Mobile source regulations.* The mobile source control measures which are discussed in section III.D. of this NPRM range in scope from national application to restricted application in one or more of the three FIP areas depending on the category. Technology improvements are generally required in phases, with new national emission standards applicable in the early years, and California, or FIP area requirements scheduled for implementation later. In some cases, the mobile source measures are applied only locally because they are adopted to fill a lack in a particular area's plan, such as enhanced I/M or the employee commute options program. Local strategies are also proposed to deal with the emissions from transportation and military facilities that contain more than one type of mobile emission source. Following is a brief classification of the measures according to the breadth of their application:

(1) Nationwide. New emission standards have recently been proposed or are shortly scheduled for proposal for several mobile source emission categories. Both on-highway and off-road heavy duty engines will meet tighter NO_X standards, as will locomotives. Lawn and garden, recreational marine, and other small nonroad equipment are the subject of new exhaust and evaporative hydrocarbon standards.

(2) Statewide. In California, it is also possible to adopt standards more stringent than those applied at the national level, if it is necessary to do so for attainment purposes. The market for vehicles and equipment in California is large enough to encourage manufacturers to supply a full range of product in the state, even though it may be different than similar product in the rest of the country. Today's NPRM proposes special standards for medium duty vehicles, heavy duty highway engines, and onroad and off-road motorcycles sold and used in California and gives notice that such standards may become necessary for lawn and garden equipment and other small engines.

(3) FIP areas. In the nonroad heavy duty engine category, the FIP proposal contains special NO_X and evaporative HC requirements for engines used in the FIP areas. The standards represent a significant challenge for heavy duty engine manufacturers and are not considered to be necessary for attainment in other areas of the United States. Engines used in highway applications are regulated in the FIP at the statewide level, but the approach to the special NO_X and evaporative HC standards for the nonroad engines will involve an engine registration and sticker enforcement system. For that reason, the standards are applied to engines actually used in each individual FIP area, and not to all engines sold in California.

In several categories, the FIP proposes emission bubbles to allow facilities or entities with many mobile sources as

sources located, or proposed to be, in this outer regime.

[24] Indian country includes: (a) All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation, (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. 18 U.S.C. section 1151.

much flexibility as possible to find reductions across different mobile emission sources. These bubbles are proposed for commercial airlines, marine vessels, railroads (South Coast only), and military installations in the FIP areas. In some cases, fees are proposed to encourage the purchase and use of the cleanest engines, to encourage activity reductions, or to promote the use of lower emitting operational procedures. These fees would apply to heavy-duty nonroad fleets, recreational marine engines, commercial and general aviation, and ships in the FIP areas only.

Finally, the FIP proposes two light duty vehicle measures in only the FIP areas of California, namely motor vehicle inspection and maintenance (I/M), and parking cash out (a transportation control measure).

b. *Stationary and area source regulations.* As discussed in section III.C of this NPRM, the proposed stationary source control package includes five general strategies:

- Regulations for specific sources;
- Regulations for specific source categories in the FIP areas;
- Regulations imposed statewide;
- Cap regulations; and
- New technology measures for the South Coast pursuant to section 182(e)(5) of the Act.

Regulations for specific sources are, by definition, particular to individual sources and thus not common to the three FIP areas. In fact, all the source-specific regulations proposed in this NPRM apply only in the Sacramento area. Similarly, new technology measures proposed for the South Coast apply only in the South Coast as specified in section 182(e)(5) of the Act. Some or all regulations from the other three categories, however, are proposed for implementation in all three FIP areas. These are summarized briefly below.

(1) Regulations for specific source categories. Sections III.C.3.b–p of this NPRM describe eighteen rules proposed for specific source categories in one or more FIP areas. Categories were selected for regulation generally because a State or local agency had already published a regulation that could be adapted for implementation in the FIP, or a previously unregulated category contributed substantial VOC or NO_X emissions. Because the FIP areas have different emission inventories and local rules, the projected impact of new federal rules varies from area to area. Therefore, EPA is proposing to implement these FIP rules only in the areas where they may have a significant impact. As a result, only a few of the rules are common to all three FIP areas.

(2) Regulations imposed statewide. As discussed in section III.C.4, EPA is proposing several stationary source rules for implementation statewide: Architectural coating, pesticides, aerosol paints and other consumer products. EPA believes that statewide implementation of these rules is necessary to assure compliance in the FIP areas.

(3) Cap regulations. As discussed in section III.C.5, EPA is proposing cap regulations for both VOC and NO_X in this NPRM. These rules cap emissions at 1989–1990 levels and require sources to reduce emissions below this level by a fixed annual percent, beginning in the year 2001.[25] The VOC regulations are common to all three areas. The NO_X cap rules apply only to Ventura, since stationary sources contribute only a small part of the NO_X inventory in Sacramento and NO_X sources in the South Coast are now controlled under the recently adopted SCAQMD NO_X RECLAIM rules.

3. Sacramento Ozone

a. *Reduction requirements for 1999 and 2005.* Anthropogenic emissions in the Sacramento area in 1990 totaled approximately 236 tons per day of VOC and 185 tons per day of NO_X. There are many existing State and local regulatory requirements in the Sacramento area. These requirements include numerous State and local stationary source regulations and the existing CARB standards on new engines and equipment which will deliver increasing reductions each year as a result of replacement of old engines and equipment with newer cleaner engines and equipment. Sections II.B.2., II.B.5., and III.H. of today's NPRM discuss the adopted CARB and local districts' rules and EPA's assignment of credit to the rules as part of the FIP/SIP attainment demonstration.

Unfortunately, projected emissions reductions from the State and local requirements must compete with projected growth in the area's population, automobile traffic and industrial activity.

As a result, without further SIP or FIP measures, the total amount of emissions in the Sacramento area is not expected to change significantly by 1999 or 2005.

CARB and EPA have performed extensive meteorologic analysis and urban airshed modeling (UAM) of ozone formation for the Sacramento area. This modeling suggests that several combinations of VOC and NO_X reduction can achieve attainment of the ozone standard. As discussed in Section III.H.3.a., EPA is using reduction targets of 40 percent VOC and 30 percent NO_X from 1990 baseyear emission levels for the Sacramento area FIP attainment demonstration. In order to achieve the 40:30 target, SIP and FIP controls must reduce the future inventories for 1999 and 2005 to approximately 140 tons per day of VOC and 130 tons per day of NO_X. (These targets are often referred to as "carrying capacities.")

b. *SIP rules.* Irrespective of EPA's FIP obligation, California and the Sacramento nonattainment area are required to submit an ozone attainment SIP in November 1994. As part of this and previous SIP efforts, CARB and the local air agencies in the Sacramento area are continually adopting and modifying regulations to reduce NO_X and VOC emissions. EPA is not proposing to act on any SIP improvements as part of this NPRM, but will do so on a case-by-case basis in separate actions.

For purposes of the attainment demonstration in this NPRM, EPA is not generally assigning emission reduction credit for those measures that are not fully adopted in enforceable form. EPA urges the responsible State and local agencies to complete rule development and submit rules for SIP approval as soon as they are fully adopted. This will allow EPA to approve the regulations and substitute the locally developed measures for FIP rules.

c. *FIP rules for 1999 and 2005.* Sacramento is classified as a "Serious" ozone nonattainment area and is, therefore, initially required by the Clean Air Act Amendments of 1990 to demonstrate attainment by 1999. There are several reasons why a 1999 attainment target for a FIP, however, would result in an unreasonable plan with undesirable impacts on the local economy. The following discussion outlines these reasons and explains EPA's proposed solution (i.e., bumping up the classification to "Severe" and extending the attainment deadline). EPA is soliciting comment on whether its solution is appropriate or whether the advantages of attainment by an earlier date justify the imposition of the kinds of measures which would be necessary.

The FIP rules proposed for implementation in the Sacramento area for the 1999 and 2005 attainment options are discussed in sections III.B.2 and III.B.3. Mobile source measures which yield emission reductions for both the 1999 and 2005 options include an enhanced I/M program, credit for national standards for nonroad vehicles

[25] For Sacramento's alternative 1999 attainment demonstration, the cap program will require full reductions by 1990.

and engines, offroad recreational vehicle standards, motorcycle standards, and a parking cash out requirement. Other mobile source measures needed for attainment, discussed above and below, depend on the attainment year, 1999 or 2005. For 1999, the additional measures include accelerating turnover for heavy duty truck engines, capping emissions for nonroad fleets, restricting driving for highway vehicles and a strategy for recreational boats. For 2005, the additional measures includes strategies for motor vehicles, locomotives, recreational boats, airports, military installations, and an employee commute options (ECO) program.

For stationary sources in Sacramento, both the 1999 and 2005 proposals include the source specific reasonably available control technology (RACT) regulations discussed in III.C.2, all of the regulations for specific source categories discussed in III.C.3 and the statewide regulations discussed in III.C.4. Many sources will also be subject to the cap regulations discussed in III.C.5. which will require approximately a 20–45 percent reduction in VOCs by 1999 (for the 1999 attainment option) or a gradual 4–9 percent per year reduction in VOCs from 2001 through 2005 (for the 2005 attainment option).

d. *1999 attainment option.* By 1999, the existing State and proposed FIP measures common to both the 1999 and 2005 proposals for both stationary [26] and mobile sources will have reduced the Sacramento VOC inventory from 236 tons per day in 1990 to 155 tons per day in 1999, and the NO_X inventory from 185 to 153 tons per day. Much of the progress on VOC and NO_X comes from the stationary source measures, continued benefits of the current motor vehicle control programs, and a substantial improvement in in-use emissions of light duty vehicles due to an enhanced I/M program. New initial emissions standards affecting nonroad diesels and locomotives are just barely beginning to be felt in new engine purchases. New standards for medium duty vehicles, heavy duty vehicles, and heavy duty nonroad engines in California are just taking effect in the 1999 model year.

In 1999, the shortfall in emission reductions is about 15 tons per day for VOC and 23 tons per day for NO_X. NO_X is almost entirely contributed by mobile sources in Sacramento. Twenty-three tons per day represent about 16 percent of the remaining mobile source emissions of NO_X in 1999, or 43 percent of the remaining light duty motor vehicle emissions (i.e., passenger cars, light duty trucks and motorcycles). If the FIP must reduce the additional 23 tons of NO_X without the benefit of new standards and normal turnover, then it must contain measures to require accelerated turnover and to reduce the activity of mobile sources. Under the option of retaining Sacramento's "Serious" area classification, EPA's strategy for making up the shortfall focused on mobile sources because of the absence of significant stationary NO_X sources and aimed first at technology measures that are able to yield NO_X reductions by 1999. EPA then considered whether similar opportunities existed for VOC reductions. The remainder of the reductions came necessarily from measures to reduce activity.

(1) *Onroad heavy duty trucks.* On-highway heavy duty trucks are a category for which EPA believes an accelerated retirement/replacement program can be adopted and implemented because the regulatory development for tighter emission standards, certification protocols and product design work was updated in 1993. For the 2005 option, the FIP proposes significant changes to the emission standards and certification protocols which will be applied to on-highway heavy duty trucks beginning with the 1999 model year. However, the NO_X standard for this category was also recently made more stringent. Since the 1991 model year, engine manufacturers have been certifying engines meeting a 5 gram per brake horsepower-hour standard. The federal NO_X standard reduces further to 4 grams per brake horsepower-hour in 1998. Engines currently in use may range in design standard as high as 10.7 grams per brake horsepower-hour. Thus, there is an opportunity to require accelerated turnover in this category to effect reductions from the current fleet in order to contribute to a 1999 attainment strategy.

In order for EPA to implement and enforce an engine replacement requirement, it will be necessary for California fleets to show compliance with a fleet average NO_X standard prior to registration. The details of such a registration system and other requirements are described in section III.D.3., Programs for Onroad Heavy Duty Vehicles and Engines. For the 2005 option, a fleet averaging program begins in 2001. If the 1999 attainment option is ultimately selected, fleets registered in California would be required, after 1997, to have an average gram per brake horsepower-hour level of no more than 5 grams.

Some 1999 truck travel in the Sacramento area would be by fleets not subject to any fleet standard. The emissions reductions available depend on the contribution to vehicle miles traveled made by fleets which are subject to the rule. For the purpose of this proposal, it is assumed that 80 percent of the onroad heavy duty miles come from California fleets, yielding an estimated reduction of approximately 6 tons of NO_X per day.

(2) Nonroad growth cap. The remaining NO_X shortfall is approximately 17 tons per day, 13 percent of total mobile source inventory or 33 percent of the light duty motor vehicle NO_X inventory in 1999. Before turning to activity reductions in the light duty motor vehicle category, it is reasonable to consider whether any reductions are available in this time frame from nonroad heavy-duty equipment. The difficulties of implementing a retrofit rule are discussed in I.D. However, there are emission reduction strategies which could be implemented by equipment fleet operators in the Sacramento area. For example, nonroad engines meeting higher national standards should be available from manufacturers as early as 1996. There are also applications which have on-road configurations as well as nonroad configurations, and fleet operators can purchase replacements meeting the tighter standards.

One of the reasons that the overall nonroad category is estimated to contribute significantly to a 1999 inventory is that it has been unregulated up to this time. The other reason is that substantial growth is projected for the category: 8.8 tons per day NO_X increase from 1990 to 1999. If growth in emissions from the largest NO_X-emitting nonroad sources could be avoided, the task of attaining the standards by 1999 or any later date would be made easier. EPA is proposing as part of the 1999 attainment FIP that growth in the nonroad heavy-duty category be capped such that NO_X emissions not exceed 1995 projected levels. The cap would be implemented via a fleet averaging concept like that described in section III.D.4 which contains the nonroad proposal for the 2005 attainment strategy. Section III.D.4 proposes a declining fleet average emissions level to assure that the historical rate of engine turnover is maintained; the 1999 attainment cap would require that fleet operators acquire and utilize low emission engines as necessary to maintain NO_X emissions at projected

[26] The stationary measures include all of the measures discussed in III.C that are identified as applying to Sacramento and those that are applied statewide, and the cap regulation which requires a 20–45 percent reduction by 1999.

1995 levels. The estimated benefit of this cap is the reduction of approximately 4 tons per day of NO_X which would have resulted from further growth in the heavy-duty equipment category.

(3) No drive days. The remaining NO_X shortfall is approximately 13 tons per day which amounts to approximately 10 percent of the total mobile source inventory, 16 percent of the on-road mobile source inventory, or 25 percent of the light duty motor vehicle inventory in 1999. This represents a substantial reduction from sources that can not be significantly controlled by further technological solutions or forced turnover to cleaner alternatives. Therefore, the shortfall would have to be achieved with even more difficult measures that focus on reducing the use of mobile sources.

Activity restrictions could be obtained from various mobile source categories using a variety of regulatory approaches. For example, broad-based reductions from essentially all categories could be obtained with such blunt measures as fuel surcharges or gas rationing. More focused reductions could be made by targeting motor vehicle activity through fees on vehicle-miles-traveled (VMT) or no-drive days.

EPA believes such potentially severe measures should only be selected after substantial public participation and debate. However, the Agency is compelled to make a selection for the proposed 1999 attainment date option. When faced with a similar dilemma in the 1990 proposed FIP for the South Coast Basin (55 FR 36458), EPA chose to limit mobile source activity with a no-drive day program for on-road motor vehicles. Today's proposal also contains that control measure in order to achieve the sizeable, remaining NO_X shortfall for the 1999 attainment option. More specifically, in order to achieve the 13 tons of NO_X reductions needed, EPA is proposing that each highway vehicle registered in the Sacramento nonattainment area be prohibited from being driven one day out of five weekdays.

(4) Recreational boat fees or prohibitions. A no-drive day, which is imposed on all highway vehicles one out of five weekdays, would produce approximately a 20 percent decrease in the emissions of the remaining NO_X and VOC from highway vehicles. This would be sufficient to reduce NO_X in the Sacramento area to the area's carrying capacity. However, the VOC reductions from the above no-drive day proposal provides only eleven out of the required fifteen tons per day. The accelerated retirement strategy and growth cap proposed for heavy duty engines do not significantly affect VOC emissions. There is a nonroad mobile source category, recreational boating, which does contribute significantly to the VOC inventory in Sacramento and which will eventually be reduced through the adoption of national standards for new engines and subsequent fleet turnover. It is possible to achieve an accelerated turnover similar to that required for heavy equipment either by restricting the operation of boats which use engines which do not meet new national standards, or by imposing a fee on the excess emissions from such boats. As a final measure in a 1999 attainment option for VOC reductions, EPA is proposing a fee system or boating restriction which will reduce emissions from recreational boating by one-third in 1999. A similar fee system is explained in the 2005 attainment proposal.

As an alternative to the fees or restrictions on recreational boating, EPA requests comment on obtaining the additional VOC reductions from stationary sources. This alternative would consist of either increasing the cap reduction requirement or achieving further VOC reductions from sources which are not covered by the cap regulations (e.g., architectural coatings, consumer products).

e. *EPA's preferred option*—(1) EPA authority to initiate bump-up. Under section 181(b)(3) of the Act, EPA must grant the request of a state to reclassify a nonattainment area to a higher classification. Once the area has been bumped-up pursuant to such a request, it becomes subject to the more stringent control requirements associated with the higher classification. While a state need not make any particular showing for the bump-up request to be granted, legislative history indicates that the voluntary bump-up "is provided for areas that wish to impose the more stringent control measures associated with a higher classification or that, for reasons such as extremely rapid population growth, conclude that they will not be able to attain by their otherwise applicable date [sic]." H.R. Rep. No. 101–490, Part 1, 101st Cong., 2d Sess., 232 (1990).

In the case of the Sacramento nonattainment area, the State could mitigate the difficulties in achieving attainment by 1999 by requesting a voluntary reclassification from "Serious" to "Severe," which would allow up to an additional six years to attain the ozone NAAQS. To date, the State has not opted to do so for the purposes of its attainment SIP, which must be submitted to EPA in November 1994. See section 182(c)(2) and (d). EPA, however, must confront these same difficulties now in designing its FIP proposal and, in the absence of a State request, must determine whether the Agency may avail itself of the voluntary bump-up option.

While the Act specifically provides for an EPA-initiated reclassification only upon failure of an area to attain the ozone NAAQS by the applicable attainment date, the Agency believes that a recent Ninth Circuit Court of Appeals case offers a persuasive basis for interpreting the Act as authority for a unilateral bump-up in the FIP context.

Central Arizona Water Conservation District et al. v. *EPA*, 990 F.2d 1531 (9th Cir. 1993), involved EPA promulgation of a visibility FIP to remedy visibility impairment in the Grand Canyon National Park. In that case, the court upheld EPA's action under regulations that on their face applied only to state action in adopting a SIP. The court stated that when "[a]cting in the place of the state * * * pursuant to a FIP under 42 U.S.C. § 7410(c), EPA 'stands in the shoes of the defaulting State, and all of the rights and duties that would otherwise fall to the State accrue instead to EPA.'" 990 F.2d at 1541. Based on this decision, EPA has concluded that when the Agency promulgates a FIP, it can stand in the shoes of the state in order to bump up an ozone nonattainment area under section 181(b)(3) on its own initiative.

(2) Rationale for bump-up to "Severe." Although the design value assigned to Sacramento for the period 1988 through 1990 resulted in its classification as "Serious," a review of the most recent design values and yearly exceedances for several ozone areas including Sacramento (summarized in the following table) show that it is comparable to other "Severe" nonattainment areas with the 4th highest design value in the group and the 7th highest number of yearly exceedances.

OZONE CLASSIFICATIONS AND AIR QUALITY DATA

[Design Values and Number of Exceedance Days Based on Most Recent 3 Years of Data]

Area	Classif.	Design value (ppm)	Exceedances (days)
So. Coast	Extreme	.300	106.1
SE Desert	Severe-17	.230	52.9
Houston	Severe-17	.210	13.0
San Diego	Severe-15	.170	7.3
San Joaquin	Serious	.160	22.6
Sacramento	Serious	.160	6.1
New York	Severe-17	.160	3.4
Baltimore	Severe-15	.156	4.9
Philadelphia	Severe-15	.153	8.4
Ventura	Severe-15	.150	17.6
Milwaukee	Severe-17	.148	4.7
Chicago	Severe-17	.143	4.7

Note: Most of the classifications were based on 1987–1989 data. Design values and exceedance numbers are for 1990–1992 and derive from *National Air Quality and Emissions Trends Report, 1992* (November 2, 1993).

The urban airshed modeling which calculates the reductions needed to attain the standards also produces results comparable to the percent reduction needed for attainment in Ventura (an area classified as "Severe" under the Act). The VOC reduction target is identical at 40 percent; the NO_X target is somewhat lower at 30 percent (compared to 40 percent).

However, the main reason EPA believes a bump-up to 2005 for the Sacramento area is appropriate is the difficulty in achieving significant emissions reductions from a mobile source dominated emissions inventory where less than 10 percent of the NO_X emissions are from stationary sources. A 1999 attainment date does not allow sufficient time for the emissions reductions of many of the mobile source strategies discussed in section III.D to occur. This includes strategies which rely on the normal replacement of older, dirtier engines and vehicles with cleaner engines and vehicles. It also would include strategies that rely on longer lead times to develop and implement lower emitting operational improvements or control hardware. Thus, EPA must turn to measures which require retrofits or replacements for in-use engines and vehicles, and restrictions on mobile source activity to achieve the necessary emissions reductions. A bump-up would allow the Sacramento area to take advantage of the new engine standards and other requirements proposed in section III.D, and avoid accelerating turnover for heavy duty truck engines, capping nonroad engine emissions growth and restricting driving—measures EPA is proposing to satisfy the 1999 attainment demonstration.

A bump-up is also important for stationary sources which will be required to meet EPA's Cap Regulations (section III.C.5). Under the 1999 attainment date, these stationary sources would be required to submit compliance plans by 1998 which will demonstrate an additional 20–45 percent reduction in VOC emissions by 1999. With the additional time allowed by a "Severe" area classification, these sources would instead be subject to a declining cap requiring gradual 4–9 percent per year emissions reductions, which will not be required to begin until 2001. The additional years for compliance would allow a company to investigate control options and take greater advantage of technological developments, and thus avoid production cutbacks or shutdowns to meet emissions reductions levels. EPA believes it is reasonable to anticipate that substantially improved emission reduction alternatives and control technologies will develop for stationary and area sources during the additional time that a higher classification for Sacramento would provide.

(3) 2005 attainment option. The FIP measures common to both the 1999 and 2005 proposals for both stationary[27] and mobile sources will have reduced the Sacramento VOC inventory from 236 tons per day in 1990 to 157 tons per day in 1999, and the NO_x inventory from 185 to 149 tons per day. Like the 1999 proposal discussed above, these reductions come from the stationary source measures, continued benefits of the current motor vehicle control programs, and a substantial improvement in in-use emissions of light duty vehicles due to an enhanced I/M program. However, by 2005 additional reductions are realized from the new emissions standards affecting medium duty vehicles, heavy duty vehicles, nonroad diesels and locomotives due to engine turnover, and from the enhanced in-use compliance program.

With the benefits from the recreational boat measure and ECO program discussed above and in section III.D, total emissions reductions by 2005 will be large enough to provide for attainment.

It is important to note that a bump-up of the Sacramento area to "Severe" also leads to the following additional Clean Air Act requirements associated with a "Severe" area classification, which include: (1) A more stringent major source definition (25 tons per year, down from 50 tons per year); (2) a more stringent offset requirement for new major sources (1.3:1 instead of 1.2:1); (3) TCMs to offset VMT growth; (4) and an employer-based trip reduction rule. The responsibility for meeting these requirements is discussed below.

If EPA grants the request of a state to reclassify a nonattainment area to a higher classification under section 181(b)(3), that area must meet all deadline and control requirements applicable to the higher classification, and is not eligible for any adjustment of those deadlines. H.R. Rep. No. 101–490, Part 1, 101st Cong., 2d Sess., 233 (1990). If reclassification is promulgated by EPA unilaterally in the FIP, the area likewise becomes responsible for meeting all such deadlines and requirements for SIP purposes.

The substance of these additional requirements is set forth in section

[27] The stationary measures include all of the measures discussed in III.C that are identified as applying to Sacramento and those that apply statewide, and the cap regulation which requires a gradual 4 percent per year VOC reduction from 2001 through 2005.

182(d) of the Act.[28] Because the statutory deadlines for compliance with or submission to EPA of these requirements have already passed, if EPA finalizes in February 1995 its bump-up option for the Sacramento area, the State will be responsible for submitting the actual regulations to comply with the "Severe" area requirements at that time. If the State fails to do so, the Sacramento area will be subject to a finding of failure to submit these requirements upon final promulgation of the FIP in 1995.

As discussed previously in this NPRM, EPA's current obligation is to design a FIP for the Sacramento area that attains the ozone NAAQS by 1999 or 2005. EPA is not legally required to meet all SIP submittal requirements that appeared for the first time in the 1990 Amendments and for which there are no state failures which EPA must cure. Nevertheless, as a policy matter, and because it has invoked the provisions of the Amendments in initiating a bump-up, EPA is proposing in today's NPRM the "Severe" area provisions (section III.F.) in regulatory form.

The measures proposed in III.F. were developed to help the State and local agencies meet the additional "Severe" area requirements if the Sacramento area is bumped up. For example, the proposed new source review rule discussed in section III.F.4. is based on the actual language of existing rules in the Sacramento area in order to provide a rule that is easy for the local APCDs to adopt and implement. The employee commute options (ECO) rule discussed in section III.F.2. is also adoptable by the local APCDs; alternatively, it may provide an incentive for the local APCDs to develop, adopt and submit ECO programs that are currently being considered. Thus, if bump-up is promulgated, EPA believes that the measures proposed in III.F. will help the State and local agencies meet their mandate in a timely fashion and avoid sanctions.

If EPA ultimately chooses its preferred option of bumping up Sacramento, EPA plans, if necessary, to implement the "Severe" area measures proposed in section III.F. on their respective effective dates following final promulgation of the FIP in February 1995. Until a submittal of replacement measures is made by the State and approved by EPA, the "Severe" area requirements proposed in section III.F. will remain in effect. If EPA finds that there will be a significant time period before the submittal is made and approved, EPA will try to delegate portions or all of the federal program to the State and local agencies.

f. *Summary of 1999 and 2005 attainment options.* The following table summarizes the FIP measures proposed for the alternative 1999 and 2005 attainment demonstrations:

SUMMARY OF SACRAMENTO FIP MEASURES FOR 1999 AND 2005 ATTAINMENT OPTIONS

	1999	2005
Mobile Measures:		
Enhanced I/M	X	X
Nonroad stds (nat'l)	X	X
Offroad recreational vehicle stds-w/normal turnover	X	X
Motorcycle stds w/normal turnover	X	X
Parking Cash Out	X	X
Airports/Military Installations declining cap reduction	.....	X
Accelerated turnover for heavy duty trucks	X	
Nonroad growth cap based on available retrofits	X	
Onroad driving restrictions (no-drive days)	X	
Fees for recreational boats	X	X
Stationary Measures:		
Applicable FIP Rules	X	X
Cap reduction by 1999	X	
Declining Cap reduction by 2005	.....	X
2005 Bump-Up Requirements:		
NSR Rule	.....	X
ECO Program	.....	X

EPA requests comment on whether the bump-up is an appropriate solution or whether the advantages of attainment by an earlier date justify the imposition of the measures necessary for 1999 attainment.

g. *Attainment demonstrations.* As discussed in Section III.H.5.a, EPA believes that the set of measures proposed in this NPRM, in conjunction with adopted State and local measures, will bring the Sacramento area into attainment with the ozone standard by 1999 or 2005. This projection is based on extensive computer simulations of ozone formation performed using the Urban Airshed Model.

4. Ventura Ozone

a. *Reduction requirements.* Anthropogenic emissions in Ventura in 1990 totaled approximately 105 tons per day of VOC and 86 tons per day of NO_X. The existing air pollution regulations controlling these emissions are among the most stringent in the country. In addition, many of the CARB and VCACPD regulations prescribe future compliance requirements that are still more stringent, and the existing CARB standards on new engines and equipment will deliver increasing reductions each year as a result of fleet turnover. Sections II.B and III.H of this NPRM discuss the adopted CARB and VCAPCD rules and EPA's assignment of credit to the rules as part of the FIP/SIP attainment demonstration.

Unfortunately, projected emission reductions from many of these State and local measures are offset by continued growth in the area's population and activity levels. Consequently, in the absence of further SIP or FIP measures, emissions in Ventura are projected to be 98 tons per day VOC and 75 tons per day NO_X by the year 2005.

EPA, CARB, and VCAPCD have performed extensive meteorologic analysis and airshed modeling of ozone formation in the area. This modeling suggests that various combinations of VOC and NO_X reductions can achieve attainment with the ozone standard. As discussed in Section III.H.3, EPA is using reduction targets of 40 percent VOC and 40 percent NO_X from the 1990 base-year emissions levels. Therefore, the SIP and FIP controls must achieve, by 2005, emission levels of 57 tons per day VOC and 46 tons per day NO_X.

b. *SIP rules.* Irrespective of EPA's FIP obligation, California and Ventura County are required to submit an ozone attainment SIP in November 1994. As part of this and previous SIP efforts, CARB and VCAPCD are continually adopting and modifying regulations to reduce NO_X and VOC emissions. EPA is not proposing to act on any SIP improvements as part of this NPRM, but will do so on a case-by-case basis in separate actions.

For purposes of the attainment demonstration in this NPRM, EPA is generally not assigning emission reduction credit to measures until they are fully adopted in enforceable form. EPA urges the responsible State and local agencies to complete rule development and submit rules for SIP approval as soon as they are fully adopted. This will allow EPA to approve the regulations and substitute the locally developed measures for FIP rules.

c. *FIP rules.* The set of FIP measures proposed for implementation in Ventura relies largely on those regulations discussed in Section III.B as elements common to all three FIP areas. For mobile sources, this includes regulations for motor vehicles and I/M, nonroad vehicle and engine controls, forthcoming national regulations for locomotives, and strategies to reduce the ambient impact of ship traffic along the

[28] For a more complete description of the requirements and EPA preliminary policies with respect to them, readers should consult the "General Preamble for Implementation of Title I of the Clean Air Act Amendments of 1990" (57 FR 13521).

coast. For stationary sources, it includes regulations for solvent cleaning operations, wood products coatings, service stations, waste burning, and fugitive emissions, as well as the statewide measures and the emission cap programs.

One FIP measure peculiar to Ventura affects emissions from ocean-going ships transitting up and down the Ventura coastline. In Section III.D.5.e.(4) of this NPRM, EPA discusses rerouting the Santa Barbara shipping channel farther from the coast, and a fee system designed to encourage ships to travel outside of the Channel Islands.

d. *Attainment demonstration.* As discussed in Section III.H., EPA believes that the set of measures proposed in this NPRM, along with adopted State and local measures, will bring Ventura County into attainment with the ozone standard by 2005. This projection is based on extensive computer simulations of ozone formation performed using the Urban Airshed Model.

e. *Alternative attainment date discussion.* Section 181(a)(1) of the Act requires that ozone SIPs demonstrate attainment as expeditiously as practicable but not later than, in the case of Ventura, 2005. As a result, EPA has attempted to identify practicable measures that could achieve attainment by an earlier date. For illustrative purposes, EPA focused this investigation on a target attainment date of 2000. EPA is not, however, proposing this attainment date or the following strategies in this NPRM.

In today's NPRM, EPA is proposing two attainment options for the Sacramento area. 1999 is proposed because Sacramento is currently classified as a "Serious" ozone area, and 2005 is proposed because EPA is recommending reclassifying Sacramento to a "Severe" area. As discussed in paragraph III.B.3.e of this NPRM, EPA believes that attainment in Sacramento by 1999 would require unacceptably harsh control measures, and therefore prefers the 2005 option. Since Ventura's ozone problem is worse than Sacramento's (e.g., EPA is projecting that a 30% reduction of NO_X emissions is needed for attainment in Sacramento while a 40% reduction is needed in Ventura), it is not surprising that attainment in Ventura by 2000 would also prove to be impracticable.

Many of the mobile source FIP controls for the 2005 attainment demonstration are proposed for near-term implementation in Ventura, and will achieve substantial emission reductions by 2000. These include an enhanced inspection and maintenance program, national standards for nonroad vehicles and engines, offroad recreational vehicle standards, motorcycle standards, and a parking cash-out program. The difficulty in achieving full attainment by that date, however, is that many of the proposed mobile source strategies rely on engine and vehicle turn-over to reduce emissions. Tight emission standards for new onroad vehicles, for example, are not effective while people are still driving older cars. By 2000, new emission standards affecting heavy duty onroad and nonroad engines and locomotives will just barely begin to be felt in new engine purchases.

In trying to identify practical measures for attainment in Ventura by 2000, EPA has considered control strategies similar to those proposed to bring Sacramento into attainment by 1999. These include the following:

Onroad heavy duty trucks. EPA could accelerate replacement of old high-emitting onroad heavy duty truck engines by requiring local truck fleet owners to register and sticker their equipment to assure compliance with tight emission standards.

Nonroad growth cap. EPA could propose that growth in the nonroad heavy duty category be capped such that emissions not exceed 1995 projected levels.

Accelerate shipping fee system. EPA could accelerate the fee system designed to encourage shipping companies to reroute their shipping activities beyond the Channel Islands.

Accelerate airport and aircraft programs. EPA could accelerate programs designed to reduce emissions from commercial, general, and military aircraft and associated activity.

Accelerate turnover of recreational boat engines. Emissions from recreational boat engines will eventually be reduced through the adoption of national standards for new engines and subsequent fleet turnover. It is possible to achieve an accelerated turnover similar to that required for heavy equipment either by restricting operation of boats which use engines that do not meet new national standards, or by imposing a fee on the excess emissions from such boats.

Most of the requirements for stationary source categories described in section III.C.3 and the statewide area sources described in section III.C.4 are scheduled for implementation in 1996. EPA expects, in fact, that all stationary source emission reductions projected under the 2005 attainment demonstration will be achieved by 2000 except for those required by the cap rules discussed in section III.C.5.

The proposed cap programs require most stationary sources in Ventura to reduce VOC and NO_X emissions by at least 4% and 6% per year respectively for each year from 2001 through 2005. Theoretically, EPA could require 20% or greater VOC reductions (and 30% or greater NO_X reductions) by 2000. While this might accelerate attainment, EPA cannot conclude that accelerating such reductions would be practicable, and believes it could well be counterproductive in practice. Specifically, such a dramatic near-term reduction requirement might result in massive non-compliance that would overwhelm EPA's enforcement abilities and fail to achieve real air quality improvement.

EPA has estimated the effects of an onroad heavy duty truck measure, nonroad growth cap, accelerated shipping fee system, accelerated airport and aircraft programs, accelerated turnover of recreational boat engines, and accelerated stationary source cap on the overall Ventura emission inventory. After accounting for these controls, EPA projects an emission reduction shortfall of approximately 10 tons/day of VOC and 5 tons/day of NO_X. Note that the NO_X contribution by stationary sources in Ventura is substantially greater than in the Sacramento area. Therefore, the mobile source measures do not produce the same effect as they did in Sacramento.

In order to address the remaining emission reduction shortfall, EPA could impose activity restrictions using a variety of regulatory approaches. For example, broad-based reductions from many stationary and almost all mobile source categories could be obtained with such blunt measures as fuel surcharges or gas rationing. More focused reductions could be made by targeting motor vehicle activity through fees on vehicle-miles-traveled (VMT) or no-drive days.

EPA believes such potentially severe measures should only be selected after substantial public participation and debate. When faced with an attainment shortfall in the 1990 proposed FIP for the South Coast Basin (55 FR 36458), EPA did propose to limit mobile source activity with a no-drive day program for onroad motor vehicles. In the 1990 South Coast case, however, EPA was struggling to find enough reductions to attain by the latest legally acceptable date. In Ventura, the issue is whether there are practical measures to attain prior to the statutory deadline. In order to achieve the remaining emission reductions necessary for Ventura to attain by 2000, EPA estimates that two no-drive days or equivalent alternative

activity reductions would be needed. That is, each highway vehicle registered in Ventura would be prohibited from being driven on two of the five workdays in each week.

Obviously, this and other measures needed to accelerate attainment in Ventura would have dramatic negative socioeconomic impacts in the area. EPA does not consider them legally required as practical measures or good policy. For that reason, EPA cannot conclude that such measures would be practicable and EPA is not, therefore, proposing to attain the standard before 2005.

5. South Coast Ozone

a. *Reduction requirements.* Anthropogenic emissions in the South Coast in 1990 totaled approximately 1913 tons per day of VOC and 1273 tons per day of NO_X for an average summer weekday. The air pollution control regulations now in effect in the South Coast are, with few exceptions, the most stringent in the Country. In addition, many of the CARB or SCAQMD adopted regulations prescribe future compliance requirements that are still more stringent, and the existing CARB standards on new engines and equipment will deliver increasing reductions each year as a result of fleet turnover. Sections II.B and III.H. of this NPRM discuss the adopted CARB and SCAQMD rules which are assigned credit as part of the FIP attainment demonstration.

Even after allowing credit for reductions from these State and local measures, continued growth in the area's population and activity levels will erode much of the future benefits of currently adopted controls. Consequently, in the absence of further SIP or FIP measures, emissions in the South Coast will not decline appreciably. The 2010 emissions levels are projected to be 1390 tons/day VOC and 1142 tons/day NO_X for an average summer weekday.

Extensive urban airshed modeling of three episodes in 1985 and 1987 provided the basis for the SCAQMD's 1991 Air Quality Management Plan, which concluded that ozone attainment could be achieved if basin-wide emissions were reduced to approximately 187 tons per day of VOC and 399 tons per day of NO_X (episode-specific emissions). Based on the current baseline emissions inventory, and prior to the completion of extensive new modeling analyses that are underway, EPA is using reduction targets of 90 percent for VOC and 69 percent for NO_X from the 1990 base-year emissions levels.[29] Assuming these reduction targets, the combination of SIP and FIP controls must achieve, by 2010, total reductions of 1726 tons per day of VOC and 874 tons per day of NO_X from 1990 emissions, or 1203 tons per day of VOC and 743 tons per day of NO_X from 2010 baseline emissions.

As with Sacramento and Ventura, EPA's control strategy analysis for the South Coast began with a comparison of the applicable existing South Coast rules to the rules currently in effect in other areas. Although the SCAQMD generally has among the most advanced regulations in the Country, EPA was able to identify stationary and area source categories for which new or enhanced technology-based rules could be promulgated immediately to yield additional emission reductions. Section III.C.3. discusses those new or improved category-specific stationary and area source rules which EPA is able to propose at this time.

After credit for emissions reductions from this initial set of FIP measures, a massive shortfall in necessary emission reductions still remains. The FIP mobile source core measures are identified in section III.B.2. and III.D.1.b. These measures contribute substantial further reductions (approximately 205 tons per day VOC and 181 tons per day NO_X), leaving roughly 1000 tons per day VOC and 562 tons per day NO_X to be achieved by added stationary and area source controls.

EPA proposes to achieve the remaining target reductions through a combination of the emission cap rules set forth in section III.C.5., additional mobile source controls discussed in section III.D, and the "new technology" commitments discussed in section III.B.5.d. below and in section III.G.

b. *SIP rules.* In section II.C.2., EPA proposes to conditionally approve commitments by the SCAQMD and CARB to continue their development of a number of new or strengthened regulations and to adopt them within the next two years to accomplish the first rate-of-progress installments required under the Act. These committal measures have the potential to deliver approximately 83 tons per day of VOC. Scheduled SCAQMD rule development could also contribute substantial additional NO_X reductions.

In preparing the November 1994 ozone attainment plan, CARB, SCAQMD, and SCAG are now reassessing strategies for adopting measures to reduce NO_X and VOC emissions. The SCAQMD is also developing a VOC RECLAIM program for near-term adoption and implementation.

For purposes of this attainment demonstration, however, EPA is not assigning emission reduction credit to measures until they are fully adopted in enforceable form. EPA urges the responsible State and local agencies to complete rule development and submit rules for SIP approval as soon as they are fully adopted. This will allow EPA to approve the regulations and substitute the locally developed measures for FIP rules.

c. *FIP Rules.* The set of FIP measures proposed for implementation in the South Coast relies largely on those regulations discussed in Section III.B as elements common to all three FIP areas. This includes the controls for onroad and nonroad mobile sources, supplemented by such elements as I/M and sticker programs. In addition, the proposed FIP for the South Coast includes the mobile source controls discussed in the Ventura FIP summary, and two measures peculiar to the South Coast FIP: A fee-based program to reduce emissions from ports and a locomotive cap rule. For stationary and area sources, it includes regulations for service stations, livestock waste, fugitive emission controls for petroleum and chemical facilities, and waste burning, as well as the statewide measures and the emission cap program. Finally, the South Coast FIP relies on the new technology commitments discussed immediately below.

d. *Section 182(e)(5) provisions.* (1) Statutory provision and General Preamble requirements Section 182(e)(5) of the Clean Air Act applies exclusively to "Extreme" ozone areas (i.e., only the South Coast area). This provision authorizes the State (or EPA, standing in the shoes of the State[30]) to rely for its ozone attainment demonstration on conceptual, as yet unadopted measures that anticipate new or improved technology. The South Coast's 1991 Air Quality Management Plan employs a similar approach in its "Tier II" and "Tier III" new technology measures, which consist of brief discussions of control targets (percentage and emission

[29] Other combinations of VOC and NO_X reductions may be evaluated in preparation of the 1994 ozone SIP. To the extent possible, EPA will attempt to conform the final FIP (and any subsequent amendments to the FIP) to the State's chosen mix of VOC and NO_X reductions used in the 1994 ozone SIP.

[30] As discussed above, the Ninth Circuit has held that "Acting in place of the State of Arizona pursuant to a FIP under 42 U.S.C. § 7410(c), EPA 'stands in the shoes of the defaulting State, and all of the rights and duties that would otherwise fall to the State accrue instead to EPA.'" *Central Arizona Water Conservation District et al. v. EPA*, 990 F.2d 1531, 1541 (9th Cir. 1993).

reductions) for specific or general source categories, to be achieved in future years through technological advances.

For EPA to credit such measures toward the ozone attainment demonstration (either by SIP approval or FIP promulgation), EPA must find that the measures are not needed to meet the Act's progress requirements for the first 10 years (see section 182(e)(5)(A)), and EPA must approve State commitments or make its own commitments to submit contingency measures no later than three years before proposed implementation of the measures, sufficient to ensure the required rate of progress and attainment (section 182(e)(5)(B)).

EPA's General Preamble for the Implementation of Title I provides the Agency's preliminary articulation of how it will exercise its considerable discretion under section 182(e)(5). At this time, EPA, in approving or promulgating measures under this section, will look to see that the plan shows that the measures cannot be fully developed and adopted by the submittal date for the attainment demonstration; that the plan contains a schedule outlining the steps leading to final development and adoption of the measures; and that the plan contains commitments from those agencies that would be involved in developing and implementing the schedule for each measure (57 FR 13524, April 16, 1992).

With respect to the Act's requirement that the technology advancement measures not be needed to achieve progress required during the first 10 years, EPA believes that the Administrator should satisfy herself with respect to three separate progress requirements applicable during the 10-year period following enactment of the 1990 Amendments to the Act: (1) 15 percent reduction of VOC emissions for the 6-year period from 1990 to 1996, as required by section 182(b)(1); (2) 9 percent reduction of VOC and/or NO_X emissions for the 3-year period from 1997 to 1999, as required by section 182(c)(2)(B); and (3) a further 3 percent reduction of VOC and/or NO_X emissions during the year 2000, as the initial installment of the 9 percent reductions required for the period 2000 to 2002.[31] In section III.B.5.d.(4) of this NPRM, EPA demonstrates that each of these three progress requirements is satisfied (with regard to section 182(e)(5)) by the combination of State and local measures and the FIP regulations proposed in this NPRM.

(2) Need for additional time to develop new technologies in enacting special provisions for ozone attainment in the South Coast, Congress recognized that attainment in this area may require 20 years, even on an expeditious schedule of progress. The difficulty of the ozone attainment project derives primarily from the topography and climate of the South Coast basin, which combine to produce ideal conditions for the formation and persistence of tropospheric ozone. In this setting exists one of the world's largest industrial and commercial centers, with a population projected to approach 18 million by the attainment year.

The technological challenge of attainment is evident in the extraordinary remaining ozone precursor reduction requirements—approximately 90% for VOC and 70% for NO_X—which are superimposed on an already very strict level of existing control. Complete elimination of all emissions from motor vehicles would not accomplish even half of the needed reductions. In fact, the South Coast could not reach attainment even if there were no mobile source and industrial emissions in the basin. The area's unique reduction responsibilities therefore necessitate breakthroughs in air pollution control technologies for practically every pollution source, coupled with the most advanced techniques and initiatives for preventing pollution.

EPA believes that the pace of air pollution control technology development in the past provides a reasonable basis for confidence that the South Coast can meet the Clean Air Act's 2010 ozone attainment goal using section 182(e)(5). Lacking sufficiently detailed data to predict and mandate specific controls for each particular source category, however, EPA proposes to employ section 182(e)(5) commitments to extend the rate of progress beyond the levels now foreseeable and reflected in the declining cap rules discussed above. EPA also proposes to commit to achieving additional reductions from smaller stationary source categories than are covered under the proposed cap rules, as well as from area and mobile sources. The commitments would allow EPA, the State, and the affected sources sufficient time to cooperate in the further development and commercialization of control approaches to deliver the remaining reductions needed for attainment. EPA strongly encourages CARB and SCAQMD to devote their substantial resources to expediting development and adoption of State and local controls in advance of the section 182(e)(5) commitment dates for rule adoption and implementation.

(3) Federal Role in Support of Technological Development Activities

(a) *Scope of EPA's Responsibilities.* From its inception, EPA has been charged with a leadership role in coordinating, assisting, and independently advancing national research efforts to develop methods and technologies for air pollution control. This continuous program has taken many forms:

- EPA laboratories to conduct research, testing, and development;
- EPA surveys, reports, networks, and clearinghouses to disseminate the most current information on technology development and transfer;
- EPA programs and EPA-lead task forces to coordinate technology development and application studies and projects with other Federal departments and agencies; with State, local, and international air pollution control agencies; with private agencies, institutions, and organizations; and with involved industries;
- EPA study and assessment (in accordance with section 405 of the Act and in conjunction with the Council of Economic Advisors) of economic incentive measures and approaches for stimulating additional air pollution control progress, concentrating on air pollution problems for which no existing methods of control exist;
- EPA research contracts with public and private agencies, institutions, and individuals to carry out specific projects relating to new air pollution reduction technologies;
- EPA grants under section 105 of the Act to State and local air pollution control agencies and to other nonprofit organizations to conduct research or demonstration projects; and
- EPA research fellowships both at EPA and at research organizations or universities.

In the 1990 Amendments to the CAA, Congress assigned EPA additional responsibilities for several specific new air pollution control technology projects, ranging from hydrogen fuel cell vehicle test programs to studies of renewable energy and energy conservation incentives. Congress also broadened the scope of EPA's mission: "the [EPA] Administrator shall conduct a basic engineering research and

[31] EPA policies on rate-of-progress plan requirements, including substitution of NO_X for VOC emissions reductions for the post-1996 period, appear in two recent guidance documents: *Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of-Progress Plans* (EPA–452/R–93–002, March 1993); and *Guidance on the Post-1996 Rate-of-Progress Plan and the Attainment Demonstration.*

technology program to develop, evaluate, and demonstrate nonregulatory strategies and technologies for air pollution prevention. Such strategies and technologies shall be developed with priority on those pollutants which pose a significant risk to human health and the environment, and with opportunities for participation by industry, public interest groups, scientists, and other interested persons in the development of such strategies and technologies." Section 103(g).

(b) *Recent National Initiatives.* The Federal commitment to a leadership role in development of clean technologies and control approaches is reflected in several new comprehensive initiatives.

(*1*) Climate Change Action Plan. The Climate Change Action Plan was announced by President Clinton and Vice President Gore on October 19, 1993. The plan consists of 50 new or expanded programs and innovative public-private partnerships. The unifying goal of the plan is reduction in greenhouse gases, which include one of the two principal ozone precursors: oxides of nitrogen. In addition, the majority of the plan's initiatives—whether in the area of energy demand actions, transportation actions, or energy supply actions—will directly advance progress toward ozone attainment in the South Coast, either through projects to reduce energy consumption or programs to spur increased reliance on clean energy sources.

Many provisions of the Action Plan are intended to produce almost immediate progress, and some of these actions, like the parking cash-out program, are already incorporated as core measures in this FIP. Successful implementation of this group of initiatives will reduce the growth in emissions in the South Coast associated with the area's projected population increases, economic development, rising energy use, and expanded transportation requirements.

Other provisions of the Climate Change plan involve a continuing effort to advance long term strategies and stimulate programs and technologies that will yield their greatest reductions in the first decade of the next century. As a means of ensuring overall coordination, the President has instructed the White House National Economic Council, the Office on Environmental Policy, and the Office of Science and Technology Policy to co-chair interagency working groups to examine all budget, technology, research and development, regulatory and economic policies that could impact greenhouse gas emission levels beyond the year 2000. From this effort will come cooperative federal pilot projects and technical assistance programs designed to establish an empirical basis for the technological advances that will provide the foundation for sustainable development in future decades.

An example of this coordinated long-term commitment is the pesticide use reduction project of EPA, the Department of Agriculture, and the Food and Drug Administration. The specific strategies under this initiative include establishing incentives for the development, registration, and use of biological pesticides and the promotion of the high-technology bio-engineering industry; initiation of demonstration projects for reductions in overall pesticide use; and support for integrated pest management programs. The success of this program should eventually, through regulatory and nonregulatory incentives, accomplish further VOC reductions beyond the air pollution achievements of the pesticide control measure proposed in this FIP (see section III.C.4.d.). Besides impressive reductions in greenhouse gas emissions, this program is anticipated to result in energy savings worth $1.9 billion through 2000, and savings of $9 billion of the period of 2001–2010.

(*2*) Technology Innovation Strategy. EPA's newly announced Technology Innovation Strategy was released in draft form on November 23, 1993. This inter-agency initiative is under the direction of the Innovative Technology Council. It has as its goal to foster the development, commercialization, and widespread use of innovative technologies that can efficiently close the gap tween our Nation's ambitious environmental goals and its ability to meet them, and provide the base for sustainable development as economic activity, population, and threats to the environment grow worldwide.

The Strategy includes four focus areas. The first plan area, Environmental and Restoration Technologies, begins with an allocation of $10.8 million for projects in FY–94. The program's goal is to support the development, testing, and commercialization of technological breakthroughs needed for critical environmental progress. Projects currently funded include:

Cleaner Processes in Plating and Metal Finishing—developmental research for cleaner technologies in electroplating and metal finishing operations;

Pollution Prevention-Based Materials Cleaning/Decontamination—development and demonstration of pollution-prevention based surface cleaning technologies for use in advanced manufacturing operations and service industries;

Supercritical CO_2—production of a solvent-free alternative technology for metal degreasing operations;

Enhancing Market Penetration of Water-Borne and Other Low-Solvent Consumer/Commercial Adhesives—identification of the key technical and institutional barriers to the use of new adhesive technologies by EPA's Air and Energy Engineering Research Laboratory, pinpointing research and development needs, directing key product and applications research and development, and demonstrating successfully developed processes and products; and

NO_X Control by Hybrid Technologies—development of cost-effective hybrid NO_X control technologies for combustion sources, including advanced fuel reburning (AFR)/selective non-catalytic reduction (SCNR).

The second plan area, Clean Technology for Small Business, is initially funded at a $12 million level. It includes many projects directed toward development, commercialization, and diffusion of new cleaner technologies. Among the projects is the Merit program in Southern California, facilitating the use of pollution prevention technologies in the South Coast.

Clean Technology Use projects involve cooperative testing and development programs for less polluting technologies applicable to many other types of small businesses:

Dry cleaning—EPA's Office of Pollution Prevention Technology projects to test and develop emerging technologies for cleaner solvents and alternative cleaning methods;

Printing—cooperative projects with industry to reduce emissions from the flexography, lithography, and screen printing sectors of the printing industry;

Printed wiring boards—projects with the Department of Energy (DOE) and industry to develop and disseminate information on environmentally improved manufacturing options;

Metal degreasing—projects with DOE and industry to expand use of cleaner, safer degreasing operations;

Solvents—updates to EPA's Office of Research and Development Solvents Alternative Guide I(SAGE) software system to identifying viable alternative solvent substitution options for industrial users; projects to demonstrate innovative manufacturing projects for reducing VOC emissions; and

Coatings—two projects, in conjunction with Southern California Edison's Customer Technology Application Center, to accelerate development and market penetration of very low or zero VOC wood furniture coatings; project to promote technology transfer of Department of Defense powder coating technology; Applied Innovative Coatings Research Center projects to complete field trials of reformulated low- or zero-VOC coatings.

The third plan element—Gaps, Barriers, and Incentives—will concentrate on identifying gaps in environmental technology development in order to stimulate technology innovation and create a national climate supportive of such innovation. Typical projects will work on institutional, legislative, and tax changes that can stimulate support for development and use of improved environmental technologies. The U.S. Department of Commerce is a key participant in several of these efforts, along with industry and other regulatory agencies.

The fourth plan component—Improving Competitiveness of U.S. Environmental Technologies may also contribute to the development and commercialization of technologies relevant to further progress in the South Coast, but the primary focus of this activity is to promote use of U.S. technologies and expertise to solve international environmental problems. Initial funding for this plan area is $12 million.

(3) Clean Car Initiative. On September 29, 1993, President Clinton and Vice President Gore announced the "Clean Car Initiative," an historic cooperative effort between the U.S. automakers, the Department of Energy, the Department of Defense, and EPA. The primary goal of this initiative is to develop an ultra fuel efficient, safe, and clean vehicle by the year 2000.

To implement this goal, industry and government engineering teams will undertake research projects in three categories:

Technologies that can lead to near-term improvements in automobile efficiency, safety, and emissions—research in this area will include efforts to develop lightweight, recyclable materials and catalysts for reducing exhaust pollution.

Research that could lead to production prototypes of vehicles capable of up to three times greater fuel efficiency—projects will include fuel cells and advanced energy storage systems such as ultracapacitors, to produce more fuel-efficient cars that are affordable, meet or exceed current safety standards, and retain the performance and comfort available today.

Advanced manufacturing techniques to make it easier to get new product ideas into the marketplace quickly—this effort will involve computer-based design and testing systems and automation and control systems.

In support of the Clean Car Initiative, both the U.S. automakers and the major utility companies throughout the country are striving to develop inexpensive high energy battery technology—a technology that will be applicable to virtually all types of mobile sources. Various projects are underway to develop and perfect engines that operate on alternative cleaner burning fuels or utilize fuel cells. The application of regenerative breaking technology to motor vehicles is being studied for light duty vehicles and is even being implemented in a limited number of heavy duty vehicles. Hybrid electric vehicles utilizing both electric and clean burning combustion technology are being developed and tested to demonstrate their potential in-use capabilities.

EPA is also engaged in several other motor vehicle-related technological advancement initiatives. For example, EPA is undertaking a regulatory process to introduce improved vapor recovery technologies to automobiles for use during the refueling process. Finally, expected improvements in remote sensing technology may enable inspection programs to more clearly identify in-use high-emitters.

(c) *SCAQMD Technology Advancement Office.* In addition to these federally managed programs and projects, EPA has provided assistance to the SCAQMD's critically important Technology Advancement Office (TAO). Since its inception in 1987, the TAO has supported research, development, demonstration, and commercialization of advanced emissions control technologies and clean fuels.[32] EPA intends to contribute continued support for the TAO and anticipates that many of the new stationary and mobile source control technologies needed for eventual attainment will derive from the TAO's research efforts. EPA expects to incorporate the results of the SCAQMD's projects in the design of new technology measures issued in the future under the section 182(e)(5) provision.

[32] Information on current and planned TAO projects may be obtained from the SCAQMD. Some of the TAO projects are also jointly sponsored by the Clean Fuels Working Group, of which CARB and the California Energy Commission are also members.

(4) Demonstration That Progress Requirements for 1990–2000 Are Met Without the Need for Section 182(e)(5) Measure Reductions

As discussed above, section 182(e)(5) provides that an attainment demonstration can rely on new technology commitments if the measures are shown not to be needed to achieve the incremental emission reductions required during the first 10 years after the date of enactment of the Clean Air Act Amendments of 1990. Section 182(e)(5) contains no requirement that this demonstration be based exclusively on adopted and submitted measures. Section 182(e)(5) explicitly states that the showing need be only "to the satisfaction of the Administrator." EPA must be able to conclude, however, that the State has the ability to meet the progress requirements without relying on the new technology measures.

Elsewhere in this NPRM (see section II.C.2.), EPA describes the recently submitted South Coast Rate-of-Progress Plan, which demonstrates achievement of the progress requirements for the first 6 years primarily through fully adopted State and local measures. To the extent that the demonstration rests on measures not yet fully adopted, EPA cannot now propose to accept the plan for purposes of satisfying the 15 percent reduction requirement of section 182(b)(1), in conformance with the referenced EPA policy memorandum, "Guidance on Issues Related to 15 Percent Rate-of-Progress Plans" (August 23, 1993).

In this NPRM, however, EPA proposes to conditionally approve these measures as strengthening the SIP and for the purpose of finding under section 182(e)(5) that later-enacted measures are not needed to meet this progress requirement. Although section 182(e)(5) does not require conditional approval for the purpose of such a finding, EPA has decided to conditionally approve, under the authority of section 110(k)(4) of the Act, the SCAQMD's enforceable commitments to adopt in fully enforceable form by 1996 specific measures to deliver the small, remaining shortfall in necessary reductions. This conditional approval, combined with the South Coast plan, assures to the satisfaction of the Administrator that the State will ultimately be able to meet the 15 percent progress requirements for the period 1990–1996 by means of recently adopted creditable control measures, along with a small number of new measures scheduled for full adoption and implementation in 1994, 1995, and 1996.

As discussed in section III.B.5.d.(1) above, the Act also establishes two other progress requirements applicable within the first 10 years following enactment of the 1990 Amendments. A further 9 percent of creditable reductions must be achieved by 1999, followed by an additional 3 percent for the year 2000, as part of the 9 percent due by 2002.[33]

While the Act specifies that progress for the period 1990–1996 is in terms of VOC reductions, section 182(c)(2)(C) allows the substitution of NO_X reductions for VOC in meeting the post-1996 progress requirements. EPA has recently issued the Agency's policy and procedures for substituting NO_X reductions, NO_X Substitution Guidance (OAQPS, December 1993.) For purposes of the progress plans, this guidance authorizes any combination of VOC and NO_X emission reductions which total 3 percent per year, so long as the proposed level of NO_X substitution is consistent with the emission reductions in the modeled ozone attainment demonstration. In the case of the South Coast, UAM analyses support a one-for-one substitution of NO_X for VOC, inasmuch as peak ozone concentrations in the South Coast Air Basin are sensitive to both VOC and NO_X controls (see discussion below in section III.H.).

EPA has concluded that the Act allows NO_X emissions reductions occurring since 1990 to be applied to the post-1996 emissions reductions requirements.[34] 57 FR 13517, April 16, 1992. SCAQMD's aggressive rule adoption schedule for NO_X has resulted in recent adoption of rules that contribute creditable NO_X reductions during the period 1990–2000. Particularly important new or revised rules include: Rule 1109—Refinery Heaters & Boilers; Rule 1110.2—Internal Combustion Engines; Rule 1134—Gas Turbines; Rule 1135—Electric Power Generators and Boilers; Rule 1146—Crude Oil Pipeline Heaters and Oil Field Steam Generators, and Industrial Boilers, Heaters, & Generators; Rule 1146.1—Small Boilers and Heaters; and the NO_X/SO_X RECLAIM program. Creditable reductions in VOC and NO_X for 1997–2000 also derive from CARB measures, including reductions from the California Low Emission Vehicles/Clean Fuels Program and California's regulation of certain nonroad engine categories. Finally, the FIP contributes significant creditable NO_X and VOC reductions in the period 1997–1999 and in 2000, primarily through the enhanced I/M program and initial benefits from the other mobile source controls.

A technical support document entitled "Calculation of Creditable SIP/FIP Rate-of-Progress Reductions for the Period 1997–1999 and for the Year 2000" identifies individual FIP and SIP measures and associated creditable reductions for both progress periods. EPA's analysis determined that cumulative creditable VOC and NO_X emissions reductions for 1997–1999 exceed the Act's 9 percent rate-of-progress requirement for 1997–1999 and 3 percent requirement for 2000, without the need for any emission reductions from the FIP's new technology measures.

e. Attainment demonstration—As discussed in section III.H., EPA believes that the set of measures proposed in this NPRM will bring the South Coast into attainment with the ozone standard by 2010. This projection is based on photochemical grid modeling performed by the South Coast Air Quality Management District. Six episodes representative of conditions conducive to high concentrations of ozone were selected for the modeling exercise. Four of the episodes chosen were from the period for which an intensive air quality and meteorological data base from the Southern California Air Quality Study was available.

The emissions for the basin were projected for the year 2010, as discussed in section III.H.2.b, and the emission reductions resulting from the implementation of the set of proposed measures were quantified (section III H.4.). The resulting emissions were used as input for each of the six episodes. The projected ozone concentrations for the modeled episodes were below the NAAQS for ozone for all portions of the domain, hence demonstrating attainment of the ozone standard.

f. Alternative attainment date discussion—As in the case of the Sacramento and Ventura attainment analyses, EPA considered for the South Coast ozone FIP a number of mechanisms to achieve attainment before 2010, the Act's deadline for the South Coast. For a discussion of possible controls, the reader should refer to sections III.B.3.d. on the Sacramento 1999 attainment option and section III.B.4.e. on an alternative attainment date in Ventura. Expedited attainment using these approaches is even less practicable in the South Coast than in the other two California FIP areas. The enormous emission reductions required for ozone attainment in the South Coast mean that the restrictions would have to be so severe as to interfere profoundly with the economic and social organization of the area, commerce generally, the provision of public services, and the effective operation of local governments. EPA believes this strategy would not be in the public's interest, despite the benefits of any acceleration in the attainment date.

6. South Coast Carbon Monoxide

a. Reduction Requirements—EPA's attainment analysis uses a 1990 South Coast CO emissions level of 7084 tons per day. Motor vehicles are responsible for 93 percent of these emissions. Without adoption of further controls, CO emissions are expected to decline to 4349 tons per day in the year 2000. This reduction is due primarily to turnover in the motor vehicle fleet (including the benefits of California's LEV program) and to reductions from the California wintertime oxygenated gasoline requirement (see section II.C.1.).

b. Attainment Demonstration—In order to maximize consistency between the FIP and local SIP efforts, EPA has elected to employ the SCAQMD modeling analyses for purposes of the CO attainment demonstration. As discussed above, the SCAQMD's 1992 CO SIP revision based the attainment demonstration on both areawide (Urban Airshed Model, or UAM) and hotspot (CAL3QHC) modeling analyses, and used an appropriate design value of 23.4 ppm, recorded in 1988 at the Lynwood monitoring station.

The modeling analyses predict attainment of the 8-hour CO NAAQS by reductions in areawide emissions of tons per day, based upon the control strategies included in the plan and the transportation modeling assumptions for the year 2000. As noted in section II.C.1, however, the SIP's attainment demonstration relies upon large CO emissions reductions (587.4 tons per day) assigned to an enhanced I/M program, which has not yet been adopted by the State. EPA proposes to disapprove the attainment demonstration portion of the SIP and fill the gap in necessary emissions reductions through the promulgation of the federal enhanced I/M program described in section III.D.2.c.[35] In the future, the SIP attainment demonstration could be approved if the State submits approvable enhanced I/M

[33] For EPA's applicable policy on the post-1996 progress requirements, the reader should consult Guidance on the Post-1996 Rate-of-Progress Plan and the Attainment Demonstration (OAQPS, December 1993).

[34] Emission reductions from the measures listed in section 182(b)(1)(D) are not creditable toward meeting the progress requirements, whether the emissions are VOC or NO_X.

[35] The FIP contributes additional CO emission reductions from other federal mobile source measures, as shown in sections III.D., III.E., and III.H., below. These reductions are not so great, however, as to advance the attainment date.

legislative authorization and regulations.

c. Alternative Attainment Date Discussion—As in the case of the California ozone FIPs, advancement of the CO attainment date could be achieved through activity restrictions more severe than those proposed in this FIP. For example, EPA could prohibit registration of cars emitting more than 3.4 grams of CO per mile, the national federal motor vehicle standard for 1994 and later model years. Alternatively, the FIP could mandate no-drive days or restrict sale of gasoline during winter months. EPA believes that these approaches are simply not practicable because of their widespread adverse consequences and enforceability issues. Therefore, EPA proposes not to include such additional measures in the CO FIP.

C. Stationary and Area Source Rules

1. Introduction

a. Source Category Description and Significance—Stationary sources of air pollution are traditionally divided into "point" and "area" categories. Point sources include refineries, electric utilities, manufacturing plants, and other large industrial facilities, and have received considerable regulatory attention under the Act. Most, for example, are visited annually by District inspectors and are restricted to activities described in District air permits. As a result, belching smokestacks have largely disappeared as industrial facilities have installed scrubbers, incinerators, carbon adsorbers, and other expensive equipment to reduce air pollution. Nevertheless, EPA believes these sources can reduce NO_X and VOC emissions even further.

Area sources consist of widely dispersed commercial and residential equipment and activities. While some are not currently subject to air pollution regulations (e.g., pesticide application and some consumer products), most have been controlled in California for many years (e.g., gasoline pumps, dry cleaners, architectural coatings, degreasers, etc.). Despite regulation, these small sources are so numerous that they now emit more in the FIP areas than do point sources. Among the largest contributors are livestock waste in Sacramento, pesticides in Sacramento and Ventura, and coatings, solvents, consumer products, and petroleum extraction in all three areas. As discussed in sections II.A, III.G.2 and elsewhere in this NPRM, overall stationary source contributions to the total anthropogenic emission inventories range from roughly 5 percent NO_X and 45 percent VOC in Sacramento to 35 percent NO_X and 65 percent VOC in Ventura. Even with the relatively favorable emission reduction targets and stationary source contributions to NO_X in Sacramento, EPA has aggressively sought stationary source emission reductions to help achieve attainment. For VOC in Sacramento and both pollutants in Ventura and South Coast, dramatic emission reductions from stationary sources are essential for attainment.

b. Selection of Control Strategies—EPA faces several large obstacles to obtaining the needed emission reductions from stationary sources. First, primary control of these sources has historically fallen to State and local agencies. Particularly in California, these agencies have developed an excellent understanding of the control technologies available to the specific sources in their jurisdiction, and have cooperated together to determine the best available retrofit control technology (BARCT) standards for major point sources, as required under the California Clean Air Act.

Second, there are literally hundreds of different stationary activities that emit NO_X and VOCs in the FIP areas. Even if EPA had the expertise, it would not have the time nor resources to scrutinize each source and determine the costs and technical details of control strategies to achieve the tremendous emission reductions needed for the South Coast, or even the lesser reductions needed for Sacramento and Ventura.

Within these and other constraints, EPA has attempted to propose a set of stationary source control strategies which best fulfill the goals described in section I.B of this NPRM. A brief summary and explanation of the strategies is presented below.

(1) Source-Specific RACT Rules. As a first step, EPA developed source-specific RACT rules for major point sources in the FIP areas not already subject to a RACT rule. These are described in section III.C.2 of this NPRM. In addition to contributing emission reductions towards the overall attainment targets, these rules are an appropriate first stage of the stationary source rule package because (1) RACT is already required for these sources under sections 181 and 182 of the Act, and (2) promulgation of RACT for these sources establishes greater equity with regard to other major sources.

(2) Traditional Stationary Source Category Rules. As discussed in section III.C.1 of this NPRM, EPA cannot evaluate every source category in the FIP areas for availability and cost of emission reductions needed to meet the tremendous FIP reduction targets. Nevertheless, this type of source-by-source evaluation and rulemaking is exactly how State and local agencies have traditionally regulated VOC and NO_X. Therefore, in order to create a State/federal partnership, minimize federal intrusion into State affairs, and achieve the other goals described in section I, EPA believes it is important to propose traditional stationary source rules by source category wherever possible.

Sections III.C.3 and III.C.4 of this NPRM describe the regulations that EPA is proposing under this effort. Categories were generally selected because: (1) A State or local agency had already published a regulation that could be adapted for implementation in the FIP, or (2) a currently unregulated category contributed substantial emissions. While many of these rules will not achieve all the needed reductions, all provide reductions in the near-term and contribute progress towards attainment. In addition, many of these regulations were recommended by State or local agencies. EPA believes these agencies should and will follow the FIP proposal by promulgating equivalent rules, further supporting the FIP goals.

(3) Cap Regulations. Section III.C.4 of this NPRM describes a set of emission cap regulations designed to achieve additional stationary source reductions. These rules impose substantial requirements on a wide range of sources, but they leave the sources a great deal of flexibility in how the reduction requirements are to be met.

The requirements in the cap rules are designed to achieve the stationary sources' share of the emission reductions needed for attainment in Sacramento and Ventura. While these reductions are substantial and challenging to the regulated community, EPA believes that the reductions are achievable on the schedule reflected in the cap rules. EPA believes that this level of reduction is achievable by sources in the South Coast, in the same time frame. EPA does not know, however, whether current technologies and control techniques are adequate to achieve the additional reductions necessary in the South Coast. As a result, EPA is proposing that the South Coast reduction requirements under the cap rules be similar to those proposed for Ventura.

(4) New Technology Measures under section 182(e)(5). The additional stationary source reductions needed for attainment in the South Coast are discussed in Section III.G. Section 182(e)(5) of the Clean Air Act allows States and EPA, acting in place of the State, to postpone promulgation of

regulations in the South Coast (the only "Extreme" ozone nonattainment area) in order to provide for technology advancements. EPA is proposing to include in this category all stationary, area, and mobile source emission reductions needed in the South Coast beyond those proposed for Ventura. As discussed above, EPA lacks evidence at this time that either accelerating the reduction schedule or increasing the reduction requirements of the proposed cap rules would be achievable, in light of feasible existing control options.

EPA solicits information from industry and the public on demonstrated and commercially available technologies that could reliably achieve a greater level of reduction than required in the cap rules. As soon as new or improved technologies and control techniques are foreseeable, EPA will consider amendments to the FIP to mandate further reduction requirements, even in advance of the schedule for rule development set forth in the proposed section 182(e)(5) commitments. EPA also urges the State and SCAQMD to pursue aggressively the development and application of low-emission technologies, clean fuels, and pollution prevention approaches capable of advancing and sustaining the pace of air quality progress in the South Coast.

c. Future Evolution of Rules—EPA intends to reevaluate these stationary source requirements as air pollution control technology continues to improve. All four of the general strategies discussed in paragraph III.C.1.b are subject to ongoing efforts to develop cost-effective emission reductions. This includes industry-sponsored environmental audits, CARB's RACT/BARCT development, EPA's continuing research and development initiatives and CTG and MACT efforts, and SCAQMD's RECLAIM and Tier 1, 2, and 3 programs, including projects of the SCAQMD's Technology Advancement Office.

Where appropriate, the final promulgated FIP rules will reflect modifications to the proposed regulations based on information received from these and other efforts during the public comment period. However, EPA fully intends to continue modifying the FIP rules through subsequent separate actions, even after final promulgation. As discussed elsewhere in this NPRM, EPA hopes that the final modification to most FIP rules will be delegation to a State or local agency or recision of the FIP rules in deference to an approvable State or local program.

2. Regulations for Specific Sources in Sacramento

(a) Introduction and rationale for selection of sources. In developing the attainment demonstration, EPA evaluated the possibility of achieving emissions reductions from stationary point sources in the Sacramento area. EPA has identified several major stationary sources of VOC in the Sacramento area which are not subject to reasonably available control technology (RACT) requirements. Under section 182(a)(2)(A) and 182(b)(2) of the Clean Air Act, local air pollution control agencies are responsible for the submittal of RACT rules for all major sources to EPA. Formica Corporation (Placer County), Sierra Pine Limited (Placer County), Michigan California Lumber Company (El Dorado County), and Reynolds Metal's tab lubricant operation (Placer County) are four major VOC sources which are not currently subject to RACT requirements. In order to achieve VOC emissions reductions for the FIP and to provide rule models that will help the local air agencies meet their Clean Air Act requirements, EPA is proposing the following source specific RACT rules for the Sacramento area.[36]

(b) Formica Corporation (Placer County) Proposed 40 CFR 52.2961(p) sets VOC emission limits for resins used at Formica Corporation's Sierra Plant ("Formica") which manufactures plastic laminate products. Emissions are generated from the lamination process which involves the application of melamine and phenolic resins to several types of paper, followed by oven curing. VOC emissions reductions have been achieved by Formica due to past changes in resin formulations. Proposed 40 CFR 52.2961(p) represents Formica's current resin formulations and EPA's proposal of a RACT rule for Formica.

Formica has made several changes in resin formulation which have reduced their VOC emissions. In 1987, Formica switched from a phenolic resin with a VOC content of 2.88 lb/gal to one at 1.85 lb/gal. In 1991, Formica reduced their phenolic resin VOC content again from 1.85 lb/gal to 1.13 lb/gal. Also in 1991, the melamine resin was switched so that the VOC content was reduced from 0.2 lb/gal to 0.002 lb/gal. EPA is proposing that 1.13 lbs of VOC per gallon of phenolic resin applied and 0.002 lbs of VOC per gallon of melamine resin applied represent RACT for Formica.

Proposed RACT rule 52.289(p) will also allow control equipment with an overall efficiency of 85 percent as an alternative to meeting the above VOC limits.

Based on the 1990 CARB point source inventory, Formica emitted 211.8 tons per year (tpy) of reactive organic gases (ROG). However, more recent and accurate emissions data indicate that Formica's emissions in 1990 were actually 601.6 tpy of VOC and that with the change in resin formulations in 1991, Formica's emissions were reduced to 461.3 tpy of VOC. Thus, with the resin changes made by Formica since 1990, approximately 140 tpy or 0.38 tons per day (tpd) of VOC emissions reductions have been achieved by Formica.

Since the resin changes required by the proposed RACT rule have already been implemented, there should be no additional costs for Formica to meet the rule's requirements. However, it appears that the past reformulations were cost effective.

EPA is aware that Formica is currently in the process of obtaining an Authority to Construct permit from Placer County APCD to install a thermal oxidizer in order to bank emissions reductions credits. EPA also understands that Formica has plans to bank the emissions reductions from the second phenolic reformulation discussed above. In order for Formica to bank the emissions from the second phenolic reformulation, EPA would have to propose a rule which set the phenolic limit at 1.85 lbs/gal., rather than 1.13 lb/gal. The emissions reductions achieved by the second reformulation would then have to be achieved elsewhere by the FIP. Given the stringency of some of the other FIP measures, EPA believes that proposed rule 52.2961(p) should represent RACT.

(c) SierraPine Limited (Placer). Proposed 40 CFR 52.2961(q) controls the emissions from SierraPine Limited, a medium density fiberboard plant in Placer County. Estimated uncontrolled emissions at the facility total approximately 306 tons of VOC per year, with the primary emissions points at three fiber dryers (178 tpy), two press vents (117 tpy), and wood-waste fired boiler (11 tpy). The three wood fiber dryers use steam heat to dry the wood fibers but in the process drive off VOCs in the wood. After the fibers are dried and formed into the desired shape, a resin is applied. A steam heated press is then used to form the fiberboard. As the fiberboard is heated, VOCs (mostly formaldehyde) are driven off. Currently all VOCs are emitted directly to the atmosphere.

[36] These four sources will also be required to achieve additional VOC emissions reductions required by the Cap Rules discussed in section III.C.5. of today's notice, as well as any NO_X requirements that may apply.

Based on a review of currently available controls, emissions from the dryers and vents could be reduced significantly through the addition of a control device (e.g., wet electrostatic precipitator/carbon adsorption system or regenerative thermal oxidation). Emissions at the wood-fired boiler could also be reduced by maintaining optimum combustion practices.

The proposed rule for this facility would require the reduction of dryer and press vent emissions by 90 percent, which would be achievable through currently available technology at an estimated cost of $2,200 to $3,400 per ton of VOC reduced. The cost per ton may be partially offset by the additional PM10 reductions expected as the result of controls.[37] The rule is expected to reduce VOC emissions at the facility by approximately 280 to 290 tpy.

(d) Michigan-California Lumber Company (El Dorado) Proposed 40 CFR 52.2961(r) controls the VOC emissions from Michigan-California Lumber ("Michigan-California") which is a lumber processing and timber manufacturing facility located in El Dorado County. Various coniferous tree species, including Sugar Pine, Douglas Fir, Ponderosa Pine, and White Fir, are harvested, transported to the facility, and processed for commercial sale. The main source of VOC emissions from Michigan-California is a spreader-stoker boiler which uses waste bark and wood as fuel. Due to several operational changes to increase the efficiency of the boiler, VOC emissions reductions have also been realized. Proposed 40 C.F.R. 52.2961(r) represents Michigan-California's current operating conditions and EPA's proposal of a RACT rule for Michigan-California.

EPA's proposed RACT rule will require Michigan-California to meet an emission limit of 150 parts per million by volume (ppmv) of VOCs in the stack exhaust stream from the spreader-stoker furnace. Since 1988, Michigan-California has made improvements in the combustion process and regulated moisture concentration of the wood fuel for the spreader-stoker furnace which resulted in an average VOC emission rate of approximately 218 ppmv during a 1992 source test. Further changes and improvements made since 1992 have resulted in a VOC emission rate of approximately 127 ppmv during a 1993 source test. Therefore, a maximum VOC limit of 150 ppmv is reasonable for Michigan-California's spreader- stoker furnace.

The 1990 CARB point source inventory reports Michigan-California emitting 251.7 tpy of VOC which was based on 1988 emissions test estimates. With the changes since 1988, current VOC emissions should be approximately 48.8 tpy. Thus, Michigan-California has achieved approximately 200 tpy or 0.56 tpd of VOC reductions since 1990.

Since the requirements of the proposed RACT rule are currently being met, there should be no additional costs for Michigan-California to meet the rule's requirements.

(e) Reynolds Metals (Placer). Reynolds manufactures aluminum "Stay On Tab" can ends in Rocklin, California and uses several VOC containing compounds which include end sealing compound, equipment cleaner and tab lubricants. Proposed 40 CFR 52.2961(s) controls the VOC emissions from the tab lubricating process at Reynolds Metals Company ("Reynolds") in Placer County. The end sealing compound is currently regulated by Placer County APCD and the equipment cleaner is covered by the Solvent Cleaning Operations rule discussed below. VOC emissions reductions from the tab lubrication process have been achieved by reducing the VOC content and application rate of the lubricant. Proposed 40 CFR 52.2961(s) requires Reynolds' to meet limits that are based on the lower VOC and application rate of the tab lubricant.

In 1992, Reynolds switched from a tab lubricant with a VOC content of 6.38 lbs of VOC per gallon, which was applied at a rate of 50 milliliters per minute (ml/min) to make 3240 tabs/min (or 2.60×10^{-5} lbs VOC/tab) to a tab lubricant with a VOC content of 5.73 lb/gal which is applied at a rate of 25 ml/min to make 3240 tabs/min (or 1.17×10^{-5} lbs VOC/tab). EPA is proposing a limit of 5.73 lb/gal for the tab lubricant and total tab lubricant VOC emissions of not more than 1.2×10^{-5} lbs of VOC per tab produced in a given press. Proposed RACT rule 52.2961(s) will also allow control equipment with an overall efficiency of 85 percent as an alternative to meeting the above VOC limits.

In 1990, Reynolds emitted a total of 247.5 tons of VOC from which 77.5 tons was generated by the tab lubricant process. The changes made in 1992 achieve an estimated 55 percent reduction in VOC (or 42.3 tpy, 0.12 tpd). Since the tab lubricant changes required by the proposed RACT rule have already been implemented, there should be no additional costs for Reynolds to meet the rule's requirements, and apparently the past reformulations were cost effective.

3. Regulations for Specific Source Categories in the FIP Areas

a. Introduction—(1) Rationale for Selection of Categories and Requirements. As discussed in section III.C.1 of this NPRM, EPA believes the FIP should include traditional category-specific stationary source rules where possible. Such rules improve the State/federal partnership, minimize federal intrusion into State affairs, and contribute to other goals described in section I.B of this NPRM. While EPA is unable to develop rules for all stationary source categories, the proposed FIP includes 15 rules for specific categories as described in sections III.C.3.b-p and 3 statewide area source regulations presented in section III.C.4 below.

Many of these rules have been adapted from regulations already existing or proposed in parts of California. In such cases, EPA has generally selected the most stringent requirements available and relied on the technical work performed by CARB and local Districts to estimate associated costs and emission reductions. While there may be additional rules that EPA could have adapted for the FIP under this effort, EPA used the amount of potential emission reductions as a primary screening device for evaluating which rules were appropriate for the FIP proposal. Thus, rules projected to reduce emissions by more than 0.1 percent of the uncontrolled attainment year inventory were considered good candidates. EPA also considered cost-effectiveness and District recommendations in selecting categories and specific requirements under this effort. Examples of proposed FIP elements adapted from existing District rules are those affecting solvent cleaning operations, wood products coatings, and auto refinishing. Many of these category-specific rules are based on regulations adopted by the SCAQMD or CARB. EPA's application of these rules to Sacramento and Ventura should not discourage the SCAQMD and CARB from pursuing further emission reductions from these source categories in order to meet the progress and attainment requirements of federal and State law.

EPA also developed rules for source categories which have not yet been regulated under the Clean Air Act but which contribute substantial emissions in the FIP areas. For these categories, EPA worked with the State and Districts to evaluate various mechanisms for reducing emissions. Among the FIP rules developed under this effort are

[37] SierraPine has applied for permits to construct wet electrostatic precipitators and wet scrubbers to reduce PM10 emissions at the facility. While these controls will have some smalll VOC reduction benefit, EPA has determined that these controls alone will not address the need for RACT level reductions as required under the Clean Air Act.

those affecting pesticides, aerosol coatings, and livestock waste management.

(2) Relationship to existing and pending SIP provisions Some stationary sources proposed for control through category-specific FIP rules are already regulated by existing State or District SIP rules. Architectural coating, for example, has been regulated in the South Coast by versions of South Coast Rule 1113 since 1977. EPA's proposed FIP rule (section 52.2959), however, would reduce architectural coating emissions even further. Where a State or local rule has been approved by EPA into the SIP (as, for example, Rule 1113 was approved in 57 FR 8104, August 11, 1992), affected sources would have to meet the tighter of each element in the two rules.[38] Sources will, however, need to continue to comply with applicable State and local rules.

As discussed in section III.J. and elsewhere in this NPRM, EPA intends to delegate the FIP rules and/or remove them whenever the State submits an approvable, equivalent SIP provision.[39] If, for example, SCAQMD submits a proposed SIP amendment that makes Rule 1113 an approvable substitute for the FIP rule, upon EPA approval, EPA would amend section 52.2959 to rescind its applicability within the South Coast. In many cases, CARB and affected Districts are already developing rules similar to those proposed in this NPRM. If these are submitted to EPA before February 1995, EPA may, upon SIP approval, simply amend or remove the analogous component from the final promulgated FIP. Alternatively, EPA may remove FIP elements under separate action.

If, however, EPA determines that a new or modified State rule does not achieve emission reductions equivalent to the FIP rule, and no other State rule compensates for the differences, EPA will maintain implementation of the FIP measure.[40] In such cases, sources could again be subject to overlapping State and federal requirements. Therefore, EPA encourages the State to adopt approvable regulations as soon as possible to avoid duplicative effort for both regulators and affected sources.

(3) Relationship to other applicable FIP provisions. Many of the sources subject to the proposed category-specific rules described here will also be affected by the cap regulations described in section III.C.5 of this NPRM. As proposed, the cap regulations require almost all significant stationary sources to reduce emissions by a specified percentage. The reduction rates are currently the same for sources which are affected by category-specific rules and for sources which are not. As discussed in section III.C.5 of this NPRM, EPA specifically requests comments on whether fairness and other concerns justify adjusting the reduction requirements to give sources credit for emission reductions required in the proposed FIP rules described in sections III.C.2–4 of this NPRM.

(4) Rule structure. These proposed rules generally follow the structure of New Source Performance Standards (NSPS) in 40 CFR part 60. They contain sections on applicability, definitions, specific requirements, exemptions, reporting, recordkeeping, test methods, and additional components as necessary. Where immediate or near-term compliance is feasible, the effective dates of the substantive requirements are generally January 1, 1996, roughly one year after final FIP promulgation is due. Issues specific to individual rules are discussed in sections III.C.3.b-p and III.C.4 below.

(b) Solvent Cleaning Operations (Sacramento, Ventura). Proposed 40 CFR 52.2961(a) controls VOC emissions resulting from certain solvent cleaning operations in the Sacramento and Ventura nonattainment areas. Emission reductions are achieved by: (1) Limiting the VOC content and vapor pressure of solvents used in solvent cleaning operations; (2) allowing the use of add-on control equipment in lieu of meeting the VOC content and vapor pressure limits; and (3) prescribing procedures and requirements for solvent cleaning operations.

The proposed rule applies to facilities that use VOC-containing materials in the production, repair, maintenance, or servicing of parts, products, tools, machinery, equipment, or general work areas, or that store and dispose of VOC-containing materials used in solvent cleaning operations. Affected facilities include manufacturing plants, printing presses, shipyards, and repair and refinishing facilities such as auto garages, auto body shops and workshops for buses, aircraft, trains and trucks. This proposed rule also applies to repair, service, and production operations at institutional facilities such as government buildings, schools, hospitals, sanitariums, prisons, restaurants, health clubs, and theaters.

This proposed rule is based largely on SCAQMD Rule 1171 (Solvent Cleaning Operations) as adopted on August 2, 1991. Evaluation of the environmental, economic, socioeconomic, and other impacts of the proposed FIP rule's requirements can be found in SCAQMD's final staff report for Rule 1171, dated July 1991. This proposed FIP rule also incorporates changes from the draft amended Rule 1171 released by SCAQMD on October 6, 1993 and components of the VCAPCD Rule 74.19 (Graphic Arts) as adopted on August 11, 1992.

EPA is in the process of developing an Alternative Control Technology (ACT) Document for solvent cleaning operations. The ACT will primarily address recordkeeping and will not establish national guidelines for solvent content and work practices. The proposed FIP rule requirements on VOC content and work practices do not conflict with the draft ACT.

As described in the technical support document, uncontrolled VOC emissions from affected facilities are projected to total 10.44 tpd in Sacramento in 1999, 11.82 tpd in Sacramento in 2005, and 3.55 tpd in Ventura in 2005. Implementation of this proposed rule is projected to reduce those emissions by 6.75, 7.66, and 2.66 tpd respectively at an overall cost savings of $991 per ton VOC removed (1990 dollars). A cost savings is projected because CARB and the Districts have identified compliant solvents which are less expensive than high-VOC solvents currently in use.

(c) Wood Products Coatings (Sacramento, Ventura) Proposed 40 CFR 52.2961(b) controls VOC emissions resulting from commercial and industrial application in the Sacramento and Ventura nonattainment areas of coatings while manufacturing wood products. Emission reductions are achieved by: (1) limiting the VOC content of various wood coating products; (2) allowing the use of add-on control equipment that reduces VOC emissions by 85 percent in lieu of meeting the VOC limits on coatings; and (3) restricting application of wood

[38] Section 302(q) of the Act defines the applicable implementation plan as that "portion . . . or most recent revision thereof, which has been approved under section 110, or promulgated under section 110(c) . . ." While the regulations discussed in sections III.C.3 and 4 of this notice may effectively supersede less stringent provisions of federally approved SIP rules addressing the same source categories, the State or local rules would remain in the SIP and be enforceable.

[39] Pursuant to § 110(1) of the Act, State rules are not approvable as revisions to an implementation plan if they 'interfere with any applicable requirement concerning attainment and reasonable further progress . . . or any other applicable requirement of this Act."

[40] EPA could also approve a substitute SIP attainment demonstration relying on a different mix of control measures to achieve attainment and interim progress that at least equals the FIP's schedule. In this case, EPA may rescind individual FIP rules that are more stringent than the substitute SIP provisions, if the particular FIP rules are no longer necessary to provide for expeditious attainment because the SIP achieves greater reductions from controls on other source categories.

coatings to application methods and equipment with high transfer efficiencies.

The proposed rule applies to all persons applying coating, inks, stains, and/or strippers in wood product coating operations for the purpose of manufacturing wood products, including furniture and other coated objects made of solid wood and/or wood composition and/or simulated wood material. The proposed rule does not apply to residential noncommercial operations. The majority of the affected wood products coating operators are expected to comply with the proposed rule through the use of reformulated coatings rather than add-on emission control devices.

The proposed rule is based largely on SCAQMD Rule 1136 entitled "Wood Products Coatings," as amended on August 2, 1991. In addition, EPA has incorporated some of SCAQMD's proposed amendments to Rule 1136, dated July 23, 1993. Evaluation of the environmental, economic, socioeconomic, and other impacts of Rule 1136 can be found in SCAQMD Staff Report "Proposed Amended Rule 1136—Wood Products Coatings," dated April 19, 1988, and SCAQMD Supplemental Staff Report "Proposed Amended Rule 1136—Wood Products Coatings," dated July 5, 1988.

EPA has prepared a draft Control Techniques Guideline (CTG) document on wood products coatings that is entitled "Control of Volatile Organic Compound Emissions from Wood Furniture Coating Operations." Upon publication of the CTG, revisions to this FIP rule may be appropriate for consistency. EPA expects, however, that the proposed FIP rule may be more stringent than the CTG in some regards to reflect the unusually difficult air pollution problems in the FIP areas.

As described in the technical support document, uncontrolled VOC emissions from affected facilities are projected to total 0.49 tpd in Sacramento in 1999, 0.55 tpd in Sacramento in 2005, and 0.65 tpd in Ventura in 2005. Implementation of this proposed rule is projected to reduce those emissions by 0.45, 0.51, and 0.61 tpd respectively at a cost of $18 per ton VOC removed (1988 dollars).

(d) Automotive Refinishing Operations (Sacramento). Proposed 40 CFR 52.2961(c) controls VOC emissions from automobile refinishing operations in the Sacramento nonattainment area. Emission reductions are achieved by: (1) limiting the VOC content of various automobile refinishing coatings; (2) allowing the use of add-on control equipment that reduces VOC emissions by 85 percent in lieu of meeting the VOC limits on coatings; and (3) restricting application of automotive refinishing coatings to application methods and equipment with high transfer efficiencies.

The proposed rule applies to facilities that apply coatings to motor vehicles and mobile equipment or their existing parts and components for the purpose of on-site refinishing and modification. The proposed rule does not apply to application of original equipment manufacturing coatings applied at manufacturing plants. Affected facilities include autobody repair/paint shops, production autobody paint shops, new car dealer repair/paint shops, fleet operator repair/paint shops, custom-made car fabrication facilities, and truck body builders.

Proposed 40 CFR 52.2961(c) is based largely on SCAQMD's Rule 1151, Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations (September 6, 1991). Portions of the proposed FIP rule are based on CARB's Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology (RACT/BARCT) for Automotive Refinishing Operations (January 8, 1991). An evaluation of the environmental, economic, socioeconomic, and other impacts of Rule 1151 requirements can be found in SCAQMD's staff report for the proposed amended Rule 1151 (August, 1991); this evaluation is also applicable to this proposed FIP rule.

As described in the technical support document, uncontrolled VOC emissions from affected facilities are projected to total 4.23 tpd in 1999 and 4.71 tpd in 2005. Implementation of this proposed rule is projected to reduce those emissions by 3.77 tpd and 4.19 tpd respectively at a cost of $7,200 per ton of VOC removed (1990 dollars).

Under section 183(e)(3) of the Act, EPA may in the future issue either national regulations or a CTG for this source category, as well as for other categories discussed in this section. If EPA does so and the FIP rule is less stringent than the national guidance or rule, EPA will amend the FIP rule appropriately.

(e) Adhesives and Sealants (Sacramento) Proposed 40 CFR 52.2961(d) controls VOC emissions resulting from industrial and commercial use of adhesives and sealants in the Sacramento nonattainment area. Emission reductions are achieved by: (1) limiting the VOC content of various adhesives and sealants; and (2) allowing the use of add-on control equipment that reduces VOC emissions by 85 percent in lieu of meeting the VOC limits on coatings.

This proposed rule applies to certain facilities that supply, sell, or use adhesives, sealants, or adhesive primers. Affected facilities include (but are not limited to) manufacturing plants, architectural and construction companies, and welding operations. Various activities are exempt from all or part or the proposed rule, including tire repair, undersea-based weapon systems manufacturing, research and development, and small quantity users.

Proposed 40 CFR 52.2961(d) is based largely on draft guidance and model rules developed by members of the CARB/California Air Pollution Control Officers Association's (CAPCOA) Technical Review Group included in "Reasonably Available Control Technology and Best Available Retrofit Control Technology (RACT/BARCT) for Adhesives and Sealants," as presented in a workshop on September 30, 1993. In addition, portions of the proposed FIP rule are based on Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 51, Adhesive and Sealant Products; VCAPCD Rule 74.20, Adhesives and Sealants; and SCAQMD Rule 1168, Control of Volatile Organic Compound Emissions from Adhesive Application. Evaluation of the environmental, economic, socioeconomic, and other impacts of the proposed FIP rule's requirements was partially based on the information provided in the BAAQMD and VCAPCD staff reports for their respective rules.

As described in the technical support document, uncontrolled VOC emissions from affected facilities are projected to total 2.64 tpd in 1999 and 2.99 tpd in 2005. Implementation of this proposed rule is projected to reduce those emissions by 1.29 tpd and 1.47 tpd respectively at a cost of $890 per ton of VOC removed (1989 dollars).

(f) Can and Coil Coating (Sacramento). Proposed 40 CFR 52.2961(e) controls VOC emissions from certain metal container, metal closure, and metal coil coating operations in the Sacramento nonattainment area. Emission reductions are achieved by: (1) limiting the VOC content of various can and coil coatings; (2) allowing the use of add-on control equipment that achieves a 90 percent capture efficiency and 95 percent destruction or removal efficiency in lieu of meeting the VOC limits on coatings; and (3) restricting application of can and coil coatings to application methods and equipment with high transfer efficiencies.

The proposed rule applies to facilities that apply coatings to metal containers,

metal closures, and/or metal coils. Facilities that apply 1 gallon per day or less of spray coating, however, are exempt from the requirements of the proposed rule. Sacramento and Placer counties have implemented can and coil rules (SMAQMD Rule 452 and PCAPCD Rule 223) similar to this proposed FIP rule, although not as stringent. Currently, no sources exist in El Dorado and Sutter counties. Therefore, while the rule is proposed for implementation in the entire Sacramento ozone nonattainment area (as described in 40 CFR 81.305), most of the near-term emission reductions are projected to occur in Yolo and Solano counties.

Proposed 40 CFR 52.2961(e) is based largely on SCAQMD's Rule 1125, Metal Container, Closure, and Coil Coating Operations. Portions of the proposed FIP rule are based on the following: CARB's "Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology (RACT/BARCT) for Metal Container, Closure and Coil Coating Operations" (July 21, 1992); San Diego County Air Pollution Control District (SDAPCD) Rule 67.4, Metal Container, Closure, and Coil Coating Operations (1990); and SMAQMD Rule 452, Can Coating (August 21, 1990).

An evaluation of the environmental, economic, socioeconomic, and other impacts of Rule 1125 requirements can be found in the SCAQMD staff reports for Rule 1125 (February 2, 1979 and October 13, 1989). Evaluations of these impacts are also presented in CARB's RACT/BARCT Determination for Metal Containers, Metal Closures, and/or Metal Coils. Both of these evaluations are applicable to this proposed FIP rule.

As described in the technical support document, uncontrolled VOC emissions from affected facilities are projected to total 2.09 tpd in 1999 and 2.34 tpd in 2005. Implementation of this proposed rule is projected to reduce those emissions by 0.26 tpd and 0.30 tpd respectively at a cost savings of $540 per ton of VOC removed (1990 dollars). A cost savings is projected in part because CARB and the Districts have identified compliant coatings which are less expensive than high-VOC coatings currently in use.

(g) Commercial Bakeries (Sacramento). Proposed 40 CFR 52.2961(f) controls VOC emissions from commercial bakery ovens in the Sacramento nonattainment area that emit VOCs while baking yeast-leavened products. The proposed rule requires that certain bakeries install and operate a VOC pollution control system to reduce VOC emissions by at least 95 percent by weight. The following four yeast-leavened dough processes are affected: sponge dough, straight dough, liquid ferments, and no-time dough.

Facilities with a combined rated heat input capacity of all ovens less than 2 million British Thermal Units (Btus) per hour and facilities with ovens used exclusively for baking products leavened chemically (without yeast) are exempt from all of the proposed rule requirements, including recordkeeping and test method provisions. Facilities which emit less than 6.5 tons of VOC per year are exempt from the standards and compliance schedule requirements, but still must observe the recordkeeping and test method requirements.

The proposed rule is based largely on SDCAPCD proposed Rule 67.24 (Bakery Ovens), as presented in Workshop Draft form on September 17, 1992. Portions of the proposed rule are based on SCAQMD Rule 1153 (Commercial Bakery Ovens) as adopted on January 4, 1991 and BAAQMD Regulation 8, Rule 42 (Large Commercial Bread Bakeries) as adopted on September 20, 1989. Evaluations of environmental, economic, socioeconomic, and other impacts of the proposed rule can be found in EPA's ACT Document for Bakery Oven Emissions (EPA–453/R–92–017, December 1992).

As described in the technical support document, uncontrolled VOC emissions from affected facilities are projected to total 1.28 tpd in 1999 and 1.40 tpd in 2005. Implementation of this proposed rule is projected to reduce those emissions by 1.22 tpd and 1.33 tpd respectively at a cost of $1,200 per ton VOC removed or 0.2 cents per pound of bread (1990 dollars).

(h) Municipal Waste Landfills (Sacramento). Proposed 40 CFR 52.2961(g) controls emissions of non-methane organic compounds (NMOC) from certain municipal solid waste (MSW) landfills in the Sacramento nonattainment area by collecting and processing the landfill gases evolved from decomposition of organic material in MSW landfills. Emission reductions are achieved by requiring collection of 90 percent of the landfill gases produced, and destruction of 98 percent of the NMOCs collected. By controlling NMOCs, VOCs are also controlled because NMOCs include, but are not limited to, VOCs.

The substantive requirements of the proposed rule apply to MSW landfills that have received more than 500,000 tons of decomposable solid waste during their operational lifetime. The following types of landfills are exempt from some or all requirements of this proposed rule: facilities that have accepted only hazardous waste; facilities issued an Authority to Construct permit from the applicable air quality management district or air pollution control district prior to April 1, 1995 and that have an NMOC control device in place with at least 90 percent efficiency; and facilities that demonstrate a low concentration of landfill gas (i.e., less than 500 ppm by volume total organic compounds measured as methane) at all points near the surface of the landfill.

Proposed 40 CFR 52.2961(g) is based largely on VCAPCD Rule 74.17 (Solid Waste Disposal Sites), as adopted on September 17, 1991. Evaluation of the environmental, economic, socioeconomic, and other impacts of that rule can be found in VCAPCD's "Final Staff Report for Rule 74.17," dated September 17, 1991.

EPA is in the process of developing "Standards of Performance for New Stationary Sources and Guidelines for Control of Existing Sources: Municipal Solid Waste Landfills" ("MSW Guidelines"). This proposed FIP rule is also based on work performed in development of the "MSW Guidelines." Upon publication of the "MSW Guidelines" in the **Federal Register**, it may be appropriate to revise the FIP rule for consistency.

As described in the technical support document, uncontrolled VOC emissions from affected facilities are projected to total 0.94 tpd in 1999 and 1.08 tpd in 2005. Implementation of this proposed rule is projected to reduce those emissions by 0.60 tpd and 0.69 tpd respectively at a cost of $18,000 per ton of VOC removed.

(i) Livestock Waste (Sacramento, South Coast, and Ventura). Proposed 40 CFR 52.2961(h) controls VOC emissions from livestock waste operations. Livestock waste emission sources include cattle, hogs, sheep, and poultry operations. VOC emissions are created during the anaerobic decomposition of livestock wastes. Although methane emissions are estimated to make up 70 to 80 percent of the total organic gases (TOG) created, VOC emissions account for approximately 10 percent of the TOG. Livestock waste operations account for approximately 7.7 tpd of VOC emissions in the Sacramento area, 34.4 tpd in the South Coast,[41] and 3.8 tpd in Ventura. Although livestock

[41] These estimates do not include methane and ethane emissions. Because limited information was available regarding the fraction of poultry operations within Riverside, San Bernardino, and Los Angeles counties which are located in the South Coast Air Basin, the 34.4 tpd estimate includes the total poultry population found in the three aforementioned counties. As a result, livestock waste emission estimates may be slightly overestimated for the South Coast Air Basin.

waste operations have traditionally not been the subject of VOC regulation, they are now under consideration because of the magnitude of livestock waste emissions and the need to achieve reductions from all FIP area emission VOC sources, most of which have previously reduced or will soon be required to reduce their VOC emissions.

As proposed, the rule would only apply to dairy cattle operations of 400 head or greater. These operations are estimated to represent approximately 1.8 tpd of VOC emissions in the Sacramento area and 10.8 tpd in the South Coast. Ventura County currently does not have any dairy operations of greater than 200 head of cattle and, as a result, dairy operations would not be affected in Ventura. Although other livestock waste operations (e.g., chicken, hogs, sheep facilities) are not being proposed for regulation at this time, EPA will continue to investigate potential options for reducing emissions from other livestock waste operations as appropriate.

Emissions from livestock waste are determined by the quantity of manure produced, how it is handled, and the temperature at which it is handled. The manure management system employed is very important. Wet management systems, such as liquid or slurry based systems (e.g., lagoons), convert large portions of the carbon to methane and other gases. Dry management systems, which rely on placing the manure in storage piles, also result in methane and other volatile organic compound emissions created by the anaerobic conditions within the storage piles. The primary emission reduction strategies available to reduce VOC emissions include utilizing methane recovery systems and/or promoting enhanced aerobic conditions in manure storage areas.

Methods recommended for promoting aerobic decomposition of livestock waste include: aerating manure storage piles every three to seven days; scraping feedlots at least three times per year; and spreading oxidizing agents on feedlots. For waste management practices using a dry method, the proposed FIP measure will require the periodic aeration and removal of manure storage piles. This measure is estimated to reduce VOC emissions by 25 percent.

Methane recovery and utilization systems are considered a potential control method for reducing VOC and methane emissions. Methane is considered an important greenhouse gas and also a potential energy source. Depending on the size of the livestock waste operation, methane recovery systems can pay for themselves over time and result in cost savings for large-scale dairy operations. Methane recovery systems are currently operating at 23 sites in the U.S., including at a swine facility near Tulare, CA and a dairy near Modesto, CA. Near Chino, CA, a recovery system is under development which would process an estimated 2,500 tpd of cattle waste and 600 tpd of chicken waste. Technologies for methane recovery include covered lagoons, plug flow digesters, and complete mix digesters. Although these recovery systems represent a viable, demonstrated technology, some systems have not been as successful as expected because of improper design or other factors. For these reasons, EPA requests comment and information on any examples, circumstances, and/or reasons why a previously installed recovery system may not have achieved its full expectations.

The proposed FIP rule will require that at least 55 percent of the manure generated be collected and managed through a methane recovery system. These systems are estimated to reduce emissions by 80 percent.

The technical and economic feasibility of this technology depends on farm size, climate, and energy process. The off-gas (i.e., methane) collected can be utilized in the dairy operation for processes such as: electricity production (e.g., to fuel an engine generator); heating (e.g., to fire boilers and/or space heaters); and cooling (e.g., to fire chillers or other refrigeration equipment). This in turn can create farm profits from avoided energy costs or sales of excess electricity to the local utility. Although methane recovery systems would require a large initial investment, estimated annual costs range from $100 to $1,300 per year (for a 400 head dairy) to a cost savings of $10,000 per year (for a 1,400 head dairy). The initial investment could be recovered within six to fourteen years, depending on dairy size.

The overall emission reductions from livestock waste operations will depend on the percentage of waste which is managed via the dry method (e.g., placed in storage piles) compared to the handled through a wet method (e.g., sent to the covered lagoon or digester). For purposes of the FIP reduction estimates, it is assumed that a minimum of 55 percent of the livestock waste would be sent to a lagoon or digester. Assuming that a hypothetical dairy farm would install a recovery system for liquid management and use the dry method for the remaining fraction of the wastes not sent to the recovery system, overall expected cost per ton of VOC reduced is estimated to range from about $2,100 per ton for a 400 head dairy to a $400 (cost) to $100 (savings) per ton for a 1,450 head dairy.

Preliminary evaluation of the environmental, economic, and other impacts of the proposed rule are discussed in EPA's technical support document. VOC Emission reductions expected from this proposed regulation are estimated at 1.0 tpd in the Sacramento area and 6.0 tpd in the South Coast. No reductions are expected in Ventura County because all livestock waste operations are believed to be less than 200 head. Additional reductions could be achieved if the requirements were extended to smaller livestock waste operations, such as 250 head or greater.

EPA is requesting comments and information on a number of issues related to this proposed measure. Comments are requested on the proposed FIP requirements and/or other potential emission reduction strategies not addressed in the proposal. Because each dairy operation is unique and can vary in its waste management practices, comments are specifically requested on alternative emission reduction methods and/or more cost effective strategies which might achieve equivalent results to those proposed.

EPA also requests comments and information on the number of dairy farms in the FIP areas which contain at least 400 head and the percentage of dairy farms which manage at least 55 percent of the livestock waste through a wet method. Because the emission factors used to estimate VOC emissions from these sources should be updated, EPA intends to explore options for additional testing to verify that VOC emission factors accurately reflect emissions expected from both wet and dry waste management methods.

(j)(1) Fugitive Emissions from Oil and Gas Production Facilities and Conveying Stations (Sacramento, South Coast, Ventura).

Proposed 40 CFR 52.2961(t) controls VOC fugitive leak emissions from valves, flanges, fittings, pumps, compressors, open ended lines and/or other components at oil and gas production facilities and conveying stations.[42] 1990 VOC emissions from these fugitive sources were estimated at approximately 0.9 tons per day (tpd) in the Sacramento area, 4.4 tpd in the South Coast, and 3.8 tpd in Ventura.

The proposed rule builds upon current regulations and strengthens and

[42] Conveying stations include any compressor station, metering station, or other transfer station located between the extraction well and the refinery or gas processing plant.

improves existing rules through retrofits on gas-operated control valves, lower allowable leak thresholds, correction of rule deficiencies, and improved inspection and repair programs. The proposed regulation is based on: CARB RACT guidance for the control of fugitive emissions of VOCs from oil and gas production and processing facilities, refineries, chemical plants, and pipeline transfer stations; Santa Barbara APCD Rule 331; SCAQMD Rule 1173; and new information regarding gas-operated control valves.

Currently, gas-operated control valves are not regulated in the FIP areas. These valves are designed to bleed upon actuation, resulting in the release of uncontrolled VOC emissions. The proposed FIP rule would require that these valves be retrofitted using a control valve which would reduce gas bleed emissions by an estimated 95 percent. EPA has estimated a California population of 10,000 gas-operated control valves and assumed that these valves are evenly distributed throughout the state. EPA has also assumed that the control valves are only used in natural gas conveyance and petroleum production. Comments are specifically requested on the number of gas-operated control valves in the FIP areas and whether these valves are used in other operations besides those described above.

The proposed FIP rule will establish a fugitives regulation for oil and gas production and conveying stations within the Sacramento FIP area. Previously, these fugitive sources were unregulated. The majority of expected reductions will be from the Yolo-Solano portion of the FIP area. In the Ventura FIP area, the rule builds upon requirements in VCAPCD Rule 74.10 and lower the number of allowable leaking components and leak definition to requirements consistent with existing rules and CARB's RACT guidance.

In the South Coast FIP area, the proposed FIP rule will correct the gas leak definition in SCAQMD Rule 1173. The proposed correction defines a gas leak as total gaseous hydrocarbon in excess of the applicable parts per million limit measured as methane.

In the Sacramento FIP area, the proposed FIP rule will establish an inspection and repair program. In the Ventura FIP area, the proposed FIP rule will further strengthen the existing program to make it consistent with those adopted in other districts and CARB's RACT guidance.

Evaluation of the environmental, economic, and other impacts of the proposed rule are discussed in EPA's technical support document. Emission reductions expected from this proposed rule are estimated at 0.8 tpd in the Sacramento area, 2.8 tpd in the South Coast, and 2.1 tpd in Ventura. (j)(2) Fugitive Emissions from Gas Processing Plants, Refineries, Bulk Plants, Bulk Terminals, and Chemical Plants (Sacramento, South Coast, Ventura). Proposed 40 CFR 52.2961(i) controls VOC emissions from fugitive leaks resulting from valves, flanges, fittings, pumps, compressors, open ended lines and/or other components at gas processing plants, refineries, bulk plants, bulk terminals, and chemical plants. 1990 VOC emissions from these fugitive sources were estimated to be less than 0.9 tons per day (tpd) in the Sacramento area, approximately 17.5 tpd in the South Coast, and 0.8 tpd in Ventura.

The proposed rule builds upon current or proposed regulations and strengthens and improves existing rules through: regulation of additional fugitive sources; lower allowable leak thresholds; correction of rule deficiencies; and improved inspection and repair programs. The proposed FIP regulation is based on: CARB RACT guidance for the control of fugitive emissions of VOCs from oil and gas production and processing facilities, refineries, chemical plants, and pipeline transfer stations; Bay Area AQMD (BAAQMD) Regulation 9—Rules 18, 22, and 25; SCAQMD Rule 1173; and EPA's proposed National Emission Standards for Organic Hazardous Air Pollutants (HON) from the synthetic organic chemical manufacturing industry and equipment leaks from seven other processes (FR 52 62685).[43]

The proposed rule will establish and/or lower allowable leak levels for affected components. Allowable leak levels for valves and connectors are proposed at 500 parts per million based on BAAQMD regulations[44] and EPA's proposed HON. Allowable leak levels for other components are proposed at levels based on CARB's RACT guidance and SCAQMD Rule 1173.

In all three FIP areas, the proposed measure will regulate fugitives from bulk plants and bulk terminals. Because only a portion of these sources have traditionally been regulated for their fugitive emissions (i.e., loading and storage of petroleum liquids), fugitive emissions may have been underestimated in previous inventory projections. Because emission factors were not readily available for these sources, emission estimates were made using fugitive emission factors for refineries. Preliminary analyses have determined that bulk plant and bulk terminal emissions may account for as much as an additional 2.9 tpd in the Sacramento area, 9.3 tpd in the South Coast, and 1.7 tpd in Ventura. Potential reductions from these sources alone would be 2.2 tpd in the Sacramento area, 4.1 tpd in the South Coast, and 1.4 tpd in Ventura. EPA requests comments and information regarding appropriate emission factors to use for fugitive emissions from bulk plants and bulk terminals.

The proposed FIP rule will correct the gas leak definition in South Coast AQMD Rule 1173. The proposed correction defines a gas leak as total gaseous hydrocarbon in excess of the applicable parts per million limit measured as methane.

Evaluation of the environmental, economic, and other impacts of the proposed rule are discussed in EPA's technical support document. Emission reductions expected from this proposed rule are estimated to be 0.7 tpd in the Sacramento area, 3.1 tpd in the South Coast, and 0.7 tpd in Ventura. Fugitive emission reductions from bulk plants and bulk terminals are not included in the above estimates.

(k) Service Stations (Sacramento, Ventura, South Coast). Proposed rule 40 CFR 52.2961(j) reduces VOC emissions from gasoline dispensing facilities. Gasoline service stations are a source of VOC emissions created during vehicle refueling and storage tank working/breathing losses. Service station VOC emissions are estimated at approximately 3.2 tpd in the Sacramento area, 25.3 tpd in the South Coast, and 1.2 tpd in Ventura. Although service stations in the FIP areas currently have vapor recovery systems, the proposed FIP rule builds upon current Phase I and Phase II regulations and strengthens and improves existing rules by requiring pressure/vacuum relief valves on open vent pipes and the

[43] Although EPA's proposed HON is expected to be finalized soon, the proposed HON covers only emissions designated as hazardous air pollutants, which may make up only a fraction of VOC emissions from affected FIP sources. The proposed FIP fugitives rule is intended to reduce VOC emissions. In some instances, the proposed HON is less stringent than adopted SIP regulations in California and the proposed FIP measure. Although the proposed HON was considered, EPA's proposed fugitives rule relies primarily on current California regulations and/or guidance. After the HON is finalized, EPA will clarify the overlap between existing SIP and/or proposed FIP rules and the proposed HON.

[44] On January 1, 1997, BAAQMD Regulation 8, Rules 18 and 25 reduce allowable leak levels to 100 ppm for valves and connectors and 500 ppm for pumps and compressors. Although these lower limits are not being proposed as FIP limits at this time, EPA will continue to investigate the need for and potential reductions from leak thresholds consistent with the BAAQMD regulations.

phasing out of inefficient vapor recovery system components.

Pressure-vacuum relief valves are expected to virtually eliminate breathing and working losses from the storage tank vent pipe. Pressure-vacuum relief valves cost less than fifty dollars, are easily installed without underground construction, and improve efficiency of existing vapor recovery systems by one to three percent. The pressure/vacuum relief valves typically pay for themselves within less than one year and result in a cost savings. Additional emission reductions will be achieved through elimination of exemptions and the replacement of remote check valves in Phase II control systems. The Phase I efficiency is expected to be increased through the combined impact of the requirements for poppetted drybreaks in the Phase I vapor control systems, the installation of the pressure-vacuum valve on the vent pipes, and the installation of CARB certified spill boxes. Phase II efficiency is expected to be increased through the combined impact of using proper tubing between the riser and dispenser cabinet, requiring a certified insertion interlock mechanism on all bellows-equipped nozzles, and replacing non- coaxial hose with coaxial hose. Many of the proposed revisions are based on recent amendments to BAAQMD Regulation 8, Rule 7—Gasoline Dispensing Facilities.

Emission reductions expected from this proposed rule are estimated at 1.3 tpd in the Sacramento area, 8.9 tpd in the South Coast, and 0.3 tpd in Ventura. Because fuel savings result from installation of the pressure/vacuum relief valves and because inefficient vapor recovery components wear out and can be replaced by more efficient components during regularly scheduled maintenance, the cost impacts of the proposed measure will be minimized. The overall cost effectiveness is estimated at $1,600 per ton of VOC reduced.

(l) Waste Burning (Sacramento, South Coast, and Ventura). Proposed 40 CFR 52.2961(k) controls VOC emissions from waste burning. Waste burning activities are defined as agricultural burning, range management burning, forest management burning, and open burning. 1990 waste burning emissions[45] were estimated at 3.8 tpd in the Sacramento FIP area, 0.7 tpd in the South Coast FIP area, and less than 0.1 in the Ventura FIP area.

Most waste burning activities are currently restricted by a permissive burn/no-burn day program as specified in the California Health and Safety Code Regulations. This program allows the local air district office to declare a permissive burn day or a no-burn day, requires that subject sources obtain a burn permit from the local designated county or state agency, and limits burning to permissive burn days. Waste burning is restricted to days with acceptable air quality based largely on current and forecasted visibility and particulate levels.

The proposed FIP rule would complement and expand the current permissive burn/no-burn day program to incorporate ambient ozone air quality considerations. The purpose of this proposal is not to ban waste burning but to restrict waste burning to days when ambient ozone concentrations are within acceptable levels. On days predicted to exceed the California ambient air quality standard for ozone (0.09 ppm), all forms of waste burning would be prohibited. EPA is currently investigating the methodologies used to predict ozone exceedances and no-burn days. These methodologies could be used to predict air quality conditions using current and forecasted weather, meteorology, ozone levels, and other relevant criteria. A similar forecasting strategy would be used as part of the proposed FIP waste burning rule. SMAQMD has a voluntary permissive burn/no-burn program which takes into account predicted high ambient ozone levels. VCAPCD restricts burning when the California ozone standard of 0.09 ppm is expected to be exceeded.

Although not contained within the proposed FIP rule, EPA expects to establish a notification system compatible with and similar to those already in place for current permissive burn day/no-burn day programs.

Because poor visibility or high particulate levels can also result during conditions conducive to high ambient ozone levels, there is expected to be some overlap between current no-burn days and any additional no-burn days resulting from the proposed FIP program. During 1990 no-burn days were declared on 16 days in the Sacramento FIP area, 68 days in the South Coast FIP area, and 311 days in the Ventura FIP area. Using 1990 air quality data, the proposed rule is expected to restrict burning on an estimated additional 45 days per year (dpy) in the Sacramento FIP area, 121 dpy in the South Coast FIP area, 3 dpy in the Ventura FIP area. In the Sacramento area, the largest impact would occur on days during July through September when ozone levels typically reach their highest levels. In the South Coast, the largest impact would occur on high ozone days during March through October. Because of Ventura's current policy on waste burning, the proposal would have minimal impact.

Open burning operations at single and two-family dwellings are currently exempt from most permissive burn/no-burn day programs. Although EPA is not proposing that these sources be required to obtain a burn permit, the proposed FIP regulation would also require that this type of burning activity be restricted to permissive burn days. Comments are requested on the impacts and issues resulting from including these sources in the proposed FIP regulation.

The cost resulting from the lost opportunity to burn waste on the additional no-burn days would be minimized by allowing sources to burn on days when exceedances are not predicted. In the case of Sacramento, the proposed rule is expected to allow waste burning during over 80 percent of the calendar days each year. However, in the South Coast, where the state ozone standard is exceeded roughly 50 percent of the calendar days each year, the proposed rule would restrict burning to approximately 50 percent of the calendar days per year. The impact of the proposed FIP measure in Ventura is expected to be minimal since the district has already instituted a policy of restricting burning when the state standard is predicted to be exceeded.

Comments are requested on the feasibility of this strategy for the FIP areas, especially for the South Coast FIP area. EPA also requests information on potential costs resulting from the proposed FIP measure. Comments are also requested on alternative strategies (e.g., soil incorporation, residue removal, after market disposal alternatives) which will reduce waste burning impacts on ambient ozone air quality. EPA seeks comments on ways to avoid any increased costs and increased pesticide use that may be associated with the rule. Comments are requested on potential VOC reductions resulting from implementation of the Connelly-Areias-Chandler Rice Straw Burning Reduction Act of 1991 (California Health & Safety Code, Part 4, Chapter 3, Article 3, Section 41865).

Comments are requested on the necessity of exemptions in the proposed FIP measure. For example, California district offices may exempt a source from no burn day prohibitions during circumstances of imminent and substantial economic loss. However, these terms are undefined. Comments

[45] These estimates do not include emissions from incineration and unplanned fires (e.g., structural fires and wildfires).

are requested on an appropriate definition for the aforementioned terms.

EPA is also requesting comment on an alternative to the aforementioned strategy. As an alternative, a waste burning measure could be designed to only allow waste burning during the period of the year when ozone levels are within the state ozone standard, typically November through February depending on the area. This alternative would supplement the current no-burn day program and prohibit burning during the ozone season. This approach would provide greater certainty to affected parties so they could adequately plan their burn schedules; however, it would also provide less flexibility by prohibiting burning on days expected to be within ozone standard.

While EPA is continuing to evaluate the emissions inventory and potential reductions from the proposed FIP measure, preliminary emission reduction estimates from the 1990 baseline are 1.8 to 3.6 tpd in the Sacramento area, 0.3 to 0.5 tpd in the South Coast FIP area, and less than 0.1 tpd in the Ventura FIP area. Actual reductions will depend on the overall effectiveness of the FIP measure.

(m) Residential Water Heaters (Sacramento). Proposed 40 CFR 52.2961(l) controls NO_X emissions resulting from residential water heaters. Emission reductions are achieved by: (1) replacement of conventional gas-fired water heaters with low-NO_X units; (2) replacement of conventional gas-fired water heaters with electric water heaters; or (3) installation of solar panels to decrease natural gas consumption associated with the use of gas-fired water heaters.

The proposed rule applies to any natural gas-fired water heater installed in the Sacramento FIP area after August 15, 1995, which emits in excess of 40 nanograms of NO_X (calculated as weight equivalent NO_X per joule) and with a heat input rating less than 75,000 British thermal units per hour (Btu/hr). The rule does not apply to water heaters with a rated heat input of 75,000 Btu/hr or greater, used for recreational vehicles, or used exclusively to heat swimming pools and hot tubs.

The proposed rule is based largely on SCAQMD Rule 1121, BAAQMD Regulation 9—Rule 6, and VCAPCD Rule 74.11.

Evaluation of the environmental, economic, and other impacts of the proposed rule are discussed in detail in EPA's technical support document. The proposed rule is expected to result in a cost savings created by the more energy efficient units and lower cost of the low-NO_X units (compared to currently sold units). Considering the long-term fuel costs for residential water heating, solar water heaters can also be a cost-effective option.

As described in the technical support document, uncontrolled 1990 NO_X emissions from residential water heaters were 1.8 tpd in the Sacramento FIP area. Emissions are projected to continue to grow to 2.3 tpd in 1999 and to 2.7 tpd in 2005. Implementation of this proposed rule is projected to reduce those emissions by 0.2 and 0.6 tpd respectively at a retail cost savings of $3.00 to $19.00 per heater (1992 dollars) if replaced with a low-NO_X heater. Additional reductions will continue to occur until approximately 2008 when it is expected that all existing units will have been replaced[46] by the low-NO_X units. Energy savings and costs would also accrue if currently available low-NO_X, higher efficiency units or solar powered water heaters were used. While electric water heaters are also an option, electricity currently costs approximately three times the cost of natural gas in the Sacramento area.

Additional reductions could be achieved in all three FIP areas by requiring that a percentage of new housing starts in the areas install solar water heater systems. While it is not feasible for EPA to require this approach through a FIP regulation, it is very feasible for local communities to adopt ordinances that require a percentage of solar water heaters in new construction. Examples of such communities include the Gold River Area Housing Development in Sacramento, the City of La Verne in Los Angeles County, and the cities of Thousand Oaks and Del Mar.

Comments are requested on additional methods or options, such as market incentives and methods encouraging solar technologies, which might further reduce NO_X emissions from residential water heaters.

(n) Stationary Internal Combustion Engines (Sacramento). Proposed 40 CFR 52.2961(m) controls NO_X emissions resulting from stationary internal combustion (IC) engines. These engines are used for a variety of applications including electric power generation for both base and standby service, oil and gas pipeline pumping/transport, oil and gas exploration and production, irrigation, hoisting, and nuclear power plant emergency cooling water pump operation. Engines are generally classified by fuel type, method of ignition, combustion cycle, and charging method. 1990 NO_X emissions from IC engines in the Sacramento FIP area were estimated at 2.6 tons per day.

Several control techniques are available for controlling NO_X emissions from IC engines. Combustion controls include exhaust gas recirculation, prestratified charge, injection timing retard, pre-ignition chamber combustion, control of the air-to-fuel ratio, and wet injection. Post combustion add-on controls include selective noncatalytic reduction selective catalytic reduction. Other control techniques include conversion of fuel-fired engines to electric motors or the use of alternative fuels such as methanol in place of diesel fuel.

The proposed rule applies to any owner or operator of an IC engine rated at 50 or more brake horsepower in the Sacramento area. After May 15, 1997, all IC engines shall meet a parts per million NO_X standard based on engine and fuel type as follows: rich-burn engines, 25 ppm; lean-burn engines, 45 ppm; diesel 80, ppm; rich-burn (waste gas), 50 ppm; lean-burn (waste gas), 125 ppm. VOC and CO limits are also included within the standards. Engines rated at less than 50 brake horsepower or operated less than 200 hours per calendar year are exempt from the requirements of the proposed rule. Additional exemptions are provided for very low or specialized uses.

The proposed rule limits are based largely on SCAQMD Rule 1110.2, VCAPCD Rule 74.9, and EPA's ACT guidance for IC engines.

Evaluation of the environmental, economic, and other impacts are discussed in detail in EPA's technical support document. The rule is expected to affect approximately 100 IC engines in the Sacramento FIP area. Although there are additional IC engines in the FIP area, these sources are already meeting the proposed FIP limits or would be exempt from the proposed measure. As described in the technical support document, 1990 uncontrolled NO_X emissions from subject sources were estimated at 2.6 tons/day (tpd). Implementation of this rule is expected to reduce those emissions by 2.3 tpd at an average estimated cost of $7,200 per ton of NO_X reduced.

It is important to note that this proposed rule will be amended in the final promulgation to further clarify which engines are subject to the rule's provisions. The effect of such amendment may be to exempt from the requirements of this rule any new IC engines which will be subject to proposed FIP nonroad engine rules or national nonroad engine regulations issued under EPA's authority for

[46] Estimated service life of a residential water heater is approximately twelve years.

regulating mobile sources in accordance with Title II of the Act. These mobile IC engines are proposed to be governed by specific emission standards and other requirements discussed below in section III.D.4.

The emission reduction estimates presented above are associated with reductions only from existing IC engines reflected in the 1990 emissions inventory. In the final FIP, EPA will attempt to adjust this calculation of credit to clarify the relationship between reductions from this proposed rule and reductions from the nonroad engine rule proposed in III.D.5., which applies to newly manufactured nonroad IC engines. The adjustment would amend NO_X reduction credits attributed to proposed rule 40 CFR 52.2961(m), by a factor relating to the expected turnover of existing IC engines through the year of attainment.

(o) Industrial, Commercial, and Institutional Boilers, Steam Generators, and Process Heaters (Sacramento). (1) Biomass Boilers. Proposed 40 CFR 52.2961(n) controls NO_X emissions resulting from biomass boilers. Biomass boilers typically burn wood, wood waste, and/or bark as a fuel source. Almond shells, landfill gas, or natural gas have also been used as a supplemental fuel source. Emission reductions are achieved through application of selective noncatalytic reduction or selective catalytic reduction. Both systems are post-combustion NO_X control techniques in which ammonia (or urea) is injected into the flue gas to reduce NO_X to nitrogen and water.

The proposed rule applies to any owner or operator of a biomass boiler or steam generator with a rated heat input capacity equal to or greater than 5 million British thermal units per hour (mmBtu/hr) and an annual heat input greater than or equal to 9 billion Btu/yr. After May 15, 1997, biomass boilers shall either meet a 70 ppm NO_X standard or reduce uncontrolled NO_X emissions by 50 percent.

The proposed rule limits are based largely on demonstrated controls at approximately 30 different biomass boilers located in the U.S. Although a SIP rule written solely for biomass boilers does not exist in any other California districts, the FIP rule is modeled after currently adopted NO_X boiler rules in California.

Evaluation of the environmental, economic, and other impacts are discussed in detail in EPA's technical support document. The rule is expected to affect biomass boilers at five sources (Michigan California Lumber, SierraPine Limited, Lausmann Lumber and Moulding, Formica Corporation, and Blue Diamond) in the Sacramento FIP area. Three of these sources (Michigan California Lumber, SierraPine Limited, and Formica Corporation) are also subject to RACT rules in this FIP proposal (see section III.C.2). Although additional biomass boilers are located in the FIP area, these boilers are already meeting the proposed FIP limits.

As described in the technical support document, 1990 uncontrolled NO_X emissions from these five sources were 0.8 tpd. Implementation of this proposed rule is projected to reduce those emissions by 0.34 tpd at an average estimated cost of $2,500 per ton of NO_X reduced.

Additional reductions could be achieved by requiring replacement of the biomass boilers with new boilers which burn cleaner fuels (e.g., natural gas), although this may not be a cost effective option for some sources.

(2) Gaseous/Liquid Fuel Fired Boilers with a Rated Heat Input Capacity of Equal to or Greater than 5 mmBtu/hr. Proposed 40 CFR 52.2961(u) controls NO_X emissions resulting from boilers, steam generators, and process heaters which have a rated heat input capacity of greater than 5 mmBtu/hr. A boiler or steam generator is used to produce steam which is then used to produce mechanical power, thermal energy, or electricity. A process heater is combustion equipment used to transfer heat indirectly to water or process streams. These units can be fired with natural gas, propane, distillate or residual oil, or landfill or sewage gas.

Emission reductions are achieved through: (1) Retrofitting units with low-NO_X burners; (2) retrofitting units with flue gas recirculation systems; (3) application of selective noncatalytic reduction (e.g., installing an ammonia injection system); or (4) application of selective catalytic reduction (e.g., installing an ammonia injection system with a catalyst).

The proposed rule applies to any owner or operator of a boiler, steam generator, and process heater which has a rated heat input capacity of equal to or greater than 5 mmBtu/hr. After May 15, 1997, all units with an annual heat input rate greater or equal to 9 billion Btu per year (10^9 Btu/yr) and using gaseous fuels shall meet a 30 ppm NO_X standard; units using liquid fuels shall meet a 40 ppm NO_X standard. Units that operate with an annual heat input rate less than 9×10^9 Btu/yr shall be tuned once every six months or after 750 hours of operation.

The proposed rule limits and requirements are based largely on SCAQMD Rule 1146, VCAPCD Rule 74.15, Yolo-Solano AQMD Rule 2.27, CARB's RACT/BARCT guidance, and EPA's ACT document for process heaters.

Evaluation of the environmental, economic, and other impacts are discussed in detail in EPA's technical support document. The rule is expected to affect approximately 60 units in the Sacramento FIP area. Approximately nine of these units are already scheduled for replacement with cleaner burning cogeneration gas turbines. As described in the technical support document, 1990 uncontrolled NO_X emissions from these sources were 1.2 tpd. Implementation of this proposed rule is projected to reduce those emissions by 0.78 tpd at an average estimated cost of $6,900 per ton of NO_X reduced.

(3) Gaseous/Liquid Fuel-Fired Boilers with a Rated Heat Input Capacity of less than 5 mmBtu/hr but greater than 1 mmBtu/hr. Proposed 40 CFR 52.2961(v) controls NO_X emissions resulting from boilers, steam generators, and process heaters which have a rated heat input capacity of less than 5 mmBtu/hr but greater than 1 mmBtu/hr. A boiler or steam generator is used to produce steam which is then used to produce mechanical power, thermal energy, or electricity. A process heater is combustion equipment used to transfer heat indirectly to water or process streams. These units are typically fired with natural gas or propane. Emission reductions are achieved through retrofitting units with low-NO_X burners.

The proposed rule applies to any owner or operator of a boiler, steam generator, and process heater which has a rated heat input capacity of less than 5 mmBtu/hr but greater than 1 mmBtu/hr. After May 15, 1997, all units with an annual heat input rate greater than or equal to 1.8×10^9 Btu/yr shall meet a 30 ppm NO_X standard. Units that operate with an annual heat input rate less than 1.8×109 Btu/yr but greater than 0.3×10^9 Btu/yr shall be tuned once every six months or after 750 hours of operation.

The proposed rule limits and requirements are based largely on SCAQMD Rule 1146.1 and VCAPCD Rule 74.15.1. Evaluation of the environmental, economic, and other impacts are discussed in detail in EPA's technical support document.

The proposed rule is expected to affect approximately 25 units in the Sacramento FIP area. As described in the technical support document, 1990 uncontrolled NO_X emissions from these sources were 0.05 tpd or 19.2 tpy.

Implementation of this proposed rule is projected to reduce those emissions by 9.2 tpy at an average estimated

annual savings of $4,600 per ton of NO_X reduced. The savings accrue from an estimated 10 percent reduction in fuel resulting from the installation of low-NO_X burners.

(p) Gas Turbines (Sacramento). Proposed 40 CFR 52.2961(o) controls NO_X emissions resulting from gas turbines. A gas turbine is an internal combustion engine that operates with a rotary rather than a reciprocating motion. Compressed air and fuel are introduced to the combustor section were the fuel is burned. Hot combustion gases then enter the turbine section, where the gases rotate one or more shafts which power the compressor and electric generator. Electric utilities and cogenerators use gas turbines to produce electricity and useful thermal energy. Gas turbines can burn a variety of fuels including natural gas, waste process gases, or liquid fuels such as distillate oils.

There are three generic control techniques available for controlling NO_X emissions from gas turbines: (1) Injection of water or steam into the combustor; (2) add-on post combustion controls (e.g., selective catalytic reduction); and (3) modification to combustor designs.

The proposed rule applies to any owner or operator of a stationary gas turbine with a rated heat output capacity equal to or greater than 0.3 megawatt (MW). After May 15, 1997, all stationary gas turbines rated equal to or greater than 0.3 but less than 2.9 MW shall meet a compliance limit based on 25 ppm NO_X times a demonstrated percent efficiency. Stationary gas turbines rated equal to or greater than 2.9 MW shall meet a compliance limit based on 9 ppm NO_X times a demonstrated percent efficiency. Peaking units and emergency standby units operated less than 200 hours per calendar year are exempt from the reduction requirements but must keep records to verify hour of operation. Additional exemptions are provided for very specialized uses.

The proposed rule limits are based largely on SCAQMD Rule 1134, CARB RACT/BARCT guidance, and EPA's ACT guidelines.

Evaluation of the environmental, economic, and other impacts are discussed in detail in EPA's technical support document. The proposed rule is expected to affect gas turbines at only one source (i.e., Proctor and Gamble) in the Sacramento FIP area. However, the Procter and Gamble unit is currently scheduled for replacement with a newer gas turbine which will operate at 5 ppm NO_X. Although additional gas turbines are located in the FIP area, these units are already meeting the proposed FIP limits or are exempt from the proposed rule.

As described in the technical support document, 1990 uncontrolled NO_X emissions from this source was 0.43 tpd. Implementation of this proposed rule is projected to reduce those emissions by 0.2 tpd at an estimated cost of $6,700 per ton of NO_X reduced.

4. Regulations Imposed Statewide

a. Introduction—Rationale for Statewide Control.—Section 110(a)(2)(A) of the Act directs states to include in a SIP those enforceable control measures necessary to demonstrate attainment. This requirement extends to development of federal plans. Paragraphs III.C.4.b–e of this NPRM describe a set of area source rules that EPA is proposing to implement on a statewide basis in order to assure compliance and emission reductions. In addition, an option for a statewide manufacturers rule is discussed for the solvents and coatings categories regulated under the proposed VOC cap rules (see section III.C.5).

EPA is proposing statewide requirements for area source categories that consist of portable VOC-containing materials including architectural coatings, pesticides, aerosol paints and other consumer products. These categories differ from traditional point source categories for which emissions principally occur at a few stable locations where products are manufactured. In contrast, area sources are distributed widely and emit pollutants where products are used. EPA believes that regulations for these categories will be most effective if applied uniformly throughout the State.

Most notably, EPA cannot assure compliance for these area source categories at the point of emissions as achieved with point sources. This would require routine inspection and enforcement against individual consumers for using, for example, high VOC house paints and bathroom cleansers. EPA has neither the resources for such a program, nor the expectation that individual consumers should be responsible for monitoring the VOC contents of their paints and cleansers. Instead, EPA must rely on compliance at point of sale or manufacture such as, in this example, paint and cleanser distributors.

Unfortunately, because there is little threat of enforcement against actual product users, EPA believes that regulations affecting these categories would be routinely circumvented if standards varied in neighboring areas. If, for example, the architectural coating rule applied only in the narrow FIP areas, house painters in southern Sutter County (part of the nonattainment area) might drive to northern Sutter (outside the nonattainment area) to purchase cheaper paints, or lemon growers in Ventura might cross into Santa Barbara for a pesticide formulation they had used the year before.

While EPA has not attempted to quantify the erosion in projected emission reductions that would occur if these FIP rules were implemented on an area rather than statewide basis, there is much anecdotal evidence to confirm that considerable circumvention of the rules would occur. California air pollution agencies, for example, believe such circumvention routinely erodes the effectiveness of existing architectural coating, automobile refinishing, and other local regulations. Such circumvention is an important force behind the ongoing national regulatory negotiation designed to establish consistent architectural coating standards. It is also a primary rationale for existing California legislation requiring statewide regulation of consumer products.

One could extend this discussion to argue that these area source rules should be implemented on a national basis. Particularly along the northern and eastern State borders, EPA expects some circumvention of rules affective only in California. These borders are relatively scarcely populated, however, and fairly far from the FIP areas. EPA expects, therefore, minimal impact in the FIP areas and believe that the State of California is the most appropriate area in which to implement these rules.

While the need for enforceability is the primary and independently legally sufficient justification for implementing these rules on a statewide basis, several additional benefits to this approach are discussed below:

(i) *Consistency*. With the exception of architectural coatings, all the categories proposed as statewide measures in this NPRM are currently addressed in California on a statewide basis.[47] Statewide FIP measures maintain consistency with these regulations, minimizing unnecessary complexity for all concerned parties.

(ii) *Fairness*. Statewide rules would provide a more level playing field than do area-specific requirements. Area-specific pesticide controls, for example, might place parsley growers in Ventura

[47] Pesticides are regulated statewide under the California Food and Agriculture Code, consumer products are regulated statewide under the California Code of Regulations, and aerosol paints are proposed for inclusion in the statewide consumer products regulations.

at a competitive disadvantage compared to parsley growers in San Joaquin. Statewide rules minimize the potential for such inequities, helping fulfill one of the FIP goals discussed in section I.B of this NPRM. In addition, many parts of California besides the FIP areas have significant ambient ozone problems, including San Diego, the San Joaquin Valley, and the Southeast Desert. These areas may also need the statewide controls described in this NPRM in order to attain the health-based ozone standard.

(iii) *Reduce costs to industry.* From an industry perspective, it is important for certain types of rules to be consistent throughout the state. In this instance, EPA believes that most manufacturers support statewide regulations for the suggested source categories. Coating manufacturers complain, for example, of the current expense and complexity of complying with different standards in California's many districts. These expenses accrue not only from research resources needed to develop multiple coatings, but from subsequent complexities in marketing, distributing, and tracking compliance. All these tasks would be simplified, however, by establishing one standard for the entire State as proposed in this NPRM.

b. Architectural Coatings—Architectural and industrial maintenance (AIM) coatings are coatings or paints generally used by consumers and contractors. These coatings are formulated and recommended for field application to structures (e.g., residences, commercial buildings, and bridges) and their appurtenances (e.g., doors, cabinets, fences, railings, and gutters).

AIM coatings primarily provide a decorative and/or general protective function. Although there are a myriad of types and grades, AIM coatings are generally classified as exterior and interior paints, industrial maintenance coatings, roof coatings, primers, lacquers, stains, traffic paints, and specialty coatings.

These coatings are formulated with a variety of components including pigments, resins, solvents, and additives. Solvents, which are typically VOCs, often contribute to the formation of ozone as they volatilize after application. AIM coatings have been regulated in California since the late 1970s and all major metropolitan areas in the State have an architectural coating rule. AIM coating emissions for California were estimated at 197 tpd (in 1989), with approximately 50 percent of the emissions within the three FIP areas. 1990 FIP area emissions were estimated at 92 tpd in the South Coast, 5 tpd in Ventura, and 12 tpd in the Sacramento area. Because of the magnitude of emissions resulting from this group of coatings, EPA is proposing a FIP measure which will provide reductions to help demonstrate attainment in the FIP areas.

The proposed AIM coatings FIP rule (see 40 CFR 52.2959) builds upon the California Air Resources Board—California Air Pollution Control Officers Association 1989 Suggested Control Measure (SCM) for Architectural Coatings and upon current district rules. In addition, and parallel to the FIP effort, EPA is involved in a Regulatory Negotiation [48] (Reg Neg) for the development of a national AIM coating regulation. The relationship between a potential national rule and the proposed FIP rule is discussed later in this section. Where possible, EPA has attempted to take into account the potential outcome of the Reg Neg and its possible impact on a FIP regulation.

The proposal is modeled after the 1989 SCM and currently adopted California regulations, and it incorporates recent information regarding low VOC AIM coatings. The proposed regulation phases in lower coating limits from 1996 to 2003. In January 1996, initial limits for approximately 40 coating categories will go into effect. This will be followed by a second reduction phase in 2000 with lower limits for select categories such as: all clear wood finishes [350 grams of VOC per liter (g/l)]; concrete curing compounds (250 g/l); and traffic paints (125 g/l). A third reduction phase in 2003 will lower limits for select categories such as: varnishes (250 g/l); flats (50–150 g/l); many industrial maintenance coatings (275 g/l); non-flats (150 g/l); roof coatings (250 g/l); and traffic paints (50 g/l). In addition, the small container (less than one liter) exemption will be phased out as of 2003.

The environmental, economic, and other impacts of the proposed rule are discussed in EPA's technical support document. The rule is expected to affect approximately 150 paint manufacturers who market their AIM coatings in the State. Implementation of this rule is expected to reduce emissions by an estimated 25–30 percent, depending on the stringency of the current SIP regulation for a given district. FIP area reductions are expected to be 2.0 tpd (1999) and 2.3 tpd (2005) for Sacramento, 1.7 tpd (2005) in Ventura, and 21 tpd (2010) in South Coast.

The proposed FIP AIM coating rule establishes future effective limits which allow industry time to transition, where necessary, to lower VOC coatings. For the most part, low VOC coatings are being sold today which can meet the limits proposed for 2000 and 2003. While EPA acknowledges that the proposed limits may in some cases phase out certain high VOC technologies (e.g., nitrocellulose lacquers), the proposal assumes that available alternative resin technologies can adequately replace high VOC coatings. The proposal will also encourage the further development of new and improved low VOC technologies.

As described earlier, AIM coatings are formulated with pigments, resins, solvents, and additives. Changes and improvements in coating technologies begin in the research laboratories of the resin manufacturers/suppliers and paint manufacturers capable of researching new resin technologies. The cost of phasing in lower VOC AIM coatings will depend in part on the ability of resin manufacturers/suppliers and paint manufacturers to develop and market low VOC coatings. For those already manufacturing low VOC products, the proposed regulation would initially impose no additional costs and might, in fact, lead to increased profits. For AIM coating manufacturers who manufacture high VOC coatings affected by the proposed rule, the cost may approach several thousand $/ton for conversion to low VOC product lines. These costs can be partially reduced through the assistance of resin manufacturers/suppliers and/or large paint manufacturers, who are primarily responsible for researching and developing new coating formulations. Upon request, most resin manufacturers/suppliers are willing to share information and sample low VOC coating formulations with interested paint manufacturers, both large and small, to assist in the development of low VOC coatings.

While low VOC coatings are available today which meet the proposed coating limits, there continues to be debate over the performance characteristics and perceived limitations of certain low VOC AIM coatings. EPA requests comment and technical information on: available or soon to be available low VOC coatings which meet the proposed limits; previous or potential reformulation costs; performance or application limitations (if any) of low VOC coatings; and any AIM coatings or promising technologies where low VOC

[48] The Regulatory Negotiation includes representatives from industry, user groups, regulators, and environmental organizations. The goal of this consensus building process is to assist EPA in the development of a national AIM rule or control technique guideline.

technology is expected to advance beyond the proposed AIM FIP limits.

(1) Relationship to National Rule Development. In early 1992, EPA began to explore a Reg Neg (57 FR 1443; January 14, 1992) to assist in fulfilling its obligation for a national AIM regulation or CTG as described under section 183(e) of the Act. Although today's proposed FIP action is independent of the ongoing Reg Neg process and is not an attempt by the Agency to meet the requirements of section 183(e), EPA will fully consider the potential Reg Neg outcome and may modify the proposed FIP rule as appropriate.

Either a FIP AIM coating rule or a national AIM coating rule/CTG will ultimately provide the basis for the regulation which reduces emissions from AIM coatings sold into and used in California. While the Reg Neg process is nearing completion, unresolved issues remain and EPA does not anticipate that the proposed action under section 183(e) will be published prior to the court-ordered FIP proposal deadline. In addition, there is not a statutory deadline for an AIM rule per se under section 183(e),[49] so there is currently no assurance as to when the AIM regulation will be finalized. Because of the need to demonstrate through actual regulations the emission reductions necessary to achieve attainment in the FIP areas, EPA could not rely on the speculative outcome of the Reg Neg for its FIP rule and is therefore proposing a FIP AIM rule. While EPA is hopeful that the Reg Neg will result in a rule/CTG which could benefit the FIP areas, the court ordered deadline for the FIP proposal does not allow EPA the opportunity to wait for the potential national rule/CTG. Upon completion of the Reg Neg process and EPA's proposed national AIM rule/CTG, EPA will reevaluate its FIP strategy for AIM coatings.

(2) Relationship to Local Rules. While all of the major metropolitan areas in California already have an architectural coatings rule, coating limits may vary between districts for certain AIM categories. Because the proposed FIP regulation will be more stringent than all current district regulations, the proposed FIP rule will effectively bring all of the areas under a common standard to provide equity within the industry and greatly enhance the enforceability the rule.[50]

(3) Alternative Reduction Approaches. The following additional approaches for reducing emissions from AIM coatings were also considered.

(a) Fees. Because of large diversity within and among AIM coating categories and because of the multitude of uses for these coatings, it may be preferable to establish a fee-based strategy for providing additional emission reductions rather than to establish limits for specific categories. For example, a fee-based strategy could be established using a combination of gallons sold and VOC in each gallon (e.g., an annual fee equaling total grams or pounds of VOC sold by each manufacturer). Because fees provide uncertainty as to actual emission reductions, the fees would need to be periodically adjusted to achieve their intended reduction and market response. Currently, EPA has limited FIP authority (see III.A.2.b. and c.) to collect and redistribute fees. Because fees have previously not been used as an emission reduction strategy, limited data is available to predict and establish the level of fee necessary to achieve the intended reductions. With these constraints in mind, EPA is asking for comment on the potential use of fee-based approaches for within the FIP. This concept is also discussed in III.C.5.i.(3).

(b) Corporate Average VOC Emission (CAVE) Limit. Within the Reg Neg discussions, the concept of a CAVE limit has been suggested. The CAVE limit would allow each manufacturer to average all coatings sold nationally to meet a single, overall grams of VOC per liter CAVE limit. The CAVE limit would be based on a table of standards (e.g., VOC limits for each category) and the previous sales for each manufacturer. In theory, the CAVE approach could be applied in the FIP on a statewide basis. Because the limit is based on averaging, it could provide uncertainty as to the expected reductions (e.g., increased use of both a high and low VOC coating may not decrease actual emissions to the predicted amount). Therefore, a backstop measure (e.g., a cap on overall emissions per manufacturer) may be needed to guarantee expected reductions. Although the details of this concept have not been worked out, EPA is asking for comment on the potential use of a CAVE approach for AIM coatings regulated within the FIP.

(c) Manufacturers Bubble. In EPA's 1990 FIP proposal, the concept of a manufacturers bubble was proposed as a backstop measure. This approach would establish a single gram or pound of VOC per year limit for each manufacturer selling coatings within California. Each manufacturer's limit could be established using a table of standards and historical annual sales. This approach aggressively encourages the use of low-VOC coatings, provides greater assurance of actual reductions, and could potentially be expanded to incorporate additional flexibility, such as a banking/trading component. Although the details of this concept have not been worked out, EPA is asking for comment on the potential use of a manufacturers bubble for coatings regulated within the FIP. This concept is further discussed in III.C.5.i.

c. Consumer Products.[51] (1) FIP Promulgation of Existing CARB Rules. Proposed 40 CFR 52.2957(a) and (b) control VOC emissions from consumer products and antiperspirants and deodorants. These proposed FIP measures reflect previously adopted CARB limits. Because CARB has not submitted the measures as SIP revisions, EPA is promulgating these measures, which are needed for progress and attainment in the three FIP areas. These measures would also provide the framework for additional future FIP reduction strategies as needed.

(a) Consumer Products. Proposed 40 CFR 52.2957(a) controls VOC emissions from consumer products, with the exception of antiperspirants, deodorants, aerosol paints, and a few other consumer product categories.[52] Consumer products are chemical formulations used in households and institutions and includes products such as detergents, cleaning compounds, polishes, floor finishes, personal care products, disinfectants, and automotive

[49] Section 183(e) of the CAA requires that EPA submit a report to Congress by November 15, 1993. Upon submission of the final report, the Administrator will establish categories of consumer and commercial products intended for regulation and divide the categories into four groups to establish regulatory priorities. Every two years after promulgation of the list, EPA shall regulate one group until all four groups are regulated. EPA has yet to submit the report and establish the list of categories to be regulated.

[50] As a matter of law, the local agencies could continue to enforce their local SIP rules, but manufacturers would be expected to formulate their coatings to address the more stringent statewide FIP provisions.

[51] As specified under section 183(e)(3) of the CAAA of 1990, EPA is required to study emissions of VOCs from consumer and commercial products and to investigate the development of a national regulation or CTG for selected consumer products. While in all likelihood EPA will be developing a national regulation or CTG for many of the consumer products covered by the proposed FIP regulations, the proposed FIP regulation is not an attempt on EPA's part to meet its 183(e)(3) responsibilities. When and if EPA promulgates a national regulation or CTG for consumer products, EPA will reevaluate its FIP strategy for consumer products.

[52] While CARB has attempted to regulate most consumer products, some products have not been regulated at this time. These include: lubricants, hand washing detergents, toilet bowl cleaners, disinfectants, paint strippers, laundry detergents, and herbicides.

specialty products. The proposed regulation limits the VOC content in products sold, supplied, offered for sale, or manufactured for use within California. The rule establishes VOC limits consistent with limits previously adopted by CARB. 1990 Statewide emissions from consumer products are estimated at 250 tpd, 14.2 tpd in Sacramento, 108 tpd in South Coast, and 6 tpd in Ventura.

The CARB and proposed FIP regulations for consumer products, including antiperspirants and deodorants, cover just over half of the consumer products in the inventory or approximately 130 tpd statewide. The CARB and proposed FIP consumer product rules are estimated to achieve a VOC emission reduction of over 25 percent. However, these reductions will be partially offset by growth in consumer product sales. The FIP area reductions after growth were estimated at 1.3 tpd (1999) and -1.6 tpd (increase in 2005) in Sacramento, 1.6 tpd in South Coast, 0.2 tpd in Ventura. Because the FIP consumer product requirements are almost identical to the CARB rules, the cost of the consumer products FIP measure is expected to be zero.

Although the proposed FIP measure is very similar to that previously adopted by CARB, minor differences exist between the proposed FIP regulation and CARB's regulation. Differences are intended to simplify or reduce the administrative burden on the affected manufacturers or to correct rule deficiencies. The proposed FIP consumer products rule differs from the CARB rule in that it deletes: requirements for certification of charcoal lighter materials; a variance section; and a federal enforceability section. Otherwise the rules are virtually identical.

(b) Antiperspirants and Deodorants. Proposed 40 CFR 52.2957(b) controls VOC emissions from antiperspirants and deodorants. The regulation limits the VOC content of products sold, supplied, offered for sale, or manufactured for use within California. The rule establishes VOC limits based on those previously adopted by CARB. The rule establishes a percent VOC by weight limit for both aerosol and non-aerosol products (e.g., sticks and roll-ons). Although aerosols make up approximately 25 percent of the market, they account for approximately 90 percent of the emissions from this category. Statewide emissions and expected reductions are incorporated in the consumer product totals described under III.C.4.c.(1).(a).

Although the proposed FIP measure is very similar to that previously adopted by CARB, minor differences exist between the proposed FIP regulation and CARB's regulation. Differences between the proposed FIP antiperspirant and deodorant rule and the CARB rule include: the compliance date[53] for aerosol products has been extended to January 1, 1999; deletion of the administrative requirements that aerosol product manufacturers apply to CARB by January, 1994 for a compliance date extension to 1999; deletion of the section restricting toxic air contaminants; deletion of certain reporting requirements; deletion of the variance section; and deletion of the federal enforceability section. Otherwise the rules are virtually identical.

(2) Aerosol Paints. Proposed 40 CFR 52.2958 reduces VOC emissions from aerosol coatings. Aerosol coatings are self dispensing, pressurized products containing coating solids (i.e., pigments, resins, and binders) and solvent designed to dispense product ingredients by means of a propellant. The solvent and propellant are typically VOCs which make up from 70–95 percent of the product by weight. The VOCs are emitted into the atmosphere during the coating delivery and curing process.

Aerosol spray paints account for approximately 25 tpd of VOC emissions in California. FIP area 1990 emissions were estimated at 1.3 tpd in the Sacramento area, 11.6 tpd in the South Coast, and 0.6 tpd in Ventura. The use of aerosol paints has grown steadily since the 1950s. Growth peaked in 1977, but in 1978, the federal government restricted the use of chlorofluorocarbons as aerosol coating propellants and hydrocarbons were introduced as a replacement for the CFC propellants. Since the mid 1980s, use of aerosol paints has continued to steadily grow, with annual sales reaching historical highs during the early 1990s.

Aerosol coatings have previously been regulated by the BAAQMD (Regulation 8, Rule 49) and the SCAQMD (Rule 1129). CARB recently assumed authority to regulate the VOC content of aerosol paints. The FIP aerosol paint rule is based on a draft regulation workshopped by CARB on November 10, 1993. The draft regulation is not scheduled for adoption until after EPA's court ordered deadline for the FIP proposal. In addition, current State law giving CARB the authority to regulate aerosol coatings also limits CARB's ability to submit some future-effective limits and reductions to EPA as SIP submittals.

Because of the need to demonstrate attainment in each of the FIP areas, EPA is proposing an aerosol coating rule which is generally consistent with the regulation expected to be adopted by CARB in 1994. Minor differences exist between the FIP proposal and the CARB draft, however. The proposed FIP aerosol paint rule does not include sections for a special recognition label, variances, and federal enforceability. Also, the proposed FIP measure does not include a provision for a five year compliance date extension as found in CARB's draft rule. Instead, EPA intends to monitor industries progress and CARB's 1999 determination regarding the coating limits. If necessary, EPA will consider amendments to the FIP aerosol coating rule where appropriate. By adopting the FIP aerosol coating regulation, EPA hopes to avoid having to impose more stringent requirements on other VOC sources which would need to compensate for the reduction shortfall pending SIP submittal of the adopted CARB regulation. While this proposed FIP aerosol coating regulation will be published prior to CARB's adoption of its regulation, EPA expects to modify the FIP regulation, if appropriate, to be consistent with the final CARB regulation.

The proposed FIP regulation will build upon the previous work by the BAAQMD and the SCAQMD and closely parallel CARB's regulation. The proposed FIP regulation would apply to any person who sells, supplies, offers for sale, applies, or manufactures for use in California any aerosol coating products as described in the proposed regulation. Because of the diversity of uses and coating types, the proposed regulation establishes VOC limits for a variety of product coating types. The initial 1996 limits are based on limits in the BAAQMD regulation. A second phase of lower limits goes into effect in 1999.

Aerosol coating manufacturers are expected to develop compliant products through propellant replacement, product reformulation, and improvements in packaging and delivery systems. Two promising propellent alternatives, hydrofluorocarbon (HCFC) 152a and dimethyl ether, are potential replacements for current hydrocarbon propellants. Reformulation to a lower VOC content could be achieved through increased solids, lower VOC solvents and propellants, or a combination of both. A further opportunity to reduce emissions lies in the redesign of the packaging and delivery system such that

[53] CARB's regulation allows manufacturers to apply for the January 1, 1999 compliance date if certain requirements are met. Based on conversations with CARB, EPA believes that most if not all aerosol product manufacturers have or will apply for the 1999 compliance date.

a nonhydrocarbon gas or mechanical device acts to displace the container's contents. Improvements in the transfer efficiency of the delivery systems would result in reduced overspray, higher surface coating percentage per container, and cost savings to the consumer.

The proposed FIP aerosol coating regulation is to reduce VOC emission by approximately 60 percent from 1990 levels. The reductions from 1990 levels equate to approximately 15 tpd in California. FIP area attainment year reductions are estimated at 0.9 tpd in 1999 and 1.1 tpd in 2005 in the Sacramento area, 8.9 tpd in 2010 for the South Coast, and 0.4 tpd in 2005 for Ventura. Only limited data is available to estimate the cost of developing compliant products. The first phase of the regulation is expected to have a minimal cost because compliant products are already available to meet the BAAQMD rule. Costs of meeting the 1999 limits will depend in part on the availability of HCFC 152a. Although a promising propellant substitute, HCFC 152a is estimated to cost five to ten times more than current hydrocarbon propellants. However, with increased demand for HCFC 152a, its cost is expected to decrease.

(3) Alternative Reduction Approaches. CARB is currently developing an alternative compliance plan (ACP) approach which would allow additional flexibility for affected consumer product manufacturers. The ACP would allow manufacturers to average a limited number of products when determining compliance. The ACP concept is under development and EPA is working with CARB to assure its consistency with EPA's Economic Incentive Program guidance. After the ACP program is adopted by CARB, EPA will consider it for adoption as part of the FIP. Additional alternative reduction approaches as described in III.C.4. for architectural coatings could also be applied to consumer products. Comments are requested on the use of these approaches to achieve additional emission reductions from consumer products.

(4) Need for Additional Reductions. Because additional reductions from consumer products will be needed to attain the ozone standard in the South Coast, EPA will continue to investigate strategies such as setting VOC limits, fees, a manufacturers bubble, or a corporate average to further encourage reductions from these products. Because a fraction of the consumer products inventory (e.g., laundry detergents, hand washing detergents, lubricants) are not regulated by current CARB regulations or the FIP proposal, EPA will investigate strategies for reducing emission resulting from these unregulated products. EPA intends to use section 182(e)(5) commitments for these additional reductions and to develop appropriate control strategies based on continuing evaluation of new technologies and compliance options.

d. *Pesticides.* (1) Summary and Applicability. Proposed 40 CFR 52.2960 is designed to reduce VOC emissions from agricultural and structural pesticide application.

Producers of such pesticides must determine the VOC content[54] of their products as defined by an analytical method. All agricultural and structural pesticides registered in California must be tested, regardless of whether the producer is located inside or outside of the State. Distribution, application, and storage of pesticides with high VOC contents will be restricted in California.

9,500 pesticide formulations may be subject to the analysis requirement, and sale and use of several thousand may be subsequently restricted. EPA cannot determine how industry will respond to restrictions on each specific formulation. Generally, however, EPA expects that low-VOC reformulations will provide feasible alternatives for many restricted pesticides.

The proposed rule is not intended to apply to consumer-oriented pesticides that are subject to consumer products regulations in this NPRM (40 CFR 52.2957) or in the California Code of Regulations (Title 17, Division 3, Subchapter 8.5—Consumer Products, §§ 94507–94517). The proposed rule is also not intended to apply to production or distribution of pesticides intended for use outside of California.

(2) Specific provisions. *Required submission of data.* By June 1, 1996 or 120 days after the effective date of the rule, whichever is later, producers must submit analyses identifying the VOC content of all affected pesticides. EPA believes that 120 days is ample time to perform this analysis, and notes that the requirement is being proposed over two years before the analysis will come due. Concern has been raised that independent laboratory capacity may be insufficient to analyze all regulated pesticides within 120 days. EPA believes, however, that most large pesticide manufacturers will perform the required analysis in-house, and that independent laboratory capacity will be sufficient to handle the remaining analytic demand.

Analysis is required of all California-registered pesticides including those not currently in use. This information is needed to determine an accurate base-year VOC emission inventory to compare against future emission reductions. It is also important to identify all available low-VOC pesticides regardless of whether they are currently in use in order to maximize the available pest-control options.

Establish VOC limit. The proposed rule describes a six-step procedure for establishing a VOC limit for pesticides.

(i) EPA will establish a base-year pesticide use inventory for each pesticide registered in California. This inventory may consist simply of the amount of each pesticide applied in the State according to the 1990 pesticide use report (PUR) combined with the inerts data-base, both of which are maintained by the California Department of Pesticide Regulation (DPR). The proposed rule is drafted, however, to provide the Agency discretion to establish the base-year inventory using other information. EPA could, for example, use an average of the 1990 to 1993 PUR data for just the three FIP areas if that was determined to be more appropriate. In any case, EPA intends to discuss the base-year inventory actually used when promulgating the VOC limit pursuant to § 52.288(c)(2)(vi).

(ii) EPA will rank the pesticides according to their VOC content. The pesticide with the largest VOC content (i.e., a gas or highly volatile liquid) will be ranked #1. If EPA determines that adequate data for a particular pesticide is not submitted by the deadline, EPA may assign the pesticide a VOC content equal to the largest VOC content reported for any pesticide (i.e., also ranking it #1). This would effectively prohibit distribution and application of this pesticide in the affected area pursuant to § 52.2960(c)(5). EPA's intention is to provide an incentive for manufacturers to submit the required data while simultaneously enabling the Agency to implement the regulation in the absence of some data. Nevertheless, the regulation is drafted to provide the Agency some discretion in assigning VOC contents for pesticides in the absence of adequate data. EPA might, for example, determine it more appropriate to assign VOC contents for such a pesticide based on the largest VOC content reported for its formulation type (e.g., oil, emulsifiable

[54] The actual volatility of the organic compounds in a particular pesticide depends on the temperature, moisture, substrate, application technique, and other conditions under which it is applied. Therefore, "VOC emission potential" might more accurately reflect the result of the analytical test methods. EPA, however, is using the term "VOC content" to be consistent with analogous coating regulations.

concentrate, pressurized liquid, etc.) Or, if analysis of a pesticide failed to demonstrate a specific VOC content but did demonstrate that the VOC content fell within a discrete range, EPA might assign the pesticide the largest VOC content within that range. In any case, EPA intends to discuss the VOC contents actually assigned when promulgating the VOC limit pursuant to § 52.288(c)(2)(vi).

(iii) EPA will multiply the VOC contents (weight percent basis) by the base-year inventory (kilogram-per-year basis) to establish the individual base-year VOC emissions (kilogram-per-year basis). A pesticide not used in the affected area in the base-year(s) would have a base-year inventory and a VOC emission of zero.

(iv) EPA will add the base-year VOC emissions of all affected pesticides to determine the total base-year VOC emissions in the affected area.

(v) Starting with the highest-ranking pesticides (i.e., those with the largest VOC content and those without adequate data), EPA will add the individual base-year VOC emissions until the sum equals 40 to 65 percent of the total base-year VOC emissions. The VOC content of the last pesticide needed to achieve 40 to 65 percent is the VOC limit. EPA has assumed that restricted pesticides will be replaced on a one to one mass basis with pesticides at the VOC limit.[55] Based on an analysis described in the technical support document (TSD) for the proposed rule, EPA has calculated that a 40 to 65 percent threshold value will achieve emission reductions of 20 to 45 percent off the base-year inventory. The target reduction of 20 to 45 percent was chosen for consistency with the range of target reductions of the stationary source cap rules described in section III.C.5 of this NPRM. Based on planned modeling and inventory analysis and comments received during the comment period, EPA hopes to select a specific reduction target from within this range for use in the final rule promulgation. The relationship between the 20–45 percent reduction target and the 40–65 percent threshold value is discussed further in the TSD.

(vi) EPA will publish the VOC limit. EPA intends to publish this limit in the Federal Register with a discussion of the data and assumptions used to generate the limit. If the limit is generated by a straightforward execution of the procedure described in this NPRM, EPA may publish the limit directly in final form. If, however, EPA exercises significant discretion (as provided for in the proposed rule) in generating the limit, EPA intends to take public comment on a proposed limit before publishing the final limit.

Restrictions on pesticides. One year after EPA publishes the VOC limit, all persons are prohibited from distributing in the affected area pesticides with VOC contents greater than the VOC limit. After that time, distributors with remaining inventory of high-VOC pesticides could still sell them to persons outside the affected area.

Two years after EPA publishes the VOC limit, all persons are prohibited from applying or storing in the affected area pesticides with VOC contents greater than the VOC limit. EPA believes this is sufficient time for affected applicators to apply existing inventory of high-VOC pesticides or to sell them to persons outside the affected area.

Revisions to the VOC limit. EPA may require a producer to reanalyze its pesticides at any time. Based on this or other information, EPA may recalculate the VOC limit at any time. EPA does not anticipate recalculating the VOC limit frequently, as recalculation has significant resource implications for both the Agency and the regulated community. Recalculation may be appropriate, however, if EPA determines that the existing VOC limit is not equitably achieving the targeted emission reductions of 20 to 45 percent. Developments that might justify a recalculation include changes in pesticide use patterns and improved understanding of VOC emissions from pesticides.

Alternative ranking scheme. Rather than ranking pesticides simply by VOC content, representatives of DPR and CARB have suggested ranking by VOC emissions. Under the former scheme, as incorporated in this NPRM, application of a high-VOC low-use pesticide (e.g., a pheromone) would be regulated even if it contributed much fewer VOC emissions than unregulated application of a medium-VOC high-use product. Under the latter scheme, pesticides would be ranked and regulated in order of their overall emissions, as determined by VOC content times quantity applied in the base-year(s).

While the two ranking systems could provide equivalent emission reductions, EPA believes the simplicity of the former makes it easier to implement and enforce. Once the VOC limit is established, Agency inspectors can simply determine whether pesticides sold and used in the affected area comply with the limit. Under the latter scheme, however, rather than publishing a single limit, EPA would need to publish and regulate a list of all the specific restricted pesticides, which would need to be revised regularly to account for new and reformulated products and for changing use patterns. If, for example, a high-VOC pesticide had low use and low emissions in the base-year but high use and high emissions thereafter, it would need to be added to the list of restricted pesticides. Conversely, pesticides with unusually high use in the base-year might need to be removed from the list of restricted pesticides, adding to the likelihood of inequities and compliance problems.

Nevertheless, EPA understands that alternatives to the regulatory structure contained in the proposed FIP rule offer different trade-offs between the various FIP goals (described in section I.B of this NPRM) of reducing emissions, encouraging State action, minimizing federal interference, etc. EPA has attempted to address some of these alternatives in paragraph III.C.4.d(4) of this NPRM.

(3) Reporting, recordkeeping and test methods. Proposed § 52.2960(f) describes the test methods required for determining the VOC content of pesticides. Pesticide producers may use one of two test methods:

(i) *Thermogravimetric Analysis (TGA).* This is one of the two test methods described in EPA's alternative control technology document (ACT) for pesticides ("Alternative Control Technology Document; Control of VOC Emissions from the Application of Agricultural Pesticides," EPA–453/R–92–011, March 1993, Appendix C). The method is based on the "American Standard Test Method (ASTM) for Compositional Analysis by Thermogravimetry" (ASTM E–1131–86).

(ii) *Volatile organics in pesticides (VOP) method.* This is the second test method described in EPA's ACT for pesticides. It includes a purge and trap procedure conducted at constant temperature that allows for direct measurement of water content.

DPR has investigated various modifications to ASTM E–1131–86 for analyzing a wide variety of pesticide formulations. Some of DPR's work is reflected in modifications to the method included in the ACT and in § 52.2960(f)(1)(i) by reference. DPR's work is ongoing, however, and EPA expects that additional modifications to the method may be determined

[55] Imbedded in the one-to-one replacement assumption is another assumption that, in the aggregate, pesticide efficacy is not reduced by reformulation to lower VOC products. For some specific pesticides, efficacy may decrease and applicators may respond by using greater quantities of the reformulated product. Emissions associated with this phenomenon will be somewhat offset by replacement of specific restricted products by pesticides with VOC contents below the VOC content limit.

appropriate. Depending on the timing and scope of such modifications, EPA may address them through the discretion allowed in the proposed rule, by incorporating them into the final FIP rule, or by formally proposing and promulgating subsequent rule modifications. Modifications may include the following:

(i) Modifications to the method for estimating water content. DPR is currently investigating several analytical methods for estimating water content including both Karl Fischer titration and spectroscopic analysis of the vapor-phase effluent from the TGA analysis. Until adequate validation of these methods is available, DPR may calculate water content based on the "percentage water added" component of the statement of formulation required pursuant to FIFRA (7 U.S.C. 136a(c)(1)(E)). Because this generally does not account for water present as impurity, water produced in reaction, or water present as a component of other raw materials, it should provide a conservative (i.e., low) estimate of true water content. Reliance on formulation data is consistent with EPA's historic policy regarding analogous coating regulations before reliable test methods (e.g., ASTM D–4017 and D–3792) were available.[56]

(ii) Modifications to the method for estimating exempt compounds. Again, until adequate validation of a specific test method(s) is available, DPR may rely on the statement of formulation for estimating the amount of exempt compounds present in specific pesticides. This is also analogous to coating regulations which generally relied on formulation data until ASTM D–4457 was available.[57]

(iii) Modifications to address solid pesticide formulations.

As described in § 52.2960 (d) and (e), producers of affected pesticides must submit copies of all raw data and a summary of the results of the VOC content analyses. Distributors must submit a distributor notification and an annual report summarizing the pesticides distributed in the affected area during the preceding year. Applicators must submit a copy of the PUR for all pesticide applications within the affected area.

Pesticide producers, distributors, and applicators are required to maintain all information necessary to demonstrate compliance with the regulation for a period of five years. At a minimum, this information must include copies of all reports specifically required in paragraph 52.2960(d), and any technical support to these reports.

(4) Relationship to State rules. As discussed in sections I.D., III.J., and elsewhere in this NPRM, EPA believes that State and local agencies can adopt and implement regulations that are better tailored to the specific characteristics and needs of the affected areas. Therefore, EPA strongly encourages the State to continue ongoing efforts to adopt approvable rules to replace all or part of the FIP.

Pursuant to § 110(l) of the Act, State rules are not approvable if they, "* * * interfere with any applicable requirement concerning attainment and reasonable further progress * * * or any other applicable requirement." For purposes of the pesticide rule, EPA intends to determine approvability based largely on emissions. Modifications to the pesticide rule which EPA may consider approvable, if shown to result in no significant emission increases, include the following:

(i) Provisions for exempting de minimis use of high-VOC pesticides.

(ii) Provisions for allowing use of high-VOC pesticides to prevent overwhelming economic dislocation.

(iii) Provisions for allowing use of high VOC pesticides to prevent harm to human health or the environment.

(iv) Provisions for allowing use of high-VOC pesticides during times of the year when low ambient ozone concentrations are projected.

(v) Modifications of the test method discussed in section III.C.3.d(3) of this NPRM.

(vi) Modifications to 40 CFR 52.2960(c)(2) of the proposed rule, such as ranking pesticides based on emissions instead of VOC content as discussed in section III.C.3.d(2) of this NPRM.

(vii) Consideration of the relative reactivity of different VOCs.

Or, of course, the State could adopt rules based on completely different regulatory strategies that still achieve equivalent emission reductions.[58]

The State is likely to propose substitution for the FIP rule's "Required submission of data" provision in 40 CFR 52.2960(c)(1) of the proposed rule. DPR is currently planning to issue a data call-in during early 1994 which would require submittal of much of the same information. If these data are timely and approvable, EPA may remove 40 CFR 52.2960(c)(1) from the final FIP rule.

(5) Relationship to FIFRA. EPA acknowledges the unique situation in which the proposed FIP rule places the pesticide and agriculture industries, which are already subject to considerable regulation under FIFRA.

However, because pesticide use is estimated to represent a significant component of the VOC emissions inventory in the Sacramento, South Coast and Ventura areas, EPA considers emission reductions from pesticides an important part of the overall FIP attainment strategy.[59]

Under the proposed rule, EPA will establish a VOC limit that all pesticides must meet to be distributed or applied in the affected area. Specific pesticides are not regulated, and the proposed rule does not conflict with FIFRA's registration cancellation or suspension procedures (7 U.S.C. 136d). Nonetheless, EPA expects that many pesticides will need to be reformulated in order to meet the VOC limit and be useable in the affected area. EPA has

[56] See, for example, "Procedure for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings," U.S. EPA, EPA–450/3–84–019, December 1984.

[57] ibid.

[58] EPA, for example, considered several other regulatory strategies for inclusion in the FIP, and analyzed two in detail through a contract to Midwest Research Institute ("Development of Pesticide Rules for the Sacramento, South Coast, and Ventura Nonattainment Area FIPs," prepared by Midwest Research Institute for EPA, April 30, 1993 draft final report).

The no-use day strategy was fashioned after existing no-burn day programs. EPA would establish meteorologic criteria for predicting unfavorable ozone conditions and pesticide use would be restricted on a day-to-day basis. A major drawback to this strategy is that postponing pesticide application for several consecutive days could result in significant crop damage and an increase in overall annual pesticide use.

The users bubble strategy would be somewhat analogous to the stationary source emission cap programs proposed in this notice. Pesticide users (e.g., growers) would calculate a base-year VOC emission rate as: amount of pesticide applied times VOC content of pesticides divided by total acreage. Users would then be required to reduce their VOC emission rate a certain percentage by the attainment year. A major drawback to this strategy is the difficulty in establishing equitable baseline inventories.

EPA selected the VOC content strategy incorporated in this notice for a variety of reasons including better enforceability, consistency with State regulatory plans, and minimization of disruption to the affected industries. EPA invites comment on mechanisms to improve the proposed pesticides rule, as well as on other strategies to reduce VOC emissions from pesticides. EPA is interested, for example, in mechanisms to encourage pesticide application technologies (e.g., electrostatic application) that decrease VOC emissions. In addition, EPA requests comment on how to optimize the interaction between the proposed FIP rule and ongoing pesticide programs and initiatives including those targeting pesticide use reduction, pollution prevention, and integrated pest management.

[59] As with all components of the FIP, § 52.2960 is proposed under authority of the Clean Air Act. Failure to comply with any provision of § 52.2960 will violate the applicable implementation plan for purposes of section 113 of the Clean Air Act, and be subject to all administrative, civil, and criminal penalties described therein.

accounted for the costs of reformulation in the technical support to this proposed rule. EPA specifically requests comment on how to minimize the costs of this regulation in light of existing FIFRA regulations while still achieving the necessary emission reductions.

5. Cap Regulations

a. Introduction—EPA is today proposing to promulgate Federal control measure rules to reduce emissions of VOC from sources located in all three FIP areas, and NO_X from sources in the Ventura FIP area.[60] The proposed measures impose an annual rate of reduction on affected sources for as many controllable VOC and NO_X categories as possible. The purpose of these proposed rules is to ensure that the FIP areas achieve attainment of the ozone NAAQS by the statutory attainment dates for each area. These proposed rules are designed to supplement reductions achieved by other proposed FIP and SIP measures as necessary to make up for any emission reduction shortfalls in the affected FIP areas.

The FIP cap measures proposed today differ in several ways from those proposed in the 1990 South Coast FIP (55 FR 36458). Most importantly, the current FIP proposal adds complete regulations for most categories of industrial sources of NO_X emissions, whereas the 1990 proposal dealt only with VOC sources. The NO_X cap regulations proposed today for Ventura (and discussed as an alternative for the South Coast) contain comprehensive control requirements, including specific detailed provisions for source monitoring.

EPA's cap regulations proposed today also make significant changes from the 1990 rules in terms of the cap compliance period, penalties for noncompliance with emission limits, and establishment of emissions baselines. In addition, this NPRM significantly revises the discussion of two potential amendments to the cap program: the development of an emissions trading element and the replacement of the industrial solvents/coatings rules with a manufacturers bubble.

Many of these changes from the 1990 proposal derive from extensive EPA involvement in the evolution of SCAQMD's RECLAIM program. However, EPA's proposed cap rules deviate from the RECLAIM program in several areas. For example, in RECLAIM, which is currently a NO_X and SO_X market, the term of each emission cap is one year. In the proposed FIP measures, the term of each emission cap is one month. EPA selected the shorter compliance term as providing more certainty that the one-hour ozone NAAQS would not be exceeded. EPA will continue to evaluate the compliance period as more information becomes available. For each FIP area, data may allow EPA to determine that different compliance periods would provide sufficient security against short-term emission increases that jeopardize air quality progress.

The 1990 proposal did not include regulations specifying the noncompliance penalty structure. This NPRM proposes penalty provisions for emissions cap exceedances based on EPA's conclusion (expressed repeatedly in the context of the RECLAIM development process) that exceedance-based systems of establishing penalties are the most appropriate for the use of mass emission caps. Exceedance-based penalty systems establish violations based on the amount of excess emissions above the facility cap. This penalty structure is most protective of the NAAQS and comports best with the Act and with EPA's established enforcement policies.

EPA has included in this FIP a much more detailed method for setting baselines for the facilities subject to the cap program. The method requires sources to examine the following data to calculate their year 2001 cap emissions:

- 1990 annual emissions, and
- Reductions to be made as a result of compliance with SIP and/or FIP control measures between the years 1990 and 2001.

This methodology will inherently rely on emission inventory data and planning projections to set year 2001 emissions caps. However, the methodology has the advantage that it will not unfairly penalize facilities which have made reductions ahead of schedule. This baseline proposal provides flexibility beyond the 1990 proposal for facilities which have made early reductions of NO_X and VOC emissions.

EPA is not now proposing to incorporate a trading system into the program in regulatory form. EPA will observe the functioning of the RECLAIM market system, the Acid Rain (CAA Title IV) market system, and other markets to determine the design which is most successful for reducing emissions in the FIP areas while achieving other program goals, including the avoidance of air toxics hotspots. In the 1990 FIP proposal, EPA indicated that a trading scheme would be proposed in the future; in this round, given that there will be more experience with trading markets by the time this FIP is finalized, EPA chose to observe the developing markets in parallel with its own research effort prior to selecting a market structure.

Finally, the 1990 proposal discussed the use of a manufacturers bubble as an alternative to emissions caps for users of industrial and commercial solvents and coatings. The current FIP proposal describes this concept in greater detail and discusses EPA's various reasons for preferring this approach, if EPA is able to successfully resolve certain issues involved in regulating manufacturers at the national level.

(1) Rationale for Approach. All of the California FIP areas suffer from emission reduction shortfalls when the FIP attainment analysis is performed. The shortfalls, or reductions beyond the other proposed FIP and SIP measures, which must be accounted for in order to bring the FIP areas into attainment, range from at least 20 percent additional reductions for VOC to at least 30 percent additional reductions for NO_X.[61] In consideration of the limitations of available technology-based regulations, and to provide the regulated community with maximum flexibility when trying to achieve the shortfall reductions, EPA is proposing a facility-wide declining emission cap program.

The declining facility-wide emission caps will have a monthly compliance period (i.e., a single monthly emissions limit for the entire facility that declines annually as opposed to emission limits on single emission points), an annual reduction rate (4 to 9 percent for VOC, 6 to 9 percent for NO_X), and initial baseline emission caps (caps for the first 12 months of the program) established using anticipated implementation-year inventories (year 2001 projected inventories) for the universe of facilities included in the FIP cap program. The facilities subject to the FIP cap program

[60] EPA assumes that the South Coast's NO_X RECLAIM program will be submitted to EPA as a SIP revision and that EPA will take some form of approval action on NO_X RECLAIM so that the South Coast FIP area can be credited with those reductions. In the event that NO_X RECLAIM is not submitted to EPA in an approvable form, then EPA will prepare regulations for NO_X emissions similar to those proposed for the Ventura FIP area.

[61] The rates of reduction shown here represent the results of EPA's preliminary analysis of the FIP areas' emission inventories. Further analysis of these inventories is currently being performed and may ultimately impact the final rates of reduction for the FIP cap program. The reates of reduction may increase or stay the same as appropriate. The current rates of reduction analysis shows that a 4 percent to 9 percent annual rate of reduction for VOC and 6 percent to 9 percent for NO_X may be necessary to demonstrate attainment in the FIP areas.

will be those facilities that generate emissions of NO_X or VOC greater than or equal to 4 tpy in the FIP areas. The universe of facilities included in the FIP cap program is based on process lists or emission categories that make up a significant portion of the emissions necessary to be reduced to ensure attainment in the FIP areas.

In developing its proposal, EPA has drawn on its experience and involvement in other emission cap programs such as the CAA Title IV program (Acid Rain), the South Coast Air Quality Management District's Regional Clean Air Incentives Market (RECLAIM), and the general guidance provided by the proposed Economic Incentive Program (EIP) rules and guidance (58 FR 11110, February 23, 1993).

Discussed below are the source categories for which rules have been developed. These measures would be promulgated as complete regulations in the FIP but would not require emissions reductions until 2001 in order to allow the FIP areas time to develop measures which obtain the necessary reductions and to allow EPA adequate time to implement these measures to ensure attainment and progress towards attainment by the statutory attainment dates. The measures for stationary and areas sources would mandate a linear annual reduction of emissions from individual facilities with emissions greater than or equal to 4 tpy in order to accomplish necessary reductions not achieved through other FIP measures and federally approved SIP rules (facilities with emissions greater than or equal to 2 tons per year will be subject to exemption verification reporting requirements). Because EPA has chosen not to develop conventional control measures at this time for a portion of the VOC and NO_X inventory, the level of control for the FIP cap measures must be sufficient to make up for at least a 20 percent VOC and at least a 30 percent NO_X emission reduction shortfall.

(2) Reduction Rate. Assuming that the creditable State rules and FIP rules will meet minimum progress requirements (particularly in the South Coast FIP area) for the period up to 2000, the proposed FIP cap rules are designed to go into effect beginning in 2001 and to achieve reductions from each category of between 4 and 9 percent per year for VOC and between 6 and 9 percent per year for NO_X until the year 2005.[62] This design, for example, means that in 2001 a VOC-emitting facility would reduce its emissions at least 4 percent from its baseline emissions; in 2002 the same facility would reduce its emissions by at least 8 percent of its baseline emissions. By 2005, the facility's emissions would be reduced by at least 20 percent of its baseline (or year 2000) emissions.

(3) Withdrawal of Rules Based on SIP Progress. These proposed FIP cap measures serve as a strong incentive for State efforts, since they could be rescinded before their scheduled implementation dates if areawide emissions are reduced to the prescribed levels through the adoption and implementation of future SIP rules. In addition, any of these measures could be rescinded upon EPA approval of State or local measures that obtain the necessary reductions and which would not interfere with any applicable requirement concerning attainment and reasonable further progress, or any other applicable requirement of the CAA. EPA strongly encourages the State to adopt measures quickly and in a manner that will minimize adverse economic impacts.

(4) Relationship to Other Applicable FIP Provisions. Given the overlap between the source categories in the proposed FIP cap program (see section III.C.5.b.(2)) and those source categories regulated by traditional means, EPA is proposing to include the reductions achieved by the other regulations (i.e., the other FIP and/or SIP measures which are effective at the time of the FIP cap program's implementation) in the FIP cap program baseline setting procedures. This design means that EPA is assuming that all reductions required by other portions of the regulatory framework are achieved by the year 2001. EPA believes this design to be a necessity given the emission reduction shortfalls and attainment dates faced in the FIP areas. However, EPA seeks comment on this design and potential alternatives that will ensure attainment and progress prior to a given FIP area's attainment date. This design also assumes that facilities after 2001 would not be operating under two regulatory frameworks; rather, the traditional regulations are assumed to have achieved their associated reductions and the FIP cap regulations would make up for shortfalls necessary in the FIP areas. This issue will be examined periodically to determine the impacts of the interface and the ultimate reduction rate for the FIP cap program in the FIP areas.

In the proposed FIP cap regulations EPA assumed no participation of new sources in the program. EPA's design assumes that new sources will be subject to federally approved new source review rules and emission limits. However, EPA seeks comment on means for including new sources in the FIP cap program and alternatives to the current design.

(5) Implementation and Enforcement Issues. The emission reduction requirements derive from the areawide emission reduction requirements of the FIP, rather than from the normal Agency assessments of available technologies. As such, they may be costly and disruptive, and the prospect of their federal implementation, in the case of inadequate State progress, should inspire successful adoption of the SIP.

Over time, the State and local agencies can develop carefully tailored economic incentive programs or traditional rules based upon the most recent technologies and regulatory approaches. For example, the SCAQMD has recently adopted the RECLAIM program and also has a multi-million dollar technology development program to assist industry to identify and successfully apply the latest scientific approaches that can be employed to reduce pollutant emissions. With these types of resources and, most importantly, with additional time to develop the most feasible control approaches, the State and local agencies are in a superior position to construct regulations that avoid social and economic dislocation.

(a) Compliance mechanisms. As designed, the FIP cap program requires affected sources to submit facility compliance plans to the Agency for review by 1999. These plans must outline the facility's means to achieve the specific annual reductions from 2001 to 2005. The options for meeting the annual reductions include, but are not limited to, product reformulation, product substitution, control equipment, and, if necessary, production curtailments.[63]

EPA will review and approve or disapprove these plans depending on whether they achieve the required emission reduction requirements. Given that these plans will encompass multiple emission sources with different emission measurement methods, EPA believes that the compliance plan review effort will be resource intensive.

[62] This design assumes that the Sacramento area's ozone nonattainment classification is changed to allow for a year 2005 attainment date. If a 1999 attainment date for Sacramento is assumed, then the cap program in the Sacramento area would start with compliance plan submittal in 1998 and full reductions required in 1999, in order to achieve the earlier attainment date. The Ventura area's ozone nonattainment classification allows for a year 2005 attainment date.

[63] See section (i) for a discussion of the option of trading credits as a possible means of meeting reduction requirements.

For those sources subject to Title V operating permit regulations, the provisions of the compliance plans would be federally enforceable permit conditions. For such sources, procedures used in reviewing and approving the compliance plans would not supersede public participation and other requirements found in the Part 70 Title V regulations.

Compliance with the monthly caps established in the FIP cap program will be determined by two means. Routine inspections to determine whether or not monthly caps are met will be conducted. In addition, facilities subject to the FIP cap program will be required to certify that they met their monthly caps on an annual basis by submitting annual reports within 60 days of the close of each calendar year. Prior to the implementation of the FIP cap program, EPA will prepare a statistical showing that the aggregate effect of the specified averaging time is consistent with attaining the ozone NAAQS and satisfying applicable progress requirements on a typical summer day basis in accordance with the proposed economic incentive program rules and guidance (see 58 FR 11110, February 23, 1993). EPA seeks comment on the term of the emission caps (i.e., monthly as opposed to a shorter or longer timeframe) and the means by which to determine compliance at facilities subject to the FIP cap program.

(b) EPA Resources. EPA believes that the compliance mechanisms outlined above require a significant resource investment by the Agency. These resources include staff to review the compliance plan submissions and evaluate the subject facilities' compliance status. EPA seeks comment on alternative designs to those outlined in the FIP cap regulations that may reduce this resource burden (including the delegation of these responsibilities to the State or local agencies discussed elsewhere in this NPRM).

(c) Emission Quantification Mechanisms. EPA recognizes that in order to quantify mass emissions, the suggested emissions quantification mechanisms may need further development. EPA will be evaluating the methods outlined and alternatives for adequacy prior to implementation of the FIP cap program.[64] EPA may develop and propose additional methods to obtain the appropriate mass emission results required of the FIP cap program prior to its implementation. EPA seeks comment on the methods outlined in the proposed regulations and any alternative means for determining emissions from the affected source categories.

b. Control Approach— (1) Rule Structure. This overview explains the format used in the proposed FIP cap program rules.

All of the proposed rules contain sections discussing definitions, applicability, specific provisions, reporting, recordkeeping, testing, and monitoring requirements. The definitions section of each rule contains the definitions which apply only to that rule. The applicability section specifies the area to which the rule applies, who is subject to the rule, and references the sections and/or paragraphs of the rule to which subject persons must comply.

The specific provisions section of the rules specifies applicable VOC or NO_X limitations and requires subject persons to submit baseline VOC or NO_X emissions data to the EPA. Once implemented, the rules would require affected facilities to annually reduce VOC emissions by 4 to 9 percent and NO_X emissions by 6 to 9 percent beginning in 2001 and ending in 2005 to achieve at least a 20 percent VOC reduction and at least a 30 percent NO_X reduction overall. It is expected that subject facilities would continue to maintain VOC and NO_X levels at 2005 levels after 2005.[65] EPA may reduce the annual percent reduction requirement during one or more years if rules adopted by the local, State, and EPA (through the promulgation of additional FIP or national measures) achieve the VOC and NO_X reductions necessary to demonstrate progress toward attainment of the ozone standard.

The purpose of the reporting, recordkeeping, testing, and monitoring requirements of the proposed rules is to complement the compliance plan and to ensure their enforceability. The reporting section specifies annual reporting requirements (subject to certification requirements) to demonstrate compliance with the monthly caps and the recordkeeping section requires subject persons to maintain, for at least three years, all information necessary to verify compliance with the VOC and NO_X limitations. The testing and monitoring section of the rules require persons to test and/or install monitoring equipment to demonstrate compliance with the VOC and NO_X limitations as requested by EPA. The VOC and NO_X cap regulations incorporate the specific methods for reporting, recordkeeping, testing, and monitoring. EPA intends that facilities which use the incorporated test methods will have satisfied the requirements discussed in the proposed enhanced monitoring program[66] regarding the source-specific analysis otherwise required by the proposed enhanced monitoring program.

In addition to the proposed source category specific rules, EPA is proposing a general provisions section which will be applicable to all sources covered in each pollutant's cap program (i.e., one section for VOC sources and one for NO_X sources). The general provisions section includes definitions applicable to all of the rules and test methods and procedures referenced in the testing and monitoring sections of most of the rules.

(2) Applicability and Exemptions. The proposed rules are designed to regulate and limit VOC and NO_X emissions at subject facilities (process sources and other sources). Examples of process sources include extraction, manufacturing, fabrication, and combustion operations. Other sources include the use of solvent and paints (not directly used in extraction, manufacturing, and fabrication processes), VOC waste disposal and storage sites, and smaller combustion processes (for example, smaller internal combustion engines). The FIP cap rules are proposed for the following source categories:

For VOC:

(a) facilities which emit greater than or equal to 4 tons per year from any of the following processes or combination of these processes:

- Industrial and commercial solvents and coatings;
- VOC emissions associated with the manufacturing of products;
- Disposal of materials containing VOCs;
- Commercial food preparation and/or baking;
- Petroleum and natural gas extraction, processing, and storage;

For NO_X:

(a) facilities which emit greater than or equal to 4 tons per year of NO_X from any of the following processes or combination of these processes:

- Any boiler, furnace, oven, dryer, heater, incinerator, test cell and any solid, liquid or gaseous fueled equipment with a maximum rated capacity greater than or equal to 2 million Btu per hour;

[64] This issue may impact the structure of any emission reduction trading market established as a result of subsequent analysis. See discussion later in this section.

[65] Except in the case of the South Coast, where continued reductions may be necessary to achieve attainment. See the discussions elsewhere in this notice of EPA's use of section 182(e)(5) of Act.

[66] The proposed program was published on October 22, 1993—see 58 FR 54648.

• Any internal combustion engine with rated brake horsepower (bhp) greater than or equal to 50 bhp, regardless of operating time;

• Any gas turbine rated greater than or equal to 0.2 megawatts excluding any emergency standby equipment or peaking unit;

• Any petroleum refinery fluid catalytic cracking unit;

• Any petroleum refinery tail gas unit;

• Any kiln or calciner;

• Any equipment burning or incinerating solid fuels or materials;

• Any sulfuric acid production unit;

• Any portable combustion and process equipment;

• Any emergency standby equipment or peaking unit;

• Any NO_X source for which NO_X emissions reported to the State or local agency were equal to or greater than 2 tons per year for the calendar year 1990.

Only those sources which emit greater than 4 tons per year of NO_X or VOC are subject to the emission cap requirements found in the rules. Those sources which emit 2 tons per year but less than 4 tons per year in the above categories are exempt from the cap requirements provided that they maintain emissions below the 4 tons per year inclusion level.[67] However, EPA notes that the South Coast RECLAIM program could subject sources which emit less than 4 tons per year to the cap requirements to get additional necessary reductions. EPA encourages the South Coast to reduce its RECLAIM emissions threshold in order to achieve necessary reductions for attainment.

Rules for most of the source categories contain exemption levels to minimize potential impacts on small businesses. The proposed rules require owners or operators of exempt facilities to certify to the EPA by January 1, 2000, that they are exempt from the VOC and NO_X limitations of the rules and to submit calculations which demonstrate the VOC and NO_X emissions from their facility will not exceed the exemption level. If a facility exceeds the level on and after January 1, 2000, the source must notify EPA within thirty days that the exemption level was exceeded. The source would then comply with the VOC and NO_X limitations of the rule beginning on January of the calendar year following the exemption level exceedance. Once an exempt facility exceeds the exemption level, it would always be subject to the VOC and NO_X limitations of the rule.

(3) Determination of Baseline Emissions. The proposed FIP cap rules require baseline emissions and emission reductions to be calculated on a monthly basis. The rules require baseline emissions to be determined based on emission inventory records, production, throughput, or usage level. If daily emissions records are available for the period 1989–1990 and are consistent with the State or local agency's November 15, 1992 inventory submittal, then this data would be used. If daily emissions records are not available for the 1989–1990 period, then the baseline would be established based on the average daily emissions value calculated by dividing the average emissions over the 1989–1990 period by 730 days. These baseline emissions are annualized and reduced by the projected reductions from 1990 through the year 2000 (using anticipated control factors from control measure implementation). Finally the reduced baseline is prorated to establish monthly emissions caps by dividing annual emissions by twelve. The purpose for using the median or average value for calculating baseline emissions is to determine the representative emissions of the affected facility.

(4) Compliance Plans. This proposed regulatory format requires owners and operators of subject facilities to calculate total VOC and NO_X emissions from all process and area emissions sources at the facility for the base year 1990, adjust these emissions by the projected reductions to be achieved by 2000 and then reduce the year 2000 emissions by 4 to 9 percent for VOC and 6 to 9 percent for NO_X per year from 2001 through 2005. Owners or operators could use a variety of methods to reduce VOC and NO_X emissions by installing new control equipment and/or increasing control efficiency of existing equipment, process modifications or substitutions, or reducing operating schedules.

The specific provisions sections of the rules require each owner or operator of a subject facility to prepare a VOC and/or NO_X emission reduction compliance plan for the years 2001 through 2005 and submit the plan to EPA by January 1, 1999. EPA could comment on any plan and request additional information if needed to adequately evaluate the requirements of the plan. Each owner or operator would submit a revised plan to EPA within 30 calendar days of the receipt of EPA comments. The source would then comply with the provisions of the most recent plan approved by EPA. The owner or operator would include the following information in the plan:

• Name, title, address, and telephone number of the owner or operator of the facility, and the person responsible for preparing the plan;

• An estimate of baseline (year 2000) VOC and/or NO_X emissions from all emissions sources at the facility;

• Methods to be employed to achieve the annual percent emissions reduction;

• Test or demonstration methods used to demonstrate achievement of the VOC and/or NO_X emissions reductions;

• Projections of annual VOC and/or NO_X emissions for each source through the year 2005 after application of the VOC and/or NO_X reduction methods described in the plan; and

• For all sources, all information required as part of the facility's Title V operating permit. If a source is not subject to Title V, then the source would submit information similar to that provided by sources subject to Title V.

EPA is proposing to require submittal of the plans two years prior to the effective date of the limitations of the rules (i.e., January 1, 1999) to obtain a more accurate estimate of baseline VOC and NO_X emissions, to identify subject facilities, and to encourage subject facilities to develop a comprehensive, long-range control strategy for reducing VOC and NO_X emissions.

The submittal of baseline VOC and NO_X emissions data in 1999 will provide the EPA with more accurate, facility-specific data for evaluating progress toward attainment of the ozone NAAQS and will allow EPA to evaluate whether the cap rules should require higher or lower VOC and NO_X reductions than the proposed annual rates. In addition, this information is important to EPA because it will provide a current estimate of emissions for the affected sources. Hundreds of small, uninventoried facilities are located in the FIP control areas account, in the aggregate, for a significant source of the VOC and NO_X emissions. Although the databases contain area source emissions estimates to account for uninventoried sources classified under some source categories, the area source emissions estimates are based on inexact data (i.e., the amount of coating or solvent used in the county, etc.) rather than emissions associated with individual facilities in the control area.

EPA will also use the emission reduction plans submitted to identify the number and location of subject facilities. This determination is needed to estimate resource requirements for

[67] It is important to note that while sources which emit less than 4 tons per year of NO_X and VOC are not required to comply with all of the elements in the FIP cap program, if a source which is classified as being in one of the categories listed emits greater than 2 tons per year but less than 4 tons per year, then that source will be subject to annual exemption verification requirements to ensure that it remains exempt from the other requirements of the FIP cap requirements.

conducting facility inspections for enforcement of the rules. Enforcement personnel will also use the plans to prepare for facility inspections.

(5) Reporting, Recordkeeping, and Compliance Requirements. Owners or operators of facilities which would be subject to the VOC and NO_X limitations of the rules would also be subject to annual reporting requirements.

Owners or operators would certify to the EPA by March 1 of each calendar year, beginning in 2002, that they have complied with all of the requirements of the rule for the previous calendar year on a monthly basis. Owners or operators would also submit documentation of the methods used to achieve the VOC and NO_X reductions.

(6) Penalties. In the FIP cap rules, EPA proposes an exceedance-based approach to establishing statutory maximum penalties for monthly emission cap exceedances. EPA favors the use of an exceedance-based approach to establishing penalties for emissions limit violations in cap programs and as such, is proposing such an approach for the FIP cap program. The FIP cap rules specify that each 50 pound increment or fraction thereof above a monthly emissions cap would be considered a violation for federal enforcement purposes. For example if a facility was subject to a 2000 pound per month emissions cap and in one month exceeded its emissions cap by 500 pounds, then that facility would have been liable for 10 violations when establishing the statutory maximum penalty for federal enforcement purposes. EPA is seeking public comment on the specific increment (50 pounds per violation—also referred to as a violation-increment) found in the proposed regulations. EPA will consider whether values in a range up to 200 pounds per violation are necessary or adequate. However, the ranges discussed in the FIP should not be construed as what would necessarily be required for all types of cap programs or economic incentive programs including those developed at the State or local level either as a supplement to the FIP cap program or as a replacement for the FIP cap program. For example, State/local agencies may design programs which incorporate enforcement authorities that are unavailable to EPA (e.g., mandatory minimum civil penalties for violations) and which may compensate for somewhat higher violation-increments. In addition to the emissions limit violation penalties, all of EPA's enforcement authorities under section 113 of the CAA apply in the FIP cap program.

Following is a detailed description of each source category for which EPA has proposed emission cap rules.

c. Industrial and Commercial Solvents and Coatings— (1) Source category description. The industrial and commercial solvents and coatings source category includes emissions from dry cleaners; degreasing operations; and all types of coating and/or solvent clean-up operations. Examples of coating operations include, but are not limited to: aerospace component coating; automobile and light-duty truck assembly-line coating; can and coil coating; paper, film, and fabric coating; flatwood products coating; large appliance coating; magnet wire coating; marine vessel coating; metal and wood furniture coating; miscellaneous metal parts and products coating; motor vehicle and mobile equipment refinishing; plastic parts coating; and graphic arts (printing) operations.

While EPA has proposed an exemption level similar to that found in the traditional regulations for this source category, EPA seeks public comment on the exemption level found in the rules and will review this exemption level prior to program implementation.

(2) Issues. The major issue on which EPA seeks comment is whether these emissions should be covered by the cap rule as proposed or by a manufacturers bubble approach (see section (i) for discussion). The FIP cap rule approach would provide the owners or operators of facilities using industrial and commercial coatings and solvents the most compliance flexibility. Owners or operators could use a variety of methods to comply with the rule. Such methods include installing new emission control systems or increasing the efficiency of existing control devices, process modifications or substitutions, or limiting the amount of solvent used at the facility. Process modifications including installing new, more efficient processes, increasing the efficiency of existing processes, or limiting process operating time. Substitutions include the replacement of solvent-based coatings with low-VOC coatings.

d. VOC Emissions Associated with the Manufacturing of Products— (1) Source category description. The rule for this source category will regulate VOC emissions from manufacturing and fabrication processes used to produce organic chemicals, gases, rubber and miscellaneous plastic products. Examples of products manufactured or fabricated by processes that would potentially be covered by this rule are:

- Industrial organic chemicals and gases. Industrial organic chemicals include, but are not limited to, gum and wood chemicals, cyclic organic crudes and intermediates, organic dyes and pigments, and 280 organic chemicals (listed in the TSD).
- Drugs which include, but are not limited to, medicinal chemicals and botanical products, pharmaceutical preparations, in vitro and in vivo diagnostic substances, and biological products.
- Soaps; detergents; cleaning, polishing, and sanitizing preparations; surface active agents, finishing agents, sulfonated oils, and assistants; and perfumes and cosmetics.
- Food additives and sweeteners.
- Paints, varnishes, lacquers, enamels, inks, primers, paint removers, thinners, stains, shellacs, cleaners, putty, coatings, adhesives, fillers, sealants, explosives, and carbon black.
- Fabricated rubber and miscellaneous plastics products including, but not limited to, tires and inner tubes; rubber and plastic footwear, hose, belting, gasket, packing, and sealing devices; and molded, extruded, and lathe-cut mechanical rubber goods.

The proposed rule for this source category contains an exemption level of 10 pounds per day of VOC emissions. While EPA has proposed an exemption level similar to that found in the traditional regulations for this source category, EPA seeks public comment on the exemption level found in the rules and will review this exemption level prior to program implementation.

e. Disposal of Materials Containing VOCs

(1) Source category description. The proposed rule for this source category would regulate VOC emissions at organic waste disposal facilities. Organic waste disposal facilities include any facility which is operated as a business or owned by a state or municipality and is used to treat, store, or dispose of organic wastes that contain VOCs or to reclaim or recycle organic compounds or gases from organic wastes that contain VOCs. Examples of organic waste disposal facility include: landfills; publicly owned treatment works (POTWs); hazardous waste treatment, storage, and disposal facilities; and sewage sludge, solid waste, and hazardous waste incinerators. Waste solvents, coatings, and other products which contain VOCs are the major source of VOC emissions at these facilities. The VOCs contained in consumer products which are flushed to POTWs after use may be a major source of VOCs at POTWs. Given the limited data available on emissions from these facilities, no exemption level is included in the proposed rule. Upon

receipt of baseline data in 1999, EPA will evaluate an exemption level for this source category.

(2) Issues. EPA is requesting any information which can be used to characterize the number, size, and location of, and VOC emissions from organic waste disposal facilities located in the FIP areas. EPA is also requesting public comment on the need for this rule because the reductions associated with the industrial and commercial solvent use and the consumer and pesticide products rules may result in a reduction in VOC emissions at organic waste disposal facilities.

f. Commercial Food Preparation and/or Baking—(1) Source category description. The proposed rule for this source category will regulate VOC emissions from commercial food preparation facilities. Commercial food preparation facilities include commercial bakeries and commercial charbroiling, fruit and vegetable preservation, grain mill production, malt beverage production, vegetable oil production, and wine- or brandy-making facilities, and restaurants involved in any of the aforementioned activities. The rule for this source category includes an exemption level of 10 pounds per day of VOC emissions. While EPA has proposed an exemption level similar to that found in the traditional regulations for this source category, EPA seeks public comment on the exemption level found in the rules and will review this exemption level prior to program implementation.

(2) Issues. EPA is requesting public comment on methods for adjusting requirements for sources which barely exceed the exemption levels. For these small sources, it will become increasingly onerous to reduce emission levels. EPA is considering implementing the initial emission reduction requirements at a later date (though within a timeframe consistent with the attainment of the ozone NAAQS in the FIP areas) for these sources.

g. Petroleum and Natural Gas Extraction, Processing, and Storage—(1) Source category description. The proposed rule for this source category would regulate VOC emissions from all VOC sources at oil and natural gas drilling wells (both on-shore wells and wells located offshore that, by virtue of the rule for onshore wells, would then be regulated by EPA's Outer Continental Shelf regulations in 40 CFR part 55); oil refineries; and petroleum, gasoline, and natural gas storage facilities. Storage facilities include extraction and refinery facilities, bulk gasoline plants and terminals, or any other facility which distributes petroleum, gasoline, or natural gas to retail outlet and wholesale purchaser-consumer facilities.

The intent of this proposed rule is to reduce VOC emissions associated with petroleum and natural gas production, processing, and storage without limiting gasoline supplies. Retail gasoline service stations are exempted from this rule because these facilities already are complying with existing regulations.[68]

(2) Issues. EPA is undecided on whether wholesale purchasers/consumers should be subject to the VOC limitations of this rule. A wholesale purchaser/consumer includes any business which is the ultimate consumer of natural gas, gasoline, or other petroleum-based fuel. Examples of wholesale purchaser/consumers include airports and fleet vehicle operations. Public comment is requested on potential control methods for wholesale purchasers/consumers (other than restricting the amount of petroleum, natural gas, or gasoline purchased) which could be applied under the rule.

h. NO_X emissions sources— (1) Source category description. The proposed rule for this source category will regulate NO_X emissions in Ventura County from the following processes:

- Any boiler, furnace, oven, dryer, heater, incinerator, test cell and any solid, liquid or gaseous fueled equipment with a maximum rated capacity greater than or equal to 2 million Btu per hour;
- Any internal combustion engine with rated brake horsepower (bhp) greater than or equal to 50 bhp, regardless of operating time;
- Any gas turbine rated greater than or equal to 0.2 megawatts excluding any emergency standby equipment or peaking unit;
- Any petroleum refinery fluid catalytic cracking unit;
- Any petroleum refinery tail gas unit;
- Any kiln or calciner;
- Any equipment burning or incinerating solid fuels or materials;
- Any sulfuric acid production unit;
- Any portable combustion and process equipment;
- Any emergency standby equipment or peaking unit;
- Any NO_X source for which NO_X emissions reported to the state or local agency were equal to or greater than 2 tons per year for the calendar year 1990.

The proposed reporting exemption level of 2 tons per year of NO_X emissions is based on work done by the SCAQMD in their development of the RECLAIM program.

(2) Issues. EPA is requesting comment on alternative exemption levels particularly for the FIP areas for these sources. For instance, the participation level could be as low as 2 tons per year, with an exemption level of 1 ton per year in the control areas. With respect to the South Coast FIP area, EPA is intending to use the RECLAIM NO_X program's reductions for use toward attainment in lieu of implementing the FIP cap NO_X program (this strategy may also be used in the case of a VOC RECLAIM program if the South Coast should develop such a program). If EPA is unable to approve the NO_X RECLAIM program, EPA would promulgate the NO_X cap program in the South Coast to achieve comparable reductions.

i. Alternatives to the FIP cap program—At present, EPA has identified several alternatives to the design of EPA's proposed FIP cap program. For example, the FIP cap program does not include a trading component (i.e., the current proposal does not provide for trading of emission credits to achieve reductions). In addition, the industrial and commercial coatings and solvents source category could be regulated at the manufacturer level as opposed to the user level. Finally, the use of other economic instruments such as fees is also an alternative to the cap program proposed today. EPA seeks public comment on any of the following issues as well as any other issues or designs that may be available to achieve equivalent emissions reductions.

(1) Trading of emissions. Although EPA's thinking on how to incorporate trading into a facility-wide emissions cap program has advanced in the last several months, EPA believes that the trading of emissions in the three FIP areas to meet facility emissions caps requires further study prior to implementation. To this end, EPA will be examining many of the issues that arise as a result of the use of emissions trading to meet emissions cap requirements. Some of the issues that will be examined are:

- The impacts of emissions trading on the FIP areas' ability to meet ozone attainment requirements;
- How enforcement of applicable requirements will be carried out with a trading system;
- Whether VOC trading would pose an increased exposure to toxic emissions (or hazardous air pollutants, many of which are also VOCs) and whether toxics trading would be allowed given EPA's work on Title III regulations and EPA's commitment to environmental justice;

[68] Service stations will be further regulated through category specific regulations proposed elsewhere in this notice.

• Whether differences in accuracy of emissions quantification methods would necessarily limit trading to source emissions that could be quantified within some minimum level of accuracy, or to limit trading to sources which are in the same source category;

• Whether there would be an economic impact on the three FIP areas because of emissions trading;

• The interface between trading and new source review requirements in the FIP areas;

• Market structure issues, such as the length of the compliance period, the type of market established, market administration, implementation of trades, and general data tracking involved with trading; and

• Resource issues involved with the implementation of a trading system (i.e., can EPA provide the additional resources needed to administer a trading program?).

(2) Manufacturers Bubble for Industrial and Commercial Solvents and Coatings. (a) Introduction. All of the California FIP areas suffer from emission reduction shortfalls after application of the proposed conventional FIP stationary, area, and mobile source controls. These shortfalls must be accounted for in order to bring the FIP areas into attainment. In this NPRM, EPA is discussing and taking comment on the use of a statewide manufacturers "bubble" rule as an alternative to the cap program to obtain required reductions in the FIP areas. Given that manufacturers sell products throughout California, EPA believes, based on its experience with other designs,[59] that statewide regulation is the only effective means of controlling these emissions at the manufacturer level. The intent of EPA's extensive discussion is to provide sufficient detailed discussion of the manufacturers bubble concept so that between the proposal of the FIP and its final promulgation, EPA can develop and include in the final FIP promulgation a measure in final regulatory form that will incorporate the concepts discussed (EPA will avoid the task of a supplemental proposal by discussing the manufacturers bubble in detailed form). The purpose of this rule would be to reduce VOC emissions from industrial and commercial solvents and coatings. This reduction would be realized by limiting the VOC content of these products at the point of manufacture. This type of regulation is consistent with EPA's new commitment to preventing pollution at the source, rather than at the end of a process or processes.

This manufacturers bubble rule would serve as a method to regulate the emissions of VOCs from industrial and commercial solvents and coatings. This proposed regulatory program would establish a VOC content limit that companies who manufacture solvents and coatings would have to meet, on average, for all of their products sold in the State of California. EPA is proposing this alternative in preliminary form only at this time and solicits the public's comments on the concept and technical merit of this program. If this approach is ultimately selected, actual rule language will follow, and will incorporate the concepts proposed in this NPRM, as well as ideas and concerns expressed in comments received.

While EPA realizes that the most straightforward means of regulation would be to put a firm limit on the maximum allowable VOC content on every coating and solvent, EPA has determined that this regulatory strategy may become, at some point, excessively onerous on the manufacturers and users of industrial and commercial solvents and coatings, and would limit the availability of commercially useful solvents. Imposing content limits stringent enough to obtain the necessary reductions in VOC emissions needed to bring the FIP areas into attainment may be technology forcing. In addition, EPA does not have the resources to effectively research the solvent and coating industries to determine feasible content limits for every coating and solvent, especially considering the court-ordered deadline for promulgation of this FIP.

EPA intends that the manufacturers bubble rule discussed here would achieve the VOC reductions necessary to bring the FIP areas, along with other control measures discussed elsewhere in this action, into attainment while minimizing any technology-forcing aspects of the rule. EPA believes that, within the FIP context, promulgating a rule that allows manufacturers to comply by averaging VOC content may provide necessary emission reductions with a minimum of adverse regulatory impact. Such a rule would allow manufacturers the flexibility necessary to comply at minimum cost.

(b) Withdrawal of rules based on SIP progress. As noted elsewhere in this NPRM, the manufacturers bubble program rule may be affected (i.e., rescinded or modified) by State or local measures which are adopted and implemented prior to implementation of the manufacturers bubble program and which represent the necessary emission reductions from industrial and commercial solvents and coatings.

(c) Relationship with other FIP provisions. EPA intends that the manufacturers bubble rule discussed in this subsection will work simultaneously with the FIP cap program proposed elsewhere in this NPRM to obtain a significant portion of the reductions needed to reach attainment of the ozone NAAQS in the FIP areas. However, EPA is considering additional options for the interaction of these two programs (the FIP cap program for these emission sources and the manufacturers bubble for these same sources) and requests public comment on the merit of these options. EPA is considering using the manufacturers bubble program to preempt portions of the cap program (particularly the FIP cap program covering industrial and commercial coatings and solvents). The manufacturers bubble program may be used to relieve portions of the cap program requirements either for a particular source category (such as industrial and commercial solvents and coatings), or to reduce the total VOC emission reductions expected from the cap program. The following sections provide a detailed discussion of the proposed manufacturers bubble program.

(d) Implementation date. EPA is proposing that the manufacturers bubble rule would be implemented January 1, 2001 to be consistent with the implementation date of the FIP cap program discussed earlier while achieving the necessary reductions for attainment, unless it is withdrawn prior to that date on the basis of State or federal progress in reducing emissions of VOCs.

(e) Applicability. This proposed rule would affect U.S. manufacturers and importers who offer for sale in the State of California industrial and commercial solvents and coatings. These solvents and coatings include, but are not limited to, the categories listed in section iii.c.5.c.(1) of this NPRM.

EPA requests comment on the inclusion or exclusion of these and other categories from the definition of industrial solvents and coatings.

(f) Exemption limit. EPA proposes and requests comment on two options for determining the minimum size of a manufacturer that would be subject to this rule. It is EPA's intention to include in this rule only those sources whose products have a potential to emit a nontrivial amount of VOC to the atmosphere. Therefore, EPA proposes that only those manufacturers whose

[59] In particular, EPA is aware of CARB's efforts to design a similar program for consumer products.

products have a potential to emit at least 0.5 ton of VOC in California in a calendar year be subject to this manufacturers bubble rule. This potential would be measured by multiplying the manufacturer's total annual sales in the State of California by the VOC content of those products.

As an alternative to using potential VOC emissions as a measure of the minimum manufacturer size that would be subject to this rule, EPA requests comment on using a manufacturer's pretax gross revenues to determine their relative potential to emit VOCs. With this method of exemption measurement, manufacturers of industrial and commercial solvents and coatings with annual pretax gross revenue below $500,000 would be exempt from this rule. Another alternative to determining this exemption level is to base it on annual unit sales of VOC-containing compounds. Under this option, a manufacturer who sold less than 100,000 units of VOC-containing materials in the State of California in one calendar year would be exempt from the rule.

(g) Conceptual design. This rule would establish VOC content limits for a variety of solvent and coating categories (see the applicability section of this discussion for details). These content limits would be derived from EPA's published Control Technique Guidelines,[70] as well as the reasonably available control technology/best available retrofit control technology (RACT/BARCT) determinations established by CARB or current District rules. Manufacturers would be in compliance with this rule if the average VOC content of their products was less than the average content limits set for those categories that the manufacturer produced. This average would not be a simple arithmetic average. Instead, it would be a weighed average, where the weights on VOC content would be derived from the demonstrated number of units sold by that manufacturer during the compliance period in the State of California. This averaging is expressed mathematically in the following formulas:

$$\text{Average Content Standard} = \frac{\sum_{i=1}^{n} VOC_i}{\frac{1}{N}\sum_{i=1}^{n} VOC_i}$$

$$\text{Average Emissions} = \sum_{i=1}^{n} VOCC_i SW_i$$

$$SW_i = \frac{S_i}{\sum_{i=1}^{n} S_i}$$

Where:
N=Number of Products;
i=Product Index;
$VOCC_i$=VOC content of product i;
SW_i=sales weight of product i
S_i=sales of product i
VOC_i=Content Standard for the ith product;

A manufacturer will be in compliance if:

Average Emissions ≤ Average Content Standard

That is, if average emissions are less than or equal to the average content standard, the manufacturer is in compliance.

EPA currently is proposing that the compliance period be quarterly. Prior to the implementation of the manufacturers bubble program, EPA will prepare a statistical showing that the aggregate effect of the specified averaging time is consistent with attaining the ozone NAAQS and satisfying applicable progress requirements on a typical summer day basis in accordance with the proposed economic incentive program rules and guidance (see 58 FR 11110, February 23, 1993). However, EPA is also considering annual, monthly, and flexible compliance periods, and is soliciting comment on the appropriateness of the duration of these compliance periods.

EPA is also soliciting comments on establishing a single VOC content limit for all industrial and commercial solvents and coatings, which would be the level that a manufacturer's sales weighted average must be less than or equal to in order to be in compliance. This option differs from the averaging scheme discussed above in that instead of having several VOC content limits for each source subcategory that would be used to determine if a manufacturer was in compliance, a single VOC content limit for all industrial and commercial coatings and solvents would be established. Manufacturers products would have to be less than or equal to this content limit, on average, in order to comply with the rule. This option is exhibited mathematically in following formulas:

$$\text{Single Content Standard} = \frac{\sum_{i=1}^{n} VOC_i}{\frac{1}{N}\sum_{i=1}^{n} VOC_i}$$

$$\text{Average Emissions} = \sum_{i=1}^{n} VOCC_i SW_i$$

$$SW_i = \frac{S_i}{\sum_{i=1}^{n} S_i}$$

Where:
N=Number of Products;
i=Product Index;
$VOCC_i$=VOC content of product i;
SW_i=sales weight of product i
S_i=sales of product i
VOC_i=Content Standard for the ith product;

A manufacturer will be in compliance if:

Average Emissions≤Average Content Standard

That is, if average emissions are less than or equal to the content standard, the manufacturer is in compliance.

While the proposed manufacturers bubble rule provides compliance flexibility for manufacturers with several products, requiring manufactures that produce only one solvent or coating to meet content limits could put them at a disadvantage. Because of this, EPA is soliciting comments on options to ease the regulatory burden on manufacturers with one product. Specifically, EPA is considering the following options:

- Including these manufacturers despite the competitive disadvantage
- Excluding these manufacturers from the rule
- Raising the minimum size manufacturer that would be subject to the rule for these manufacturers

(h) Recordkeeping and reporting. To demonstrate compliance, EPA will require manufacturers subject to this proposed manufacturers bubble rule to submit documentation to EPA. This documentation will be submitted in two parts. The first part will be a plan describing what products the manufacturer intends to market during that compliance period, the VOC content of each product, an estimate of their sales during the compliance period, and how the manufacturer intends to conclusively show what the sales of those products during the compliance period actually were. EPA will review this plan for completeness and the viability of the proposed sales reporting method. EPA will approve or disapprove this submission within the 90 days of the compliance period. In the

[70] These limits could be expressed in pounds per gallon (grams/liter), weight percent, or volume percent of VOC. EPA seeks comment for a preferred means of expressing these limits.

case of an incomplete submittal or disapproval, EPA will notify the submitting manufacturer of the deficiencies, and will require another submittal before the end of the second quarter of the compliance period.

The second part of this compliance demonstration will be submitted to EPA at the end of the compliance period. This document will contain the sales demonstration for each of the manufacturer's products that are subject to this manufacturers bubble and their VOC contents. This demonstration will follow the methodologies approved by EPA in part one of the compliance demonstration. Manufacturers will be required to retain all documents pertaining to this compliance demonstration for a period of five years. EPA solicits comments on these proposed recordkeeping provisions.

(i) Implementation and enforcement issues. Because of EPA's limited resources, the agency intends to require manufacturers subject to this proposed rule to structure their compliance demonstrations in such a way so that the agency can minimize its review and enforcement costs. EPA invites comment on ways to accomplish this goal. The agency invites comments from other entities with experience in designing and implementing these types of manufacturers bubble programs. EPA especially seeks comment on ways to reduce the cost of enforcement against manufacturers with a potential for multiple inspection locations.

(3) The use of other economic instruments to incentivize emission reductions. EPA is also examining the use of other economic instruments to achieve emission reductions equivalent to the proposed FIP cap program. The primary instrument that EPA is considering is the use of emission fees to accomplish the necessary reductions in the FIP areas. The use of fees will involve examining at least the following issues:

- Fee structures: how much should be charged for a given quantity of pollution and how will the fee structure affect the FIP areas' ability to attain the ozone NAAQS? Should fees be constant up to an allowable emissions limit and increase as excess emissions increase?
- Permitting issues: how will NSR and other permitting issues be addressed?
- Enforcement issues: how will EPA or the FIP areas enforce a fee program?
- Economic impacts: how will the use of fees affect the FIP areas' economies?

EPA seeks public comment on the above fee-related issues as well as comment with respect to the use of other economic incentive strategies not discussed in this proposal.

D. Mobile Sources

1. Overview of Mobile Source Issues and Measures—*a. Emissions Credit for the California Motor Vehicle Control Program.* The California LEV program relies on advanced emission control technologies, clean gasoline, and an on-board diagnostic (OBD) system, which together with enhanced I/M, or its equivalent, are designed to assure that in-use vehicles emit at levels close to their respective emission standards. EPA is confident that the LEV program will achieve substantial emission reductions beyond those which will result from federal cars. Emission reductions for the LEV program used in the FIP reflect a substantial reduction in the rate of emission deterioration compared to current vehicles.

EPA believes that the California LEV program has addressed the problem of excessive in-use emission deterioration with its on-board diagnostics program, which requires the identification of individual vehicles whose emissions exceed the certification standards by more than 50 percent. Furthermore, ARB's assessment of the new technology which will be used to comply with LEV standards has identified many new components and control techniques which will improve emission durability. These features of the LEV program will help assure that in-use vehicle emission deterioration will be substantially reduced from current levels and that the low emission attributed to the program by ARB will be realized in-use.

b. Summary of Mobile Source FIP Measures—In 1990, passenger cars, other highway vehicles, nonroad engines and equipment, and the transportation facilities used in interstate commerce produced from 53 to 63 percent of the total inventory of volatile organic compounds (VOCs) and from 70 to 94 percent of the total inventory of oxides of nitrogen (NO_X) in the FIP areas covered by this proposal. In order to demonstrate attainment of the ozone standard in these areas, it will be necessary to propose regulations which assure significant reductions in mobile source emissions—beyond those already expected from the continued turnover to newer, cleaner vehicles and engines. The mobile source category covers a very broad range of sizes of equipment, types of fuels, uses and operating modes, and extent of current pollution control. Therefore, there is no one measure or even one uniform type of measure which is proposed across the category to achieve the reductions needed for the attainment plans.

In addition to those measures that are required in all States by the Clean Air Act Amendments of 1990, and those measures being implemented by the State of California and local agencies, EPA considered measures requiring cleaner vehicles and engines via further improvements in technology or through incentives for users to select alternatives with lower polluting characteristics. EPA also developed measures which will achieve emission reductions from other remaining mobile source categories, both to provide sufficient reductions for attainment and to ensure that each category of emission source was contributing to the solution. The following specific measures were developed.

(1) Programs for Light Duty Vehicles. EPA expects the California Low Emission Vehicle (LEV) program will substantially reduce emissions from cars and light duty trucks, compared to federal standards. However, despite the use of advanced technologies and the OBD requirements, ARB projects LEVs will exceed their certification standards in-use. Emissions above the certification standards will occur because some models may experience more in-use deterioration than expected, or because individual vehicles experience component failure or improper maintenance which is not immediately corrected by the various existing in-use compliance programs, including enhanced I/M.

Because the magnitude of the emission reductions needed for attainment is so great, the adoption of further measures to reduce these in-use emissions will help reach attainment of the ozone standard. EPA is therefore seeking comments on the need for and benefits of adopting an enhanced in-use compliance program which would provide extra emission reductions above and beyond the substantial reduction provided by the California LEV program.

Specifically EPA is considering three approaches. The first would modify the current federal recall program to initiate recalls based on the emission results of vehicles tested in their as-received condition, but from vehicles which are subject to the new enhanced I/M program and thus should be well maintained. Obviously tampered or abused vehicles would also be excluded from that sample. This differs from current practice and would result in a shift in responsibility for ensuring low in-use emissions from the consumer to the manufacturer.

The second approach would make manufacturers responsible for vehicle repairs in those cases where vehicle

failure rates for a particular model in an enhanced I/M program exceed a threshold level (e.g., greater than 5 percent within the first 5 years). This approach (i.e., an I/M-based, selective recall program) also provides an incentive for vehicle manufacturers to increase the durability and reliability of their designs.

The third possible program involves adoption of a requirement that the on-board diagnostic system of new vehicles be capable of communicating, to on-road sensors, the operational status of the emission control system (i.e., whether a fault has been detected). This approach would allow for the immediate detection of high emitting vehicles so that they may be submitted for repair.

(2) Programs for Medium Duty Vehicles. California's medium duty standards for 1995 and later model years apply to all vehicles between 6000 and 14,000 pounds Gross Vehicle Weight Rating (GVWR). Manufacturers have previously been able to certify medium duty vehicles over 8500 pounds under the less stringent heavy duty standards and procedures. California rules require further reductions to be phased in between the 1998 and 2003 model years, through a California medium duty LEV program. EPA proposes to accelerate the medium duty LEV program phase in and to require additional emission reductions. EPA is also requesting comment on including all 1999 and later model vehicles certified under California's medium duty LEV program (as modified by the FIP) in an enhanced in-use compliance program similar to that described for light duty vehicles. An option to certify engines used in these vehicles under the stringent heavy duty engine program described below is also available.

(3) Programs for Heavy Duty Vehicles. Currently, heavy duty engines for highway vehicles are certified to national emission standards; no waiver is in place for the State of California to enforce different standards for engines sold in the state. EPA proposes that, beginning with the 1999 model year, more stringent standards would apply for NO_X and HC exhaust from heavy duty engines sold in California, and strict evaporative hydrocarbon requirements would also be applied to prevent a shift from diesel to gasoline fuel which could make reductions in NO_X easier but would result in higher HC emissions. As with light duty vehicles, the FIP proposes additional measures to enhance in-use compliance for the engines' full operational life, including as-received recall requirements. The FIP also proposes to include some pre-1999 model year heavy duty vehicles in the I/M program.

Since the emission reductions from the heavy duty engines are very important to the attainment demonstration, it is also necessary to ensure that the fleet operated in California continues to experience normal turnover. The introduction of tighter standards can work against turnover, however, if heavy duty vehicle owners perceive that costs will rise or that new technology is risky. To ensure a normal turnover in heavy duty engines, the FIP proposes a declining average NO_X level for operating fleets starting in the year 2000. The decline in average NO_X will reflect the historical level of new engine purchases and old engine retirements..

Many trucks operating in California are also engaged in interstate commerce. California Air Resources Board (CARB) data show that about 20 percent of the mileage accumulated for heavy-duty vehicles in California is from trucks registered in other States. If new emission standards are adopted for California trucks, the interstate trucks would likely remain certified only to the less stringent federal standards, and their use in California could increase, preventing the new California standards from achieving their full potential for emission reduction. Tighter emission standards only on California registered trucks could impose a cost burden on California shipping firms that would not exist for shippers based outside of the state. EPA wants to avoid such a competitive disadvantage for trucking firms based in California since it could result in even more operation by out-of-state trucks, and is requesting comment on two options for a policy to deal with federally certified interstate trucks driving in California. These programs could be implemented together or separately.

First, starting in 1999, EPA proposes that any time a federally certified truck (i.e., not meeting the FIP standards and not included in a California fleet averaging program) with multiple-state registrations operates in the state, it could make no more than one stop in either the South Coast, Ventura, or Sacramento FIP areas. Any pickup or delivery would be considered a stop. Also interstate trucks making a stop in one of the FIP areas would not be permitted to make more than two stops statewide.

Second, starting in 2005, EPA is proposing to require all trucks which do not meet FIP standards operating in the state to be certified to the federal emission standards for 1998 and later model engines. Preventing earlier models from operating in California would greatly reduce the emission contribution from the interstate portion of the heavy duty fleet.

(4) Programs for Nonroad Vehicles and Engines. EPA has begun the process of setting national emission standards for a wide variety of nonroad sources including, but not limited to, small spark ignition engines used in lawn and garden and other utility equipment, recreational vehicle and marine engines, and heavy duty farm and construction equipment. In addition to these national standards, special California-only standards are proposed in the FIP for certain subcategories of engines and equipment:

(a) Nonroad Heavy Duty Engines (engines at or above 50 horsepower, 37kW). Phase 1 of the FIP proposal incorporates the national program for control of NO_X from new nonroad heavy-duty engines which will be published in final rulemaking by May 1994. The FIP also proposes standards for HC, CO, particulates, and smoke. These standards are consistent with the nonroad equipment standards which have been adopted in California. The effect of Phase 1 is to extend the application of the California standards to farm and construction equipment which California is currently pre-empted from regulating.

New engine standards would be phased in on a national basis by engine size over four years beginning January 1996. The national standards apply to all compression ignition engines at or above 50 horsepower (37kW) except engines used in underground mining activity, aircraft, marine vessels, or to propel locomotives.

Phase 2 of the FIP proposal for this equipment category contains a program to ensure that nonroad engines over 50 horsepower used in the FIP areas meet stringent NO_X and HC standards over their full useful lives. The program includes a combination of low NO_X and HC standards, very stringent ILEV evaporative requirements, and other elements of an enhanced in-use compliance program. Requirements are also proposed for engine rebuilds.

For Ventura and the South Coast, the FIP proposes the same numerical NO_X standard for nonroad engines as is proposed for on-highway heavy duty engines. It proposes a less stringent standard for nonroad equipment used in the Sacramento area, because less NO_X reduction is needed for attainment.

Nonroad engines and equipment are generally not registered or licensed by a state, with the exception of recreational boats. This fact makes it difficult to administer and enforce a rule for

equipment that is different in California (or even in some areas of California) than it is in the rest of the country. But if these subcategories are to contribute their share to the attainment plan (and their share can be quite large as all other types of mobile sources are tightly controlled), then EPA must consider going beyond national standards, fashioning a plan which assures that equipment used in the FIP areas meets tighter standards, and that equipment purchased outside the control area cannot be used to avoid the cost of control. That is what the FIP proposal attempts to do for nonroad heavy duty engines.

A fleet-average standard with a declining emission level which reflects the historical number of new engine purchases and old engine retirements, similar in concept to that for on-highway heavy duty engines, is proposed. Operation of heavy equipment in the FIP areas will be prohibited if the equipment is not part of a registered fleet. Nonroad equipment owners may pool their fleets to facilitate compliance, just as with highway fleets. An equipment labeling system is proposed to allow enforcement by EPA.

(b) Small Nonroad Equipment (spark ignited engines at or below 25 horsepower, 19kW). Since March 1992, EPA has held several public workshops and meetings to solicit information on technical characteristics, emissions, potential regulatory strategies, and other issues related to small spark ignition engines. The Agency believes that the best approach for setting emission standards in this category will be a consultative approach of negotiated rulemaking often called "reg neg." But there is also a sense of urgency about the need for areas to benefit from the reductions in emissions that will result from standards in this category. The result is that EPA will be pursuing a two phased approach to regulation of small spark ignition engines.

In the first phase, EPA will propose regulations through the normal regulatory process. These regulations will be similar to California's regulation for 1995 and later utility and lawn and garden equipment engines. EPA's proposal will extend the regulations in California to engines which California is currently pre-empted from regulating. The second phase of regulation will utilize the reg neg process to develop consensus on important issues, such as useful life, in-use emissions, evaporative emissions, test procedures, and market based incentive programs. EPA believes that Phase 1 standards will result in a 40 percent reduction in the HC inventory from small engines. Phase 2 will achieve a 90 percent reduction in HC inventory from this category. The agency expects that achieving a 90 percent reduction would not depend solely on more stringent exhaust emission standards, but rather on a combination of strategies (e.g., scrappage or other programs to accelerate turnover, fuel requirements , and/or evaporative controls).

EPA's Phase 2 rulemaking is intended to apply nationally in approximately 2000 to 2001. If the Agency's phase 2 program does not come out of the reg neg process providing for a 90 percent reduction in HC, then EPA has committed to propose those more-stringent measures applicable to California, either statewide or in the FIP areas, which are necessary to the overall attainment strategy. The federal rules are expected to explicitly exclude spark ignition marine engines, engines used in underground mining, motorcycle engines, aircraft engines, and those used in recreational vehicles which will be covered elsewhere.

(c) Motorcycles and Recreational Vehicles. EPA believes that by using existing on-highway motorcycle technology, it is possible to reduce the contribution of nonroad motorcycles and recreational vehicles to the HC and NO_X emission levels in the FIP areas. Therefore, it is proposing to treat on-highway and nonroad motorcycles in California equally and to apply a more stringent set of exhaust emission standards to all new on-highway and nonroad motorcycles sold in California after January 1996. This proposal encompasses engines used in such vehicles as mopeds, dirt bikes, all terrain vehicles (ATVs), and go-karts. The standards are being proposed statewide, because EPA believes that that is necessary to assure that the equipment used in the FIP areas meets standards. The level of stringency may require the substitution of 4-stroke nonroad engines for the 2-stroke engines currently used in some nonroad applications, but there is also the prospect that catalyst technology may be viable.

(d) Spark-Ignition Marine Propulsion Engines. Reductions from this subcategory of nonroad equipment will come from a national program of emission standards and from a registering/permitting fee system for operation in FIP-area waters. The national regulation, scheduled to be final by November 1995, will reduce emissions from outboard engines, personal watercraft (jet-skis, etc.), sterndrive engines, and inboard engines through application of new engine emission standards. The standards themselves are not being proposed in the FIP, but will be proposed in September 1994. Reductions in per-engine emissions are expected to be on the order of 70–80 percent from current two-stroke outboard and personal watercraft engines, and up to 30–50 percent from current 4-stroke carbureted sterndrive and inboard engines.

The standards will apply to new spark ignition marine propulsion engines produced after August 1, 1998. Certification procedures will be similar to on-highway procedures, with some modifications appropriate for the ways these engines are used. The program may also include features such as assembly-line testing and recall.

Although these national standards will result in substantial emission reductions per new engine, overall reductions in emissions from this category will depend on how much boating activity uses the newer, cleaner engines, and how much activity uses older engines. EPA expects that approximately one half of the total fleet of marine pleasure craft owned by FIP-area residents will meet the standard by the year 2005. However, equal use of old and new engines, in combination with other available measures to reduce VOCs, does not appear to be enough to meet the goals of the FIP. Therefore, EPA is also proposing a permit based fee system for marine engines produced before the new standards take effect, to strongly discourage use of these very high emitting engines in the FIP areas. The fees for emission permits would be based on the average excess emissions of pre-control engines compared to engines meeting the new emission standards. This fee system would take effect in 2004, and would apply to only operators of marine pleasure craft who wished to operate a boat in the FIP areas. Owners who live in the FIP areas but only use their boats elsewhere would not be affected. Owners of boats meeting the new emission standards would be eligible for emission permits free of charge.

(5) Programs for National Transportation Sources and Federal Activities. The litigation which resulted in today's FIP proposal arose at least in part from a feeling in California that the emission regulation of certain sources was not keeping pace with the attainment needs of California areas or with the stringency of control imposed on other sectors of the California economy. For today's FIP proposal, EPA is proposing controls for these sources which include the following provisions:

(a) Locomotives. Today's proposal has three parts: a program for freshly manufactured locomotives which will

be implemented nationwide; a program for remanufactured locomotives which could be implemented nationwide or in California only; and a South Coast program. Reductions from new and remanufactured locomotives should be achievable without causing economic damage to the railroad industry or causing a shift of the freight carrying business to truck-based forms of transportation. At the same time, it will extend the burden of clean air attainment in California to the locomotive sector.

EPA will propose a national regulation that will apply to freshly manufactured locomotive engines beginning in 2000, and may also apply to the remanufacture of engines which were made since approximately 1973. Locomotives may operate for many decades and be remanufactured many times before they are retired. Extending the application of standards to remanufactured engines will accelerate and extend the overall emission reductions in the category.

EPA estimates that a national program for freshly manufactured and remanufactured engines would reduce locomotive emissions in the South Coast by approximately 40 percent from 1990 levels by 2010. As the total NO_X reduction from all sources required in the South Coast is approximately 70 percent, EPA would like to achieve comparable reductions in this category. The FIP proposes that average engine NO_X emissions from locomotives and sources directly associated with locomotives be lowered to the new engine levels through use of clean engines, electric power, and other means. California would retain the right to regulate operational changes in railroads, including time spent idling, rail lubrication, operating times, etc. The overall average would allow companies the maximum flexibility in meeting the additional emission reduction target.

(b) Commercial Aviation. Commercial airports become increasingly important in the attainment effort as time goes by. In the South Coast Air Basin, there are five commercial airports which will contribute nearly 9 percent of a 2010 allowable attainment inventory of NO_X and 6 percent of VOC if left uncontrolled. The emissions contributions in Sacramento and Ventura are smaller than in the South Coast. Airport mobile sources include aircraft; ground service equipment such as baggage carts; and ground access vehicles such as passenger cars, taxis, shuttle buses, etc. Aircraft are the dominant source. The percentage contribution and absolute amount of emissions from ground access vehicles in the future decrease substantially as other FIP measures take effect; ground service equipment emits a smaller fraction of the airport total.

The FIP proposes an airline emissions bubble comprising mobile emission sources under the control of the airlines. These include aircraft, aircraft auxiliary power units, ground service equipment, captive vehicle fleets, and any other airline-operated mobile source. The FIP proposes declining targets for emissions for all commercial airline operations in the Sacramento area, Ventura, and the South Coast Air Basin during the ozone season beginning in 2001. The emission reduction requirements are consistent with those proposed for stationary sources under the emission cap program. This level of allowable emissions would translate into an environmental performance factor, applicable to each airline, expressed as an allowable pounds of pollutant per passenger equivalent unit. Airlines which exceed the limit would pay a fee based on the amount of excess emissions generated.

There are a number of ways that an airline could reduce emissions under its control to avoid compliance fees. Higher plane load factors (fewer empty seats), electrifying ground service equipment, towing airplanes to the runway, increased use of single engine taxiing, and bringing the cleanest planes to the California airports all contribute to emission reductions under the FIP concept. The Agency is proposing that each airline be allowed to average the emissions from its operations at all airports within a FIP area. Such intra-airline averaging could provide airlines with additional flexibility in demonstrating compliance with the emissions target. EPA is also requesting comments on establishing an inter-airline credit and trading program to further enhance compliance opportunities.

(c) General Aviation. General aviation is comprised of a wide variety of aircraft types with significantly different engines: piston, turboprop, and turbine. Much of the general aviation fleet is old, and there appear to be few, if any, significant technological improvements in emission performance which could be obtained without a large investment in research and development. Currently the general aviation manufacturing industry is also in a precarious economic state.

EPA proposes to achieve emission reduction targets for general aviation which are consistent with the emission cap requirements for many stationary sources in the FIP areas. EPA is proposing two fee system options in the alternative for achieving the reductions in general aviation. In the first option, aircraft owners/operators would be charged a fee for each takeoff from an airport in the FIP areas. The fee would be set high enough to discourage use without making general aviation flying prohibitively expensive.

The second option is identical to the first, but incorporates an exemption for engines that are certified to "clean" emission levels. It is possible that an engine manufacturer may find a differential fee system sufficient incentive to begin producing cleaner aircraft for certification and use in California. The proposal also requests comment on differentiating fees for specific airports based on the implementation of other emission reduction measures by the airport proprietors such as refueling vapor recovery where applicable.

(d) Military Installations. Military installations can include a significant amount of mobile source activity. The FIP proposes, with certain exemptions, a military installation bubble in each FIP area encompassing mobile emission sources under the control of the Department of Defense (DOD). This includes auxiliary power units, ground service equipment, captive vehicle fleets, privately owned vehicles, and any other mobile source operated within the boundaries of the installation. A declining cap will be applied which corresponds to the cap imposed on stationary sources within each FIP area.

(e) Ships and Ports. Marine vessels are the largest uncontrolled source of emissions of NO_X and sulfur oxides (SO_X) in California. According to a study prepared for CARB, marine vessels account for approximately 40 percent of all SO_X and 12 percent of all NO_X emissions from both mobile and stationary sources statewide. While most emissions associated with marine vessels occur at sea, a great deal is emitted while the vessel is in port, during maneuvering and hotelling activities. Both are of concern in the South Coast area, since emissions from vessels at sea are transported onshore by the prevailing winds and can affect air quality, and because there are large ports and significant shipping activity in the area.

EPA does not believe that it is practical to pursue a conventional regulatory strategy for marine vessels in the FIP for a number of reasons. Not all ships are equally high emitting, and not all ships spend a lot of time in California ports. An expensive retrofit requirement may serve only to drive shipping traffic to competing port

facilities where this special technology would not be required. Also, regulation of ocean-going vessels, especially foreign-registered vessels, is traditionally undertaken by international organizations like the International Maritime Organization (IMO). A unilateral action by EPA to require such technology on all ocean-going ships that enter California's ports may be considered inappropriate by the international organizations that oversee such vessels.

EPA is proposing a flexible control strategy for the reduction of emissions from ships. This strategy would rely on economic incentives to encourage operators of ships that frequently use Southern California ports to take the necessary steps to reduce their emissions. Specifically, an emissions fee would be based on the type of emission control that a particular ship used. Ship operators would be allowed (and encouraged) to reduce the fees which would be applied by using electrical onshore power service instead of the ship's engines while in port. Ships that use South Coast ports more frequently would be faced with higher annual fees, and therefore would have a greater incentive to install more efficient emission control devices to reduce or eliminate those fees.

In Ventura, there are no large ports, but marine vessel emissions are still large contributors to the area's NO_X inventory, because of the emissions that are blown onshore from passing ships by the prevailing winds. The FIP includes in its fee system provisions for encouraging ships to move further out to sea when passing the Ventura coastline.

(6) Programs to Reduce Vehicle Miles Traveled. Passenger cars, light and heavy trucks, buses, and motorcycles have met increasingly stringent new vehicle standards for years, and industrial sources of pollution have installed increasingly sophisticated controls to reduce emissions. But the trends in the total emissions of VOCs and NO_X barely show any reduction over time. One reason for this is the growth in economic activity which causes increases in emissions from stationary and area sources; another reason is the fact that the number of vehicle miles traveled (VMT) has grown, significantly undercutting the impact of improved vehicle emission controls.

VMT is increasing for several reasons: more Americans are working; travel by automobile is cheap and convenient; alternatives to automobile travel are not convenient or do not exist at all in many situations; workers commute suburb to suburb; and workers commute many miles each way in order to be able to afford a single family home. But there are things that local communities can do to change some of the factors that cause the reliance on the automobile. Land use and zoning policies can support mass transportation and car pooling as they now support single occupant vehicle travel. Investments can be made in providing travel alternatives for work and leisure. Communities can begin to make the real cost of driving be reflected in fee systems for parking or use of congested roadways during peak hours. EPA does not have the authority to make the land use planning policies that would be effective in reducing VMT growth in the FIP areas. The Agency could impose fees on passenger vehicles in the FIP, but it could not return the revenue that would be collected to the local area to support transportation alternatives. Therefore, the FIP focuses primarily on additional requirements for improvements in vehicle technology which will contribute to a decrease in per vehicle emissions. But, EPA has also considered whether there are controls which can be imposed via a federal implementation plan which can lead to reductions in vehicle miles traveled. Two measures are proposed in today's NPRM:

(a) Employee Commute Options Program. EPA is proposing two alternative attainment dates for the Sacramento area. The first is the 1999 attainment date which is required by the Clean Air Act Amendments of 1990, for areas classified as serious nonattainment for ozone. EPA is also proposing to bump the Sacramento area up to the severe classification with a 2005 attainment date. Under the Clean Air Act, severe ozone nonattainment areas must implement employee commute options (ECO) programs designed to reduce work-related trips and vehicle miles traveled during peak commuting periods. Specifically, employers with 100 or more employees must develop and implement a plan to encourage employees to use alternatives to the single occupant vehicle commute. Both the South Coast and the Ventura areas have implemented ECO programs, but the Sacramento area has not yet enacted the necessary legal authority, although an ECO program is required under California law. Elsewhere in this NPRM, EPA is proposing to approve the South Coast ECO program. Although EPA is not at this time prepared to approve the Ventura ECO program, EPA need not do so as part of this FIP. Even though EPA is similarly not required to promulgate an ECO program for Sacramento at this time, EPA is proposing to do so because the obligation of Sacramento to do an ECO program under federal law would be a direct result of EPA's proposed bump-up. EPA is therefore proposing an ECO program for the Sacramento area to be implemented if the area's classification is changed to severe. Affected employers must within two years develop programs which are designed to increase the vehicle occupancy of their employees to a target which is 25 percent above the current average vehicle occupancy for all commute trips in the area.

(b) Parking Cash Out. Even in downtown areas, most employees in California receive free or subsidized parking spaces. Current tax codes allow employers to offer this benefit without the employer or the employee having to pay taxes on the value of the space. Since parking costs represent the bulk of the daily cost of driving to work, these "free" spaces are a strong incentive for employees to drive to work alone.

As part of his Climate Change Action Plan, President Bill Clinton has called for transforming much of the existing tax subsidy for employer-paid parking into a powerful reward for commuters to ride transit, carpool, or find other ways to get to work. The Administration will shortly propose changes in the tax law necessary to bring about parking subsidy reform. This same proposal is included in the FIP, in a form which is consistent with EPA's authority. The proposal does not modify the tax code or require payments by an employer. Rather it applies certain restrictions.

Employers of 25 or more employees who lease parking spaces for their employees may not offer free parking unless they offer employees the option of retaining the parking or accepting a cash allowance equal to the market cost of the parking space. The cash allowance will be considered taxable income, but under current law, up to $60 per month of the cash may be taken in the form of a transit pass, which would be tax-exempt. Those who opt for the parking space will be unaffected by the change. Whether the employee decides to take the free parking or the cash allowance, the company can still deduct the cost from corporate income tax. Research indicates that such a program may reduce single occupant commuting by 20 percent in densely developed areas where most employer-provided parking is through leased spaces. The improvement which is achieved will also assist employers in complying with the ECO programs in each of the FIP areas.

(7) Special Issues for Mobile Sources. (a) Inspection and Maintenance.

While stricter standards act to ensure that new vehicles are cleaner than were their predecessors, there has been no guarantee that these vehicles would "stay clean" in actual use. Historically, tampering, lack of proper maintenance, maladjustment, and control equipment failures have meant that cars on the road would emit on average 3 to 4 times more pollutants than the levels for which their control systems were certified. The evolution of vehicles to fuel injection and closed-loop computer control along with the reduction in availability of leaded fuel have significantly reduced the amount that owners tamper with or maladjust their vehicle emission control systems. Simply, the cost advantage of using leaded fuel has disappeared, and vehicle performance has become so closely tied with having all systems operating as designed that it is no longer widely perceived to be beneficial to remove or render inoperative any of the various vehicle systems. Malfunctions of the engine and emission control systems can still occur, however. Periodic vehicle emissions inspection and maintenance (I/M) programs are designed to identify and repair these malfunctions.

For this reason, I/M plays an important role in the FIP proposal. The Clean Air Act Amendments of 1990 require areas such as the FIP areas which are classified as serious or worse ozone nonattainment to implement enhanced I/M programs. Up to this time, the State of California has not enacted an enhanced I/M program which meets the requirements of the national I/M rule which was published in 1992. A recently signed law in California retains the current Smog Check network of licensed inspection garages in slightly altered form. The national enhanced I/M regulations require that inspection and repair functions be conducted separately to avoid conflict of interest and improper testing unless there are other features which provide sufficient reductions to meet the enhanced I/M performance standard. EPA and the State are currently discussing a program design which would meet the enhanced I/M performance standard, but which would also preserve as much business as possible for the currently licensed inspection stations. This program has not yet achieved consensus among all parties and is not represented by specific legislation or as a SIP revision.

The FIP I/M design must also deal with the further constraints that are imposed on EPA, namely that it cannot order the State to implement any of the FIP's required programs, nor can it add to its own appropriation in order to staff the various programs. That means that EPA must design programs which require the minimum level of oversight and administration.

EPA is proposing an enhanced I/M program which follows closely the model program which sets the performance standard for all I/M programs nationwide. EPA would implement the program in the FIP areas through legal agreements between EPA and a private firm or firms which would provide testing services to California motorists. The firm(s) would be authorized to charge a specific fee for the test; EPA's oversight costs would have to be absorbed by the Agency.

EPA believes that an I/M network run by one or a few private firms will, in fact, be the most cost-effective, convenient option for the State in providing I/M testing. It may not, however, meet other economic and social objectives held by State and local authorities, special interest groups, or the public. Some in California have indicated a desire to continue to involve as many individual businesses as possible in the program; some are also interested in exploring alternative test procedures. The fact that these features do not appear in the FIP proposal does not mean that they necessarily could not be pieces of the I/M program which California ultimately adopts in the SIP. However, if a SIP I/M program with a licensed test-and-repair station element is less effective than the I/M program proposed in the FIP, substitution of the former for the latter would require the addition of compensating increases in the stringency of other measures or the addition of measures not proposed for the FIP at all.

Because of the reasons outlined above, EPA is proposing an enhanced I/M program in the FIP. However, EPA and the State are continuing to hold discussions on a program design which would meet the enhanced I/M performance standard. EPA would not finalize the FIP I/M program, should an agreement be reached, if appropriate legislation were adopted and an approvable SIP revision submitted.

(b) Retrofit Programs for Mobile Sources. There has been a considerable amount of interest expressed by California air pollution control officials in retrofit/replacement options for highway diesel vehicles, heavy duty nonroad equipment, and locomotives. These are the categories (in addition to light duty vehicles) which contribute the bulk of the NO_X emissions in the FIP areas. And, a retrofit requirement could accelerate the emission reductions that would normally result from equipment turnover. In order for a retrofit/replacement strategy to work, however, there are a number of tasks which must be completed.

The general knowledge about how and where different types of engines are used must be increased significantly. For each category, there will be different typical lifetimes and rebuild or repower practices as well as differences in current technology and the feasibility of lowering NO_X through in-field engine modifications. To estimate the impact of any measure, it is necessary to know the market share for the engines for which low emission models are available and much more about the usage patterns, for example, how much of the VMT in the inventory is due to local operations versus out-county or even interstate operations. It is also important to consider fleet fueling practices and whether or not there might be difficulties in gaining reasonable access to alternative fuels. Some technological modifications may not be appropriate for engines used on nonroad applications if they accelerate engine wear or reduce reliability in the rugged working conditions which are common to the category. Finally, the economic impact to individual industrial segments as well as on the overall economy in the FIP areas is a critical component in the regulatory decision. Nonroad engines are very specialized to their applications, and the costs of re-engineering engines and fuel systems cannot be spread over large numbers of sales as is the case with on-road vehicles.

If, after consideration of many factors, a decision were made to require retrofit or engine replacement for NO_X, it would be necessary to set emission performance standards for the retrofit/replacement and to promulgate the appropriate test protocols. The fact that there are specialized applications with a very wide range of vehicle duty cycles and engine types and sizes makes it extremely difficult for EPA to develop appropriate test cycles. EPA would also need to devise a process for identifying the individual pieces of equipment to which the requirements would apply, to implement a program in which a fleet operator would certify the efficacy and durability of a retrofit/replacement, and to establish an enforcement system which assured that the emission reductions which were predicted would actually occur.

EPA believes that it has neither the knowledge nor the time which would be necessary to develop an effective retrofit strategy for on-highway or nonroad heavy duty engines in the FIP areas. For the locomotive category, EPA is proposing to develop national or state regulations which will address the

rebuilds for locomotive engines. These regulations will contain the test protocols, emission standards and enforcement mechanisms to assure that the reductions occur. Although it is not proposing a retrofit program for existing trucks in any of the FIP areas, EPA is proposing a fleet average standard strategy for on-highway heavy duty engines and a growth cap for the nonroad heavy equipment category as part of a 1999 attainment option for the Sacramento area. The necessary standards, certification protocols, and enforcement mechanism either already exist or are being developed for other FIP areas. The specific details of these requirements are discussed elsewhere in this NPRM.

(c) Adjustments Based on Local Control of VMT Growth. As discussed earlier, the expected growth in vehicle miles of travel (VMT) by on-highway vehicles in the FIP areas contributes to the stringency and wide applicability of the many emission reduction measures in the proposed FIP. For practical reasons, EPA is proposing only a limited set of measures that can be expected to affect VMT growth, specifically the parking cash out requirement and the employee commute options program in Sacramento. Consequently, there remains considerable opportunity for state and local governments to do more to influence VMT growth, and EPA urges them to do so.

EPA invites public comment on what measures in particular could be designed by the state and local agencies which would be less expensive, less dislocating, and more equitable than the FIP's controls. Those measures which make more expansive use of market incentive approaches and those which address land use planning are the most likely candidates.

If the state and local agencies are able to identify and adopt measures which effectively lower the rate of VMT growth from what is currently projected, then EPA could entertain the removal of certain FIP measures which impose the most stringent controls. EPA invites public comment on which of the FIP measures might be a candidate for earlier removal. State and local action now on measures to reduce growth will also make it easier in the long term to replace the bulk of the FIP with a State Implementation Plan, since there will be more flexibility for the state to choose an optimum set of measures.

Although the FIP contains an attainment strategy for the South Coast area, it does not contain the fully adopted regulations that will ultimately be needed. In fact, attainment there will clearly require at least all the elements proposed today or their equivalents. EPA does not envision an adjustment process for that area although the flexibility that lower growth provides would still hold true. Also, because of the limited time before 1999, EPA does not think it would be possible to revisit VMT growth in the Sacramento area soon enough to affect the strategy for the 1999 attainment option.

It is a requirement of the Clean Air Act that every SIP and FIP attain as expeditiously as practicable but no later than the date specified by statute. In any VMT revisitation and strategy adjustment process, EPA could not and would not remove reasonably available measures from the FIPs. EPA believes, however, that some of the measures proposed today and likely to be finalized go beyond the test of reasonable availability. These are candidates for later removal as described here.

2. Programs for Onroad Light Duty Vehicles and Engines. a. Overview—Despite requiring vehicles to meet increasingly rigorous certification standards, California's air quality is among the poorest in the country. High emission levels have persisted even though emission standards for light-duty vehicle (i.e., passenger cars) (LDV) and light duty truck (LDT) exhaust hydrocarbon emissions have dropped more than 90 percent since 1970. The continuing high emissions derive from considerable increases in the number of vehicle miles traveled (VMT), the increased expected life of vehicles in the temperate California climate and the failure of many in-use vehicles to meet the standards to which they are certified when new.

In order to reduce the emissions from onroad light duty mobile sources, EPA has developed two distinct control strategies. The first strategy, described in detail in section III.D.2.c, is the implementation of a centralized test only enhanced I/M program. In the second strategy, described in section III.D.2.d, EPA is proposing to complement the California LEV program with enforceable requirements providing lower in-use emission levels. EPA believes that both of these strategies are necessary in order to bring all of the California FIP areas into compliance.

b. Air Quality Significance—Light duty onroad mobile sources (cars, light duty trucks and motorcycles) are significant contributors to the emissions inventories in all three of the FIP areas. The table below ("1990 Base Year Inventory for Light Duty Vehicles") details the level of emissions from onroad light duty mobile sources in each of the FIP inventories for the 1990 base year. The information contained in this table illustrates the large portion of the FIP inventories that is attributable to emissions from onroad light duty mobile sources. No control strategy could achieve attainment in the California FIP areas without affecting these engines which are central to the California economy.

1990 BASE YEAR INVENTORY FOR LIGHT DUTY VEHICLES

	Sacramento		Ventura		South coast	
	VOC	NO_x	VOC	NO_x	VOC	NO_x
Onroad LDVs (tons)	108.5	78.0	38.3	27.0	772.6	421.1
Percent of total inventory	46%	42%	36%	31%	40%	37%

c. Enhanced Inspection and Maintenance—(1) Introduction. In its studies of in-use vehicle emission performance, EPA has found that vehicles typically emit at 2–3 times their certification standards in actual use. Factors such as lack of durability, tampering with emission control equipment, design defects, and poor maintenance all contribute to making cars and other mobile sources much dirtier in use than they should be.

EPA has found that an efficiently designed and managed vehicle inspection and maintenance (I/M) program is one of the most effective and cost effective ways of cleaning the air. I/M programs are able to produce significant emission reductions after only a single inspection cycle, and the effort the consumer must expend to comply with I/M can be offset with improved fuel economy and performance.

(2) Enhanced I/M. I/M programs achieve their objectives by identifying vehicles that have high emissions as a result of one or more malfunctions and requiring them to be repaired. An "enhanced" I/M program covers more of the vehicles in operation, employs inspection methods which are better at finding high emitting vehicles, and has additional features to better assure that all vehicles are properly tested and adequately repaired.

Given the severity of the air quality problem in the FIP areas covered by this proposed action, EPA is proposing to implement an enhanced I/M program in all FIP areas as one of the most significant and productive of its FIP measures.

(3) Background. The first mandatory I/M programs were required by the 1977 Amendments to the Clean Air Act, which called for I/M programs in areas with long term air quality problems. The 1990 Amendments to the Act expanded the role of I/M, directing EPA to develop guidelines and performance standards for two levels of I/M program—basic I/M for areas with moderately dirty air, and enhanced I/M for areas (like those addressed by this proposed FIP) with more serious and chronic nonattainment problems. On November 5, 1992, EPA published a final regulation (40 CFR part 51 subpart S) establishing certain minimum requirements and performance standards for both basic and enhanced I/M programs. It is this regulation and its supporting documentation that will form the basis for much of what will be proposed in this action. Readers are encouraged to consult the preamble to the final I/M rule for a more thorough explanation of the costs and benefits of I/M programs and the specific regulations.[71]

A state-administered I/M program known as Smog Check has been in existence in California since March 1984, and is currently operating in all three of the FIP areas. The Smog Check program includes a biennial tailpipe and antitampering inspection of 1966 and newer model passenger cars, as well as light- and heavy-duty trucks. The inspections are conducted in a decentralized network of private garages and service stations which are licensed by the State and which may perform both the emissions inspection and emissions-related repairs. The tailpipe test consists of a simple idle test for VOCs and carbon monoxide (CO) for vehicles up to the 1979 model year and a two-speed idle test for model year 1980 and newer vehicles. The program also includes antitampering inspections for all significant emission control components. Owners of subject vehicles must present proof that the vehicle has either been tested and passed or been waived from the program requirement prior to registering their vehicle(s) in even numbered years for even numbered license plates and odd numbered years for odd numbered license plates.

Since the beginning of the program in California, a review committee of State and local air quality professionals has been conducting a continuing evaluation of the Smog Check network in order to recommend improvements to the Legislature and to address problems in program operation as they are identified. The "California I/M Review Committee's Fourth Report to the Legislature" details the results of comprehensive station audits and vehicle emission tests and concludes that the current program is yielding less than one-half the potential emission reduction benefits of the program if properly implemented due to improper testing and inadequate repair in the garages.

Based upon its own audits, as well as those conducted by California and other states, EPA has concluded that I/M programs throughout the country which combine the functions of testing and repair in a single facility are only roughly half as effective as programs which separate the two functions. The I/M rule which applies to enhanced areas requires the separation of test and repair unless a State can demonstrate that its current test-and- repair program is equal in effectiveness to a test-only network. In making this demonstration states will receive only one half the emission credit for the tailpipe test than that allowed for test-only facilities unless the state can demonstrate higher reductions from its program.

During the 1993 legislative session, the California legislature considered but did not pass legislation which would have authorized the upgrade of the Smog Check network. Citing concerns over jobs and consumer convenience, state legislators advanced a bill designed to improve the State's failing Smog Check system without fundamentally changing its test-and-repair structure. Although the bill contained some important measures, EPA had to inform the legislature that the bill fell short of meeting the Clean Air Act's standards for an enhanced I/M program. EPA officials are continuing to work with the California legislative leadership in the hopes of achieving consensus on a program design which would meet both the Clean Air Act requirements and California's unique needs. EPA is proposing an enhanced I/M program design which incorporates the most sophisticated testing techniques with features to maximize consumer convenience and to mimimize the cost of inspection. If the State should develop and adopt an alternative program design which meets the Act's performance standard for enhanced I/M programs prior to finalization of the FIP, then the alternative program will be proposed for approval as a State plan revision and its reductions will be substituted for those which would be expected from a federally imposed I/M program. EPA would propose additional measures if necessary to provide equivalent emission reductions as part of the FIP attainment demonstration. Once the FIP I/M program is finalized, however, the State will need to meet not only the requirements of the I/M rule, but will have to produce a plan that fills any shortfall between the State I/M program and the FIP I/M program, so as not to jeopardize the FIP's required attainment demonstration. This could be done through the State I/M program or other emission reductions.

(4) Summary of Proposed Federal Enhanced I/M Program. The proposed program would cover all model year 1966 and newer onroad, gasoline-fueled vehicles—including heavy-duty trucks but excluding motorcycles—and would be conducted on a biennial basis to optimize the measure's emission reduction potential and cost effectiveness, as well as to minimize the disruption created by any transition from the current, state-run Smog Check program.

The proposed program would be conducted in a network of test-only stations (i.e., stations in which both owners and operators are legally barred from profiting either directly or indirectly from the sale and servicing of motor vehicles and motor vehicle parts). The tests performed would include a transient, mass-emissions tailpipe test known as the IM240 which would measure hydrocarbons, carbon monoxide, and oxides of nitrogen; purge and pressure tests to assure that the evaporative control system is working properly; and a visual antitampering inspection for the presence and proper

[71] Although the proposed I/M program will meet the requirements of the Clean Air Act Amendments of 1990, as well as the performance standard for enhanced I/M programs promulgated on November 5, 1992, EPA is not obligated to meet these requirements as part of its California FIP proposal. EPA would only be required to do so within 2 years of a state failure related to such requirements. EPA has chosen the proposed program design because it is one of the most productive and cost effective means by which to meet the requirement that the FIP demonstrate attainment with the ozone NAAQS.

connection of the positive crankcase ventilation (PCV) and air systems.

EPA intends to enter into a legal agreement with one or more entities for the performance of all possible program activities, other than enforcement of the motorist registration requirement, and oversight requirements which would constitute a conflict of interest. This entity shall hereafter be referred to as the "test provider."

The biennnial test is estimated to cost between $20 and $25, and the average wait time at the high volume inspection stations should average less than ten minutes.

A more detailed discussion of the FIP's proposed I/M program and its various program elements follows:

(a) Applicability. The enhanced I/M requirement will apply to all vehicles registered, or required to be registered, in the counties listed in Table IM–1 and to vehicles in commercial fleets which are primarily operated within these same counties. Vehicles which are operated on Federal installations located within the I/M program area must also comply with the I/M requirements regardless of their registration status.

TABLE XX–X.—COUNTIES INCLUDED IN THE ENHANCED I/M PROGRAM

Sacramento area	Ventura	South coast
Sacramento	Ventura	Los Angeles.
Yolo		Orange.
Placer (part)		Riverside (part).
Solano		San Bernardino (part).
Sutter.		
El Dorado (part).		

Note: The portions of Riverside, San Bernardino, Placer, and El Dorado counties to be covered by the FIP I/M program would be the same as are currently covered by the State's Smog Check program.

The current Smog Check program covers more than the required areas, and therefore carrying this coverage over into the FIP I/M program is sufficient to satisfy the Act's enhanced I/M requirements. EPA is requesting comment, however, on whether the geographic coverage is sufficient to include all significant contributors to FIP area emissions and whether there is any reason that it should be expanded beyond the scope of the existing I/M areas.

(b) Enforcement. Under this proposal, the Secretary of State of California, the California Department of Motor Vehicles, its employees, any any other persons representing the State of California are prohibited from registering any subject vehicle which does not present a valid certificate of compliance with or a valid waiver from the FIP's I/M program requirements. At Federal installations, where vehicles may not have California registration, the vehicles may not be issued a base sticker or other operating permit without evidence of compliance with enhanced I/M program requirements. EPA or the test provider(s) will issue these certificates.

(c) Network Type. Two basic types of inspection networks have existed since the start of I/M programs—centralized, test-only networks and decentralized, test-and-repair networks. A centralized, test-only network consists of inspection and retest at high-volume, multi-lane, usually highly automated stations, run by either a government agency or a single, state-hired contractor within a defined area. A decentralized, test-and-repair network consists of inspection and retest of vehicles at privately owned, licensed facilities, such as gas stations and other shops which may also do repair work. California's current I/M program is of this latter variety.

While the Clean Air Act Amendments of 1990 called for EPA to develop performance standards for both basic and enhanced I/M programs, they also established minimum requirements for certain program parameters. In the case of enhanced I/M programs, network type was one of these prescribed parameters. Specifically, section 182(c)(3)(C) of the Act states that enhanced programs must include, at a minimum, "operation of the program on a centralized basis, unless the State demonstrates to the satisfaction of the Administrator that a decentralized program will be equally effective." Based upon its evaluation of current decentralized, test-and-repair programs, as well as upon data gathered by individual states on their own I/M programs' effectiveness, EPA provided for the approval of a decentralized test-only network as an equally effective alternative, because the inherent conflict of interest found in test-and-repair programs had been removed. It may be that the State of California will ultimately choose to design a decentralized test-only system in order to guarantee that there are many independent businesses which participate in providing inspection services. But it is not a practical choice for a federally implemented I/M program. Given the significantly lower implementation burden of a centralized system, EPA has determined that it is appropriate to propose a centralized program for the FIP.

Although EPA has the authority to forbid the State of California to register vehicles which do not have a certificate of compliance with the prescribed enhanced I/M program, it does not have the authority to order the State to write the program rules, oversee the construction or licensing of test-only stations or carry out any of the tasks involved in program implementation and oversight. Therefore, it is necessary for EPA to design a program which will divert as few as possible resources from the national environmental effort to the day to day operation of what would ordinarily be a state-run emission control program.

EPA is proposing that the California FIP I/M program would be a centralized, test-only network operated by a private entity or entities (if each FIP area is to be treated separately) that have entered into a legal agreement with the federal government. This entity or entities will be known generically as the test provider(s). Program oversight would be facilitated through the award of a contract to provide for the collection of data in the form of overt and covert auditing of the testing contractor's sites and performance. The test provider(s) would be reimbursed through the collection of a fee paid directly to the test provider(s) by motorists at the time of testing. Once EPA has entered into an agreement with the test provider(s), it will be the State's obligation to enter into its own agreement with the test provider(s) when the State wants to replace the FIP program with its own. EPA does not intend to place itself in the position of assuming any legal penalty through termination of a

contract with a test provider as a result of California starting its own program; comments are requested on how this result may be achieved.

The test provider(s) would perform many program activities, with the exception of enforcement of the registration requirement (which shall remain a State responsibility) and any oversight requirements which would constitute a conflict of interest, such as covert and overt auditing of the test sites and testing personnel. In addition to establishing the test sites and conducting the testing, therefore, the testing provider would provide for both mechanic and inspector training, tracking and reporting of effectiveness data, performing other program data collection and reporting requirements, conducting a campaign of public information, establishing and maintaining a repair technician hotline, performing motorist compliance surveys, designing and issuing program documentation such as certificates of compliance and waivers, and designing and managing a program of onroad vehicle testing via remote sensing technology. Separately, EPA would award a contract to a different entity or entities to collect the information needed to oversee the performance of the test provider(s) and to evaluate the effectiveness of the I/M program. Duties under this oversight contract would include purchasing vehicle records or otherwise entering into a cooperative agreement with the California Department of Motor Vehicles to facilitate testing and database comparisons for program effectiveness and enforcement analyses, procuring vehicles for covert testing, conducting covert station audits, and performing periodic overt audits to confirm that the testing equipment is accurate within the quality specifications.

Under the legal agreement EPA envisions entering into with the test provider(s), no funds would accrue to EPA, because that is prohibited by the Miscellaneous Receipts Act, which only allows each Federal agency to retain those funds which have been specifically appropriated for its use by the Congress. Awarding of the oversight contract and program administration duties would, therefore, require EPA to divert funds and human resources from other activities to perform the role currently performed in California by the Bureau of Automotive Repair.

EPA requests comment on its proposal to establish a centralized, test-only network and to enter into a legal agreement with one or more test providers as well as awarding a separate contract for data collection in support of program oversight. EPA also requests comment on whether the Agency should enter into separate agreements and award separate contracts for each FIP area, or if a single agreement and a single oversight contract for all FIP areas are appropriate.

(d) Test Type and Procedure. The California Smog Check program currently employs a steady-state, unloaded, tailpipe test, which is conducted with the vehicle parked and idling. The test is called "steady-state" because the vehicle is operated in only one or two operating modes (typically at idle, or at both idle and 2500 rpm, depending upon the model year of the vehicle); it is considered "unloaded" because the vehicle is parked and therefore encounters no additional power demands to overcome road resistance. Emissions are measured by placing a probe in the tailpipe to gather a sample which is analyzed to determine the relative concentrations (i.e., percentage or parts per million) of CO, carbon dioxide, and hydrocarbons in the exhaust (the analyzer-test type combination used in the Smog Check program is currently unable to measure NO_X emissions). Given that the volume of exhaust from any vehicle is unknown, the concentration of pollutants measured during a Smog Check cannot indicate the emission level of the vehicle in terms of grams of pollutant emitted per mile driven—or from the fleet all together in terms of tons of pollutant emitted per day.

Studies conducted by EPA's Office of Mobile Sources, at the National Vehicle and Fuels Emission Laboratory and elsewhere have shown that steady-state, idle, concentration-based tests such as those used in California's Smog Check program are not highly effective at identifying and reducing in-use emissions from the types of vehicles which currently dominate the fleet (and will continue to dominate the fleet in the future). (See the I/M rule's technical support document, entitled "I/M Costs, Benefits, and Impacts," November 1992, for more details on these studies and their results.) Steady-state idle tests were originally designed to detect excess emissions from relatively low-technology, pre-1981, carbureted, non-computerized passenger cars and worked well enough for these vehicles because the typical emission control problems they experienced tended to involve "rich" air/fuel mixtures which are detectable at idle as well as other driving modes. To meet increasingly stringent emission standards, however, current high-technology cars must use an elaborate array of sensors and computer feedback controls to continuously adjust engine operations, optimizing the air/fuel mixture depending upon the current driving mode. Such vehicles are more effectively tested with procedures that address the full range of driving modes, including cruise, idle, acceleration, and deceleration cycles under loaded conditions.

Emission tests which include driving cycles are called "transient tests," and are performed by running a vehicle on a treadmill device known as a dynamometer which allows the vehicle to be driven in place and which can be made to simulate road load conditions by increasing the resistance on the treadmill rollers. Transient tests capture a known volume of exhaust and produce actual grams-per-mile results as opposed to the relative concentration values generated by steady-state, idle tests. Transient, mass emission testing also measures fuel economy, and the results can be provided to the vehicle owner. A transient test known as the Federal Test Procedure (FTP) has been used for certification testing of new vehicles for over twenty years and is considered the yardstick by which other testing strategies are measured.

A full Federal Test Procedure involves special vehicle preparation and takes several hours to conduct, making it impractical as an I/M test type. But EPA has developed a shortened version of the FTP known as the IM240, which more closely reflects how vehicles perform under actual driving conditions than do current idle inspections, while also being short enough to be practical in an I/M setting (the "240" stands for the maximum number of seconds it takes to perform an IM240 test). In its development and evaluation of the IM240, EPA has found the test to be superior to alternative I/M testing strategies for all relevant evaluation criteria, including accuracy and overall cost effectiveness. Using the pass/fail limits proposed in this action, the IM240 has been shown to have a zero percent false fail rate, while also accurately identifying the vast majority of the highest emitting vehicles. The result is that the IM240 is able to get more emission reductions by failing fewer cars than is the case for other I/M tests yielding comparable emission reductions. Furthermore, since the equipment required to perform the IM240 is based upon that used to perform certification testing, IM240 test sites will not become obsolete with future changes in vehicle technology; driving cycles and testing algorithms may require changes in software, but the hardware configuration will remain substantially similar well into the next

century. Transient testing is also the only currently known reliable way to test for NO_X emissions—something not possible with an idle-based test, yet nevertheless required in order to achieve the NO_X reductions necessary for ozone attainment, and specifically required by section 182(c)(3) of the Clean Air Act.

The enhanced I/M program being proposed in this action also includes two functional tests to detect excessive evaporative emissions. Over the last several years, EPA has learned that vapors which escape from various points in a vehicle's fuel system represent a huge source of hydrocarbon emissions, generally greater than those present in now highly controlled tailpipe exhaust. In response to this finding, EPA has developed two functional tests which can determine whether vehicle evaporative emission control systems are operating properly. The first test is a simple pressure check to find leaks in the fuel system (e.g., bad gas caps or cracked evaporative system hoses). The test, referred to as the "pressure test," is simple to perform and highly cost effective. The second test—called the "purge test"—is a check of the evaporative system's purge function, which involves removing gasoline vapors stored in the charcoal canister and routing them to the engine where they can be burned as fuel. The purge test is performed in conjunction with the IM240 (i.e., while the vehicle is operating on the dynamometer). Performance of the purge test is not possible using a traditional idle inspection, since most automobiles are not designed to purge extra vapors when they are not needed during the idle mode.

EPA is proposing to use the IM240, and purge and pressure testing, as the main group of high-technology emissions tests around which the FIP's I/M program would be built. The FIP's I/M program would also retain the current Smog Check program's visual antitampering inspections for the air pump and PCV system, but would eliminate the catalyst, inlet, and evaporative canister inspections. The evaporative canister inspection would be eliminated because it would be redundant in the face of the more rigorous purge and pressure tests. The catalyst and inlet checks would be eliminated because the IM240 is sufficiently sensitive to detect the fact that a catalyst has either been removed or poisoned through the use of leaded fuel. The air pump check, on the other hand, would be retained because this emission control device only operates during cold start conditions and its malfunction affects emissions only in this driving mode. Since vehicles will generally be warmed up by the time they arrive for their I/M inspection, this type of malfunction is difficult to detect without a visual inspection. The PCV inspection would be retained because malfunction of this device can produce emission leaks that are not detectable through the tailpipe. Lastly, the FIP's I/M inspection would also include a test portion involving connection to and the interrogation of the onboard diagnostic (OBD) computer on vehicles so equipped beginning with the 1994 model year. Information in the form of trouble codes would be downloaded from the OBD computer and analyzed for the presence of emissions-related system malfunctions.

All of the proposed FIP I/M program's inspections would be conducted in compliance with the test procedure guidance developed and issued by EPA in conjunction with the I/M rule. The IM240 standards will be set at the following gram-per-mile cutpoints for HC, CO, and NO_X, respectively, for Tier 0 vehicles (with somewhat more stringent first and second test cycle standards for Tier 1, TLEV, LEV, and ULEV vehicles in the pre-1999 model year group):

First test cycle: 1.2 / 20 / 3
Second test cycle: 0.8 / 15 / 2
Third test cycle: 0.6 / 10 / 1.5

The third test cycle cutpoints represent the final IM240 cutpoints for 1983–1998 model year vehicles and would be used for all subsequent test cycles. Model year 1999 and newer vehicles are addressed as part of the discussion of the enhanced in-use compliance program in section III.D.2.d of this preamble; I/M cutpoints for these vehicles are contained in Appendix 1, section A(4). EPA is also in the process of developing test procedures for performing the OBD check portion of an I/M inspection and will propose these as amendments to the I/M rule later in 1994.

(e) Vehicle Coverage and Test Frequency. The proposed FIP I/M program would cover all model year 1966 to 1998 gasoline-fueled vehicles, excluding motorcycles but including heavy-duty vehicles to 19,500 pounds Gross Vehicle Weight Rating (GVWR), including vehicles with engine-based certification. The proposed FIP I/M program would also cover all model year 1999 and newer vehicles of all fuel types, excluding motorcycles, but including heavy-duty vehicles to 14,000 pounds GVWR (except for 8,500 to 14,000 pound vehicles with engine-based certification). The IM240 tailpipe emission test would be performed on all vehicles including the heavier trucks for administrative simplicity. Model-year based cutpoints for pre-1983 light-duty vehicles are included in this proposed rule, as are cutpoints for heavy-duty trucks, although these latter cutpoints are subject to possible amendment prior to program implementation, based upon the experience of state-adopted enhanced I/M programs that begin operation prior to the scheduled implementation date for the proposed FIP I/M program. The purge, pressure, and visual inspections would be performed on all model year 1971 and newer vehicles. Older model years were not equipped with the evaporative control systems subject to the purge and pressure tests. EPA will also study the sales and in-use performance of pre-1999 diesel and alternatively fueled vehicles, to determine if significant, additional emission reductions can be achieved by testing such vehicles as part of the FIP I/M program.

EPA proposes to require I/M testing biennially in the California FIP areas, with new vehicles being exempt until the second anniversary of the initial registration date. Notification of scheduled testing times would be through regular mass mailings conducted by the test provider(s), with individual motorists receiving notification no less than 45 days prior to the individual's testing deadline. The test provider(s) would use mailing lists obtained from the Department of Motor Vehicles to conduct the test notification mailing.

EPA has chosen to retain biennial testing for the California FIP's I/M program due partly from an interest to minimize the disruptive impact of the new program, but mainly because biennial testing is simply more cost effective, especially when conducted within the context of a high-technology I/M program such as the one proposed. Simply put, the IM240, purge, and pressure tests are so effective that a biennial test program will yield almost the same emission reduction benefits as an annual program. In its research on the relative benefits of test accuracy versus test frequency, EPA has found that doing the test right is far more important than doing it more often. Furthermore, the types of repairs needed to pass these high-technology tests are substantive and durable—something which is not always the case with repairs aimed at passing an idle-based I/M program.

(f) Waivers and Special Warranty Protection. The FIP I/M program would include the opportunity for owners of failing vehicles to apply for a cost waiver once they have spent at least

$450, adjusted annually for inflation, in relevant emission control repairs. The $450 figure is required by the Clean Air Act Amendments of 1990 for state-adopted, enhanced I/M programs. While EPA is not required to include such a waiver limit in this FIP, EPA is proposing this waiver limit because it is practical, ensures repair of virtually all failures, and will simplify the transition once California adopts its own program. The $450 figure will be adjusted annually, based upon the difference between the Consumer Price Index for the current year and that of a 1990 base year, and would not include costs related to the repair of tampering-related defects or emission control components the servicing of which are covered by an unexpired warranty. The test provider(s) would be responsible for issuing such waivers and for conducting a visual inspection to confirm that all claimed repairs have, in fact, been made. Motorists on public assistance would be able to apply for a one-time, non-renewable time extension on making repairs, not to exceed one full test cycle. Only one such time extension will be granted per the lifetime of a vehicle.

The California Motor Vehicle Control Program provides for warranties similar to those included under Federal law. These warranties would be available to owners of failed vehicles up to the specified age and mileage limitations which vary depending on the model year of the vehicle. Special warranty protection would be available to owners of vehicles certified under the proposed enhanced in-use compliance program for model year 1999 and newer vehicles (see Section III.D.2.d).

(g) Enforcement and Oversight. Under the FIP I/M program, it would be a violation of Federal law for the California Department of Motor Vehicles (DMV), its employees, or any other representative of the State of California to register any vehicle subject to the FIP's I/M requirement for which a valid certificate of compliance or waiver (either paper-based or electronic) has not been presented. DMV employees or other State representatives suspected of violating the FIP I/M requirement would be subject to prosecution under Federal law and, if found guilty, could be subject to civil penalties up to $25,000 per violation. Each instance of unlawful registration would be considered a separate offense.

Motorists who were late for either regularly scheduled tests or who failed to comply with an out-of-cycle test required because the vehicle was identified by a remote sensing unit (see below), would be assessed a late fee at the rate of $10 per week late. EPA requests comments on other means of enforcing program requirements, including the possibility of tying penalty fees to the length of violation multiplied by the level of excess emissions.

(h) Convenience Issues. EPA would make customer convenience an important criteria in entering into any legal agreement with a test provider(s). Minimum convenience requirements would be established and addressed. For example, EPA intends to require in any such agreement that test stations be sited such that 80 percent of all subject motorists are within a 5 mile radius of a test station, with 95 percent of all motorists within a 10 mile radius. Wait times between entering a test station queue and the initiation of actual testing would be tracked and would not be allowed to exceed 15 minutes on average. Scheduling individual vehicles for tests would be required to be done on a weekly basis, as opposed to monthly, to help reduce the impact of the end-of-the-month rush. To avoid being assessed a late penalty, motorists would have to report for testing sometime during the scheduled testing week, with the week beginning on Sunday and ending on Saturday. The test provider(s) would be allowed to use late fees paid by motorists who do not show up during the specified test week to either create an incentive program to stimulate off-peak test lane usage or to expand capacity. The test provider(s) would also be required to offer "valet testing" for a reasonable fee. Such an option would allow motorists to have their vehicles picked up for testing from their homes, work places, etc., and returned.

(i) Onroad Testing. Although not expressly required to do so as part of its FIP effort, EPA proposes to use remote sensing devices (RSD) as a supplement to the proposed FIP I/M program, because EPA believes RSD to be a useful way of identifying gross emitters for possible out-of-cycle repairs. The actual onroad testing would be performed by the test provider and would cover a larger percentage of the fleet than the minimum required of state-adopted enhanced I/M programs under the I/M rule (i.e., approximately 10 percent). Owners of vehicles which fail the RSD check would be notified of the failure by registered mail, and would be required to report for an out-of-cycle confirmatory test at a test-only test site. Should the vehicle fail this confirmatory test, the owner would be responsible for the procurement of necessary repairs and would be required to submit the vehicle for retesting. The owner would have an opportunity to apply for a waiver, but only after meeting all the same criteria that would apply during the regular testing cycle. Vehicle owners who did not respond to the NPRM of RSD failure would be assessed a late penalty at the time of their next scheduled test. The late penalty would be the same as that charged for missing a regularly scheduled test (i.e., $10 per week late).

(j) Program Start Date. The FIP I/M program would initiate testing 100 percent of the subject vehicle population beginning in January 1997.

d. Enhanced In-Use Compliance Program for Light-Duty Vehicles—EPA expects the California Low Emission Vehicle (LEV) program will substantially reduce emissions of cars and light-duty trucks, compared to the federal standards. However, despite the use of advanced technologies and the OBD requirements, CARB projects LEVS will exceed their certification standards in-use, although, for the reasons noted in Section III.D.1.a(2), by a much smaller margin than has occurred in the past. Emissions above the certification standards, referred to as excess emissions, will occur because some models may experience more in-use deterioration than expected, or because individual vehicles experience component failure or improper maintenance which is not immediately corrected by the various existing in-use compliance programs, including enhanced I/M. Because the magnitude of the emission reductions needed for attainment is so great, the adoption of further measures to reduce these remaining excess in-use emissions will help reach attainment of the ozone standard.

EPA is therefore seeking comments on the need for and benefits of adopting an enhanced in-use compliance program which would provide extra emission reductions above and beyond the substantial reduction provided by the California LEV program, and cause in-use emissions to approach the certification standards. Specifically, EPA is considering three approaches. The first would modify the current federal recall program to initiate recalls based on the emission results of vehicles tested in their as received condition. This differs from current practice, and would result in a shift of responsibility for maintaining low emissions from the consumer to the vehicle manufacturers.

The second possible program would make manufacturers responsible for repairs for vehicles whose failure rate for that model in an enhanced I/M program exceeds a threshold level (e.g., greater than 5 percent within the first 5

years). This approach, like the first approach, provides an incentive for vehicle manufacturers to increase the durability of their designs, or implement other programs designed to maintain the emissions of their products in-use. Both of these possible programs would apply throughout a vehicle's statutory useful life.

The third possible program involves adoption of a requirement that the on-board diagnostic system of new vehicles be capable of communicating, to on-road sensors, the operational status of the emission control system (i.e., whether a fault has been detected). This approach allows for the immediate identification of high emitting vehicles, and their timely repair. Unlike the first two approaches, this approach would remain in effect for the vehicles's entire life, a significant point since over 40 percent of cars and light trucks on California's highways have over 100,000 miles on their odometer.

EPA requests comments on these three approaches, and on any other approaches to further reduce in-use emissions. Comments should address the need for and viability of EPA implementing, within the context of the FIP, compliance programs in addition to those already adopted by California. EPA is proposing to adopt the enhanced in-use compliance program described in Appendix I A.

e. On-highway Motorcycles—Provisions for on-highway motorcycles are contained in section III.D.4.c(1). Because engines used in nonroad recreational vehicles such as all terrain vehicles and dirt bikes are similar to those used in on-highway motorcycles, all control strategies for these engines are contained in the section referenced in the preceding sentence.

f. Discussion of Emission Registration and Fee Systems for Light Duty Vehicles—In the light duty vehicle and light duty truck sector, emission reductions can result from direct regulation of the vehicle and fuels or can be brought about by regulations or incentives (either positive or negative) to change vehicle ownership patterns and/or driver behavior. Emission standards for light duty vehicles and their fuel have significantly decreased the amount of pollution emitted by any one vehicle over a given mile. Standards continue to tighten and within the FIP EPA is proposing to reduce tailpipe and evaporative emissions even further.

Additional reductions could come from incentives to increase the number newer vehicles on the road and reduce the number of older vehicles. Accelerating fleet turnover through any means would reduce on road emissions by replacing older vehicles (which have older emissions technology) with newer, cleaner vehicles.

Increasing the number of newer vehicles purchased could be achieved either by offering incentives, such as rebates or reductions in registration fees, and/or with disincentives for owning older vehicles, i.e. higher registration fees based on age or on emissions.

Despite the impressive reductions in tailpipe emissions, on highway motor vehicle emissions remain a source of concern. Increases in the number of vehicles on the road and the number of vehicle miles traveled (VMT), threaten to outpace gains from technology. For the three FIP areas EPA utilizes the VMT growth projections provided by the local MPO or air quality management district. Growth in VMT can have significant impact on a given nonattainment area's ability to show attainment.

In most, if not all, nonattainment areas changing driver behavior has been addressed primarily (if at all) through implementation of transportation control measures (TCMs). The TCMs found in SIPs have generally, in the past, been voluntary in nature and often have consisted of efforts to make transit more available through increased bus routes, light and heavy rail expansions and the building of park and ride lots. While these steps are laudable they do little to change the current equation faced by a user of our transportation system. Because our road and highway system is financed in large part by general revenues (40 percent), and because drivers do not pay for the congestion and pollution they cause, the use of our roadways appears to users to carry a relatively low cost. In addition, single-occupant vehicles have considerable advantage in terms of convenience and privacy. Thus, any attempt to promote the use of alternatives to single-occupancy vehicles faces quite a challenge.

The limited effectiveness of traditional TCMs has led many in Federal, State and local government and in academia to promote instead the use of market-based TCMs. (See Cameron, Shoup for DOT, EPA/DOT Report to Congress, forthcoming NARC report by Apogee). Congestion pricing, parking reform, and VMT and emission fees all show great promise as effective means of changing driver behavior by making travel choices reflect more closely their true social costs.

EPA seriously considered making market-based TCMs an integral part of the FIP, however, within the context of the FIP, neither traditional TCMs nor market-based TCMs lend themselves easily to Federal implementation. The very nature of many traditional TCMs limits their usefulness within the context of the FIP. FIP authority does not allow the Agency to take on fundamentally local roles such as building new transit lines, expanding bus services, or building HOV lanes. If EPA were to impose emission fees or VMT fees or to institute congestion pricing, all revenue generated would have to go to the Federal Treasury (see the above discussion of the Miscellaneous Receipts Act in section III.A.2.b). Such a flow of revenue out of the FIP areas could have numerous adverse impacts.

In addition, the issue of fees, especially VMT fees, raises other inherently local issues such as land use planning. There are many theories and explanations for the rapid and continual growth in VMT over the last few decades—increases in women in the work force, population growth, increases in average income—but suburban sprawl also plays a significant role. For a variety of reasons, crime, housing costs, land costs, etc. the bulk of growth in metropolitan areas has been occurring in the suburbs. The lower housing densities and lack of mixed use zoning in most suburbs have made use of a car a daily necessity. Just as these patterns of land use occurred over a long period of time in response to local demands, so must future changes.

Despite the EPA assessment that control of VMT growth and the use of market-based TCMs are most appropriately considered at the local level, EPA would like to present an outline of a reasonable and, at the state or local level, an arguably workable light duty vehicle fee system, based on both emissions and vehicle miles traveled. EPA invites comment on federal implementation of this approach or any other appropriate market-based measures. If changes in technical estimates or in the stringency of other controls are made following public comment, EPA may have to turn to a fee system as described below despite the reservations voiced above. In such a case, EPA would obtain more public input on program specifics before implementation, including if appropriate, reproposal and public comment.

A fee on the product of emissions level and VMT would provide incentives for individuals to reduce emissions but also would provide them with some flexibility to achieve those reductions. A driver could choose to reduce her fee by buying a cleaner vehicle, or she could reduce her fee

burden by driving fewer miles. Most likely, individuals would consider the trade-offs they face and choose a course of action most appropriate for their circumstances. In thinking about this fee system, EPA has attempted to remain sensitive to many issues surrounding fees and the incentives they provide. EPA used as a guide California Senate Bill 1070, and many of the principles it provides. As in Bill 1070, EPA believes a fee collected at biennial inspection and maintenance points which is a function of VMT in excess of an annual per driver allotment of 5,000 miles and of the vehicle's I/M score recorded after any necessary repairs have taken place would be most workable.

EPA recognizes that the automobile represents for many people in the FIP area the only means of getting to work. Therefore, EPA suggests each licensed driver over the age of 18 could be allocated 5,000 "free" miles annually. Drivers in one household could combine their allowances however they choose, and use them to cover some of the VMT from the household's vehicles. EPA suggests this lifeline level based on data in the 1990 National Personal Travel Survey (NPTS) conducted by DOT. According to the 1990 NPTS, on average 32 percent of VMT and 26 percent of trips are directly the result of commuting. The average new car mileage (older model years are driven fewer miles in each successive year) is 15,000 miles. Thus 5,000 represents, on average, the upper end of commuting miles for a given driver. However, EPA invites comment on this issue.

Obviously the emission component of the fee provides an incentive for the vehicle owner to reduce vehicle emissions. How an individual chooses to do so is somewhat dependent on the way in which the fee is set. If the fee is charged based on how much the vehicle's emissions exceed the average emissions from other vehicles from the same model year, then the owner of the vehicle is interested in keeping the vehicle in good working order to ensure average or better emissions for a car of that model year. A fee set in this way does not penalize an owner for having an old car (and therefore old emissions technology) per se, but for having an old car dirtier than other cars of its age. The fee then does little to encourage the owner to replace the vehicle with one offering newer and therefore cleaner technology.

If, on the other hand, the fee is set based on actual emissions, owners still have an incentive to keep each car as clean as possible, but they face an added incentive to invest in cleaner technology. An added bonus for California of this type of emission fee is that it would address the question of vehicles not meeting California emissions standards which are brought into California by new residents ("49 state vehicles"). Any additional emissions resulting from a 49 state vehicle would be appropriately charged a fee, eliminating the need for a separate program to address those emissions.

However, such an incentive structure raises obvious questions regarding equity. Many, although not all, older cars are often perceived to be utilized by citizens with lower incomes. Thus, one could argue straight emission-based fees are regressive. However, on average, older vehicles are driven fewer than 5,000 miles annually for reliability reasons. A fee formula structure which forgives the first 5,000 miles of VMT and emissions, such as the system outlined here, allows low income car owners continued free use of their vehicles for daily necessities.

If EPA or the FIP areas were to adopt a VMT/emission fee system other details would need to be addressed. For example, EPA would suggest using actual VMT for each vehicle as determined by odometer checks at the time of the biennial I/M inspection. To discourage odometer tampering, EPA would propose to include in all registration material home and work addresses for all household members so that the distance from home to work could be estimated. EPA would also propose some type of system to "stop the clock" on VMT additions when the vehicle is being used out of state as during a vacation. (Granting fee exemptions for all VMT outside the FIP area appears to be too complex and/or cumbersome). EPA invites comment on this and other odometer tampering issues.

For the emission portion of the fee calculation, EPA would suggest using the actual IM240 scores without regard to model year and with no adjustments for evaporative or cold start emissions. Since all three FIP areas need substantial reductions in both VOC and NO_X emissions, EPA suggests that the emission readings for the two pollutants be given equal weight in calculating the VMT/emissions fee. As with other fee programs described in this document, the fee could be charged at the rate of $10,000/ton of emissions, based on the emissions generated by an individual car.

Again, EPA is not proposing a VMT/emission fee within the FIP. EPA believes such a fee system is most appropriately implemented at the local level and invites comment on the suggested program outlined here.

g. Parking Cash Out—Even in downtown areas, most employees in California receive free or subsidized parking spaces. Current tax codes allow employers to offer this benefit without the employer or the employee having to pay taxes on the value of the space. Since parking costs represent the bulk of the daily cost of driving to work, these "free" spaces are a strong incentive for employees to drive to work alone. For example, in downtown Los Angeles the average employer-paid subsidy for employee parking is 43 percent more than the cost per average commute trip for gasoline.

As part of his Climate Change Action Plan, President Clinton has called for transforming the existing tax subsidy for employer-paid parking into a powerful reward for commuters to ride transit, carpool, or find other ways to get to work. The Administration will shortly propose changes in the tax law necessary to bring about parking subsidy reform. This same proposal is included in the FIP, in a form which is consistent with EPA's authority. The proposal does not modify the tax code or require payments by any employer. Rather, it applies certain restrictions.

Certain employers may not offer free parking unless they offer employees the option of retaining the parking space or accepting a cash allowance equal to the market cost of the parking space. The cash allowance will be considered taxable income, but under current tax law, up to $60 per month of the cash may be taken in the form of a transit pass, which would be tax-exempt. Those who opt for the parking space will be unaffected by the change. Whether the employee decides to take the free parking or the cash allowance, the company can still deduct the cost from corporate income tax.

The cash out provision would be applicable to employer-paid parking provided by firms of 25 or more employees, located in an access-controlled parking lot not owned by the employer. Those spaces or lots leased by employers from a third party before March 14, 1994 are included only if the lease explicitly includes the value of the parking per space and the lease allows the employer to reduce the number of parking spaces leased without monetary penalty. The provisions will apply to all spaces leased on or after March 14, 1994, regardless of the form of the lease. Employers who execute leases on or after this date should make sure the per space value and the right to reduce the number of leased spaces are included in the lease. Absence of either will not be grounds for exemptions. Absence of a

per space value will mean that the employer may not offer free parking.

At this time EPA lacks information on the number of employers and employees who would be affected by this program or the average value of leased parking spaces in each of the three nonattainment areas, making it difficult to estimate the exact impact of a cash out program. Analysis by Dr. Donald Shoup of UCLA suggests that if offered in downtown Los Angeles, one form of parking cash out would reduce employee solo driving by 20 percent, and would eliminate 9,000 vehicle trips per day. (See: Cashing Out Employer-Paid Parking, U.S. Department of Transportation, Federal Transit Administration, Final Report FTA–CA–11–0035–92–1, December 1992.)

Dr. Shoup's analysis of Los Angeles predicted these impacts in a location where parking costs approximately $5.00 per day. Once EPA has more specific information on the three nonattainment areas, EPA proposes to assume for emission reduction crediting purposes a linear relationship between the value of parking in a given area and the employee response to a cash out program, based on Dr. Shoup's work. EPA invites comment on this assumption. EPA also asks for information on the employer composition and parking lease practices in the three non-attainment areas.

It should be noted that for this proposal EPA has assigned credit to the ECO program in the Sacramento FIP area assuming a 20-percent reduction in affected employers' employees who drive alone to work. The universe of employers who are subject to ECO and to the cash out provisions do overlap and in the final FIP rule EPA will ensure that emission reductions taken for the two programs do not include any double counting.

EPA recognizes that this provision is similar to the cash out legislation recently enacted in California. Since the Administration will soon offer legislative language to enact parking cash out nationally EPA is proposing a cash out program in keeping with the federal proposal. The most obvious difference between the two proposals is in the definition of affected employers. California's legislation applies to employers with 50 or greater employees, while the Climate Change Action Plan calls for parking cash out for employers with 25 or more employees. The EPA proposal simply makes mandatory an option many employers have had as a way of achieving the South Coast and Ventura goals. As with the President's plan, this proposal requires cash out in such a way to ensure that no employer will have a net loss.

h. Importation of Vehicles Into California—Little data are available on the population and characterization of 49-state vehicles in California and nationwide. However, it is estimated that out-of-state passenger vehicles (49-state vehicles) currently make up about 10 percent of the VMT in California. As a result of the California's LEV program and the proposed enhanced in-use compliance program, the difference in the emissions level between California certified vehicles and federally certified 49-state vehicles is expected to increase, and 49-state vehicles will therefore have increasing negative impact on air quality. Moreover, if California and 49-state vehicles further diverge in design there may be an increased incentive for California residents to purchase vehicles designed to meet only 49-state standards. Currently, 49-state vehicles with less than 7500 miles of operation (classified as new) may not be brought into California, but older vehicles can be upon payment of a California DMV fee, which is not prohibitive in comparison to many vehicle's market value.

Today's FIP therefore proposes to impose a restriction, starting in 1999, on California residents importing 49-state vehicles. Specifically, EPA proposes to prohibit (with an exception noted below) the State of California from allowing California residents to register for the first time in California any vehicle that was previously registered in another state, unless that vehicle was originally certified to the vehicle requirements set forth in this proposal for its class. In addition, EPA proposes to prohibit California residents from owning and keeping a car in California that is currently registered in another state.

As an exception to this prohibition, EPA proposes that the State of California may allow recent immigrants to California (defined as residents of California for less than three months) to register a car, over 7500 miles, that they had previously registered for at least three months in another state while a resident of that state. EPA's attainment demonstrations are based on migration patterns for out-of-state vehicles that match the restrictions described above. EPA solicits comments on these rules and restrictions.

EPA is also inclined to provide exemptions for historic and collector vehicles, and requests comment on methods for providing these exemptions.

3. Programs for Onroad Heavy Duty Vehicles and Engines

a. Overview—Heavy-duty mobile sources (trucks and HDVs) are large contributors, especially for NO_X, to the emissions inventories in the three FIP areas. Existing standards for heavy-duty engines in California are, for the most part, the same as the Federal standards. Further control of these engines is necessary to meet the attainment targets. For these reasons, EPA will propose an enhanced in-use compliance program for heavy-duty vehicles, similar to the one proposed for light duty vehicles, which includes not only tighter standards but also selected controls on higher emitting interstate trucks.

Larger heavy-duty engines see substantially heavier use than smaller engines. These engines are built to very high durability standards and are designed to be cost effectively rebuilt one or more times within their total lifetime. To provide assurance of emissions control over this extended actual life, this proposal includes certification and liability requirements for rebuilt engines as well.

b. Air Quality Significance— Heavy-duty highway mobile sources are significant contributors to the emissions inventories in all three of the FIP areas. The table below ("1990 Base Year Inventory of Heavy Duty Vehicles") details the level of emissions from onroad heavy-duty mobile sources in each of the FIP inventories for the 1990 base year. The information contained in this table illustrates the large portion of the FIP inventories that is attributable to emissions from onroad heavy-duty mobile sources.

1990 BASE YEAR INVENTORY OF HEAVY DUTY VEHICLES

	Sacramento		Ventura		South Coast	
	VOC	NO_X	VOC	NO_X	VOC	NO_X
Onroad HDVs (tons)	12.7	48.3	5.5	14.8	107.8	246.7
Percent of total inventory	5	26	5	17	6	19

c. Enhanced In-Use Compliance Program for Heavy-duty Vehicles—EPA is proposing an enhanced in-use compliance program for onhighway heavy-duty engines. The heavy-duty vehicle program described in Appendix I Section B is based in large part on the enhanced light-duty vehicle program, described in Appendix I Section A. However, certain changes and additions were made in order to deal with the differences between heavy- and light-duty vehicles. The reader is advised to read the discussion of the enhanced in-use compliance light-duty vehicle program as the information will facilitate understanding the heavy-duty program.

The enhanced program for heavy-duty vehicles consists of several parts: More stringent emission standards, new full useful life requirements, high-emitting interstate truck regulations, expanded recall scope, a fleet averaging program and I/M for certain vehicle classes. Each of these program elements is discussed further in Appendix I Section B; however, a short introduction is provided here.

Heavy-duty on-highway engines contributed 19 percent of South Coast NO_X emissions and 6 percent of South Coast VOC emissions in 1990. These engines are predicted to continue to contribute significantly to the inventory, even though, for NO_X, the applicable standards have decreased in recent years (1989 and 1990) and will continue to do so (1998). These NO_X inventory contributions continue to be significant largely because the heavy-duty engine NO_X standards have been introduced relatively recently and because of a continued increase in heavy duty VMT. In addition, the heavy-duty NO_X standards are significantly less stringent than the light-duty standards due to the historical inability of heavy-duty diesel engines to attain low NO_X levels. The VOC contribution from heavy-duty engines, although smaller than the NO_X contribution, is also a significant part of the inventory. Additional reductions in the contribution of heavy-duty engines to the NO_X and VOC inventory are required in order to meet the objectives of the FIP. Thus, EPA has developed the enhanced heavy-duty vehicle program being proposed today.

California's heavy-duty engine standards are not significantly more stringent than federal standards. A large part of the reason for this relates to interstate commerce. Approximately 22 percent of the VMT traveled by heavy-duty trucks in California are from out-of-state trucks engaged in interstate commerce. California cannot effectively deal with its air quality problems without regulating these engines, but the State has hesitated from regulating interstate commerce because of concerns about the impact on in-state firms and lawsuits. In order to effectively deal with NO_X from heavy-duty engines, controls on interstate trucking must be considered. For these reasons, the program proposed today for heavy-duty vehicles includes not only tighter standards (as described in Appendix I Section B(3)) and a fleet averaging program (as described in Appendix I Section B(9)), but also selected controls on higher emitting interstate trucks (as described in Appendix I Section B(7)).

Larger heavy-duty engines see substantially heavier use than smaller engines. These engines are built to very high durability standards and are designed to be cost effectively rebuilt one or more times within their total lifetime. To provide assurance of emissions control effectiveness over this extended actual life, this proposal includes revised recall provisions (similar to those for light-duty) and certification and liability requirements for rebuilt engines (as described in Appendix I Section B(4)).

EPA is proposing to adopt the enhanced in-use compliance program described in Appendix I Section B. EPA also requests comments on all aspects of its proposal and on any other approaches to further reduce in-use emissions.

4. Nonroad Engines and Vehicles

a. Overview—(1) Statutory Authority. Authority for the actions proposed to regulate nonroad engines is granted to EPA by sections 110, 203, 204, 205, 206, 207, 208, 209, 213, 215, 216, and 301(a) of the Clean Air Act (CAA or Act) as amended (42 U.S.C. 7410, 7522, 7523, 7524, 7525, 7541, 7542, 7543, 7547, 7549, 7550, and 7601(a)).

The Clean Air Act Amendments of 1990 extended EPA's authority regarding regulation of nonroad engines and vehicles. Specifically the revised CAA section 213(a) directs EPA to: (1) Conduct a study of emissions from nonroad engines and vehicles; (2) determine whether emissions of carbon monoxide (CO), oxides of nitrogen (NO_X), and volatile organic compounds (VOCs) from nonroad engines and vehicles are significant contributors to ozone or CO in more than one area that has failed to attain the National Ambient Air Quality Standards (NAAQS) for ozone and CO; and (3) regulate those categories or classes of nonroad engines and vehicles that contribute to such air pollution if nonroad emissions in the aggregate are determined to be significant by November 1992. Under CAA section 213(a)(4), EPA may also regulate emissions other than CO, NO_X, and VOCs from new nonroad engines and vehicles if EPA determines that such other emissions contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Finally, Section 213 directs EPA to regulate emissions from new locomotives.

EPA is already required by statute, and, in some cases, court order, to promulgate national rulemakings for various categories of nonroad engines. In this NPRM, EPA proposes to allow credit for these rules, which will be promulgated either before or within a relatively short time after promulgation of these FIPs. Thus final issuance of these rules is legally compelled well in advance of their scheduled implementation.

Because of the imminence of these rulemakings, and because EPA's commitments to them are legally guaranteed, EPA believes it is appropriate to give credit in the FIP for the emissions reductions they are expected to generate. The emissions reductions involved are relatively small, and are further ensured by EPA's regulatory guarantee to achieve the level of credited emission reductions by other means if necessary.

Canvassing the alternatives to this approach bolsters EPA's conclusion. One option is to accelerate the statutory and court-ordered deadlines so that they precisely fit the FIP promulgation date. But the rulemakings at issue are national in scope, and it would be detrimental to cut short the time Congress and the courts have allocated for their analysis and consideration as a technical accommodation to the localized FIP deadlines. The only remaining alternative would be to promulgate temporary, interim measures that would in all probability never be implemented, and that would evaporate when the national rules were issued. This approach would be wasteful, inefficient, and confusing for regulated sources.

(2) General Nonroad Background. This section provides general background on nonroad sources excluding large ocean-going ships, locomotives, and Federal sources such as aircraft. These sources will be covered starting with Section III D.4.e of this preamble. The Nonroad Engine and Vehicle Emission Study (hereafter, "Nonroad Study") required by section 213(a)(1) was completed in November 1991. The Nonroad Study is available in docket A-91-24. The determination of

the significance of emissions from nonroad engines and vehicles in more than one NAAQS nonattainment area, required by section 213(a)(2), was proposed on May 17, 1993 (58 FR 28809). At the same time, the first set of Federal regulations for a class or category of nonroad engines that contribute to air pollution, required by section 213(a)(3), was also proposed (58 FR 28809) for new nonroad compression-ignition (CI) engines at or above 37 kilowatts (kW) (50 hp). As EPA continues to implement section 213(a)(3) and (4), it will propose Federal emission standards for new nonroad spark-ignition (SI) engines at or below 19 kW (hereafter, "small SI engines"), and spark-ignition (SI) marine engines (hereafter, "SI marine engines") as well as other classes or categories of nonroad engines that contribute to air pollution.

On the basis of the Nonroad Study, EPA has proposed its determination that emissions of CO, NO_X, and VOCs from nonroad engines and vehicles contribute significantly to ozone or CO in more than one NAAQS nonattainment area (see 58 FR 28809, May 17, 1993). According to the Nonroad Study, nonroad engines and vehicles contribute an average of 10 percent of summer VOCs and 17 percent of summer NO_X in the 19 ozone nonattainment areas included in the study. Small SI engines are the source of half of those nonroad summer VOC emissions. CI engines over 50 kW used in farm, construction, and utility applications are a major source of nonroad NO_X emissions. In the 16 CO nonattainment areas included in the study, nonroad engines and vehicles account on average for 9 percent of winter CO emissions. Small SI engines are the source of 56 percent of the nonroad winter CO contribution, according to the study. In the Sacramento, Ventura, and South Coast FIP areas, nonroad sources comprise 10 percent, 5 percent, and 6 percent of the baseline VOC inventory, respectively. Nonroad sources contribute 22 percent of Sacramento's baseline NO_X inventory, 12 percent of Ventura's, and 21 percent of South Coast's.

(3) Sierra Club Suit. The Sierra Club Legal Defense Fund brought suit against EPA in Federal District Court for the District of Columbia for failure to meet certain deadlines required under the Clean Air Act (*Sierra Club* v. *Browner*, Civ. No. 93–0197 NHJ (DDC 1993)). Plaintiffs and EPA have entered into a settlement agreement in that case that, among other things, requires EPA to finalize Federal emission standards for certain categories of nonroad engines on the following schedule:

Heavy Duty CI Ignition Engines.	May 1994.
Small Nonroad SI Engines Phase I.	May 1995.
Small Nonroad SI Engines Phase II.	April 1997.
Marine Pleasure Craft	November 1995.

The Settlement also requires that EPA make a decision regarding whether to regulate SI engines over 19 kW (25 hp) and CI engines under 37 kW (50 hp) by December 1996. Given the reductions available through other measures proposed today, it will not be necessary to develop special control measures for the FIP areas for these two categories of nonroad engines. However, certain SI engines over 37 kW (50 hp) may be affected by the enhanced nonroad program described in the Appendices of today's proposal.

(4) Rationale for Implementing the Federal Programs in the FIP Areas. Nonroad sources are a diverse class of engines used in as many as 80 applications. The structure of the industry that manufactures nonroad engines and vehicles is complicated in that it is not integrated. Some manufacturers manufacture only engines, others manufacture only equipment, few manufacture both engines and equipment. Much of the equipment is portable and is not registered, making enforcement of regulations challenging. Almost without exception, nonroad engines have not been regulated previously by EPA for emissions. Much of the data which existed relating to emissions from nonroad engines prior to 1991, while adequate to estimate emissions inventories for the purpose of the Nonroad Study, needed updating and analysis before comprehensive regulatory programs could be developed. For some categories of engines, little emissions data existed; for other categories of engines, EPA believes that the emission test procedures need to be validated to ensure accurate representation of in-use emissions using advanced control technology.

The Agency is now in the process of gathering more emissions data and validating and developing test procedures for nonroad engines. Because of the need to achieve near-term emissions reductions from nonroad sources in the nonattainment areas and the lack of certain data, the Agency adopted phased Federal regulatory strategies for two nonroad categories: CI engines at or over 37 kW and SI engines at or under 19 kW. In Phase 1 for each of these categories, EPA either has proposed or will soon propose standards that will achieve maximum reductions in the near term using existing test procedures and technology or modifications of existing technology. Phase 2 will deal with those issues for which a longer review time is advisable, such as development of new technologies and test procedures.

For the purposes of the FIP, the Agency proposes to implement certain Federal programs that have not yet been promulgated by EPA. In particular, the Agency proposes to implement the Phase 1 and Phase 2 Federal Standards for nonroad SI engines at or under 19 kW. These Phase 1 and 2 standards are now under development and will be proposed by May of 1994 and May 1996, respectively. EPA also proposes to implement the Federal Standards for CI Nonroad Engines at or over 37 kW which have been proposed (58 FR 28809) and will be made final by May 31, 1994, and National Standards for Spark-ignition Marine Pleasure Craft which are under development and will be proposed by September 1994. These programs are described in the section entitled, "Federal Nonroad Requirements."

(5) California's Nonroad Program/Preemption. Section 209(e)(1) prohibits California, and all other states, from adopting standards for new locomotives and for new engines and vehicles used in farm and construction equipment under 175 hp. CAA section 209(e)(2) authorizes California to adopt and enforce emission standards for all other nonroad engines if it is California's determination that such standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal Standards and if EPA finds that: (1) California's determination is not arbitrary and capricious; (2) California needs such standards to meet compelling or extraordinary conditions; or (3) California's standards and accompanying enforcement procedures are consistent with that section. CAA section 209(e)(2) also authorizes other states to opt into California standards.

The California Air Resources Board (CARB) has chosen to create categories for regulation of nonroad sources based on application or end use of the engines. The Federal program for control of emissions from nonroad sources creates categories for regulation based on engine parameters and characteristics such as size and fuel system, rather than application. The Agency believes that this regulatory scheme provides criteria that make it easier to clearly determine which engines are covered by which set of standards. The Agency does consider application or operating environment in its regulatory scheme for some engines.

In general, the Federal categories are broader than those chosen by California and encompass a wider range of engines and applications. CARB has approved standards for nonroad lawn and garden and utility SI and CI engines from 0–25 horsepower. EPA is currently reviewing CARB's section 209(e) waiver request for its lawn and garden and utility rule. A decision will be issued once EPA's section 209(e) procedural rule is finalized. There is potential for other states to adopt the California standards, which are scheduled to become effective in 1995. CARB also has proposed standards for other classes of nonroad vehicles.

Federal Standards will be more comprehensive than California's proposed standards for lawn and garden equipment or heavy-duty farm and construction equipment because the Federal programs will cover engines used in new farm and construction equipment under 175 hp which California is preempted from regulating. About 1 in 5 engines that would otherwise be covered by California's proposed lawn and garden standards are preempted because they are classified as farm or construction engines. The Federal program for control of SI marine engines, which will be proposed by September 1994, will also be applied in the FIP areas. California has no proposed standards for marine pleasure craft, however, CARB has conducted a public meeting to consider a plan to control emissions from "large" marine vessels.

b. Federal Nonroad Requirements—(1) Federal Requirements for CI Engines at or above 37 kW. This section provides a general overview of the major elements of the Federal program to control emissions from new nonroad CI engines at or greater than 37 kW.

(a) Applicability. The regulations are expected to apply to all new nonroad CI engines at or above 37 kW with certain exemptions and exclusions. Engines included in this rule will be referred to as "large nonroad CI engines."

The vast majority of large nonroad CI engines currently being used and manufactured are diesel-fueled engines. The use of alternative fuels will not be necessary to meet the emission standards. However, these regulations would apply to large nonroad CI engines regardless of the fuel that is used (for example, diesel, compressed natural gas (CNG), rapeseed, methanol, ethanol, and blends). Provisions are expected to be included which will allow manufacturers to apply for Administrator approval of alternative test procedures if fuel other than diesel is to be used.

(b) Standards. EPA expects to adopt NO_X emission and smoke standards for all large nonroad CI engines at or above 37 kW as proposed May 17, 1993 (58 FR 28809). Furthermore, EPA expects to adopt standards for HC, CO, and PM emissions for engines at or above 130 kW, consistent with those standards adopted by California in section 2420–2427, Chapter 11, Title 13 of the California Code of Regulations, "California Regulation for New 1996 and Later Heavy-duty Off-road Diesel Cycle Engines."

Net Power (kW)	HC g/kWh	CO g/kWh	NO_X g/kWh	PM g/kWh	Smoke A/L/P percent*
≥130	1.3	11.4	9.2	0.54	20/15/50
≥75 to <130	N/A	N/A	9.2	N/A	20/15/50
≥37 to <75	N/A	N/A	9.2	N/A	20/15/50

* Smoke Opacity Standards are reported in terms of percent opacity during an acceleration mode, a lug mode, and the peak opacity on either the acceleration or lug modes.

(c) Compliance Dates. Under the expected regulations, all engines produced by an engine manufacturer on or after January 1 of the implementation year specified below by power category would be required to be certified by the engine manufacturer according to the requirements in effect for that year. EPA expects equipment manufacturers to begin installing certified engines as soon as they become available from engine manufacturers, with some lag time expected for equipment manufacturers to clear out normal inventories. Early certification will be allowed one year prior to the applicable effective date for engines participating in the averaging, banking, and trading (ABT) program.

Engine size (kW)	Implementation date
≥130 to ≤560	January 1, 1996.
≥75 to <130	January 1, 1997.
≥37 to <75	January 1, 1998.
>560	January 1, 2000.

(d) Certification and Test Procedures. The exhaust emission 8–Mode test procedures for NO_X emissions and the smoke test procedures are expected to be adopted as they were proposed with minor revisions. The 8–Mode test procedure would also apply to emissions of HC and CO.

For PM emission measurement, EPA would adopt the California test procedures as finalized in Section 2420–2427, Chapter 11, Title 13 of the California Code of Regulations, "California Regulation for New 1996 and Later Heavy-duty Off-road Diesel Cycle Engines."

Manufacturers of engines that are not able to operate properly over the 8–Mode or smoke test cycles (such as engines with constant speed governors), would be able to petition the Administrator to allow use of an alternative test procedure. Upon adequate demonstration of need, the Administrator may allow use of alternative procedures. If an engine is unable to be operated over the smoke test procedure, the manufacturer would be required to submit an alternative test plan to the Administrator for approval in advance of any testing.

The particulate standard adopted in the rule would be based on the use of the low sulfur fuel. Should a manufacturer or EPA choose to perform certification or in-use compliance testing with commercially available fuel containing higher sulfur, the particulate measurement will be adjusted by using the following equation to reflect the effects of higher sulfur content of the fuel on particulate emissions

$$PM_{adj}=PM-[BSFC\times0.0917\times(FSF-USLF_{CA})]$$

Where:

PM_{adj}=adjusted measured PM level [g/kWh]

PM=measured weighted PM level [g/kWh]

BSFC=measured brake specific fuel consumption [(G/kW-hr) hr]

FSF=fuel sulfur weight fraction

$USLF_{CA}$=upper sulfur level weight fraction of California test fuel specification

This adjustment only applies to engines with no exhaust gas aftertreatment. No adjustment is provided for engines with exhaust gas aftertreatment.

(2) Federal Requirements for Small Nonroad SI Engines at or Under 19 kW.

(a) Background. Since March 1992, EPA has held several public workshops

and meetings to solicit information on technical characteristics, emissions, potential regulatory strategies, and general regulatory issues related to small SI engines. Public notice of such meetings may be found in the docket for this rulemaking.

At the March 1992 public workshop, the Engine Manufacturers Association and the Outdoor Power Equipment Institute encouraged Federal regulation of nonhandheld small SI engines and expressed interest in working in a cooperative program with EPA to develop regulations by November 1993. Likewise, the Portable Power Equipment Manufacturers Association encouraged Federal regulation of portable 2-stroke power equipment and expressed interest in working cooperatively with EPA.

Following the March 1992 workshop, EPA determined that setting emission standards for the small SI engine category might be suitable for a consultative approach to rulemaking, such as negotiated rulemaking. The Negotiated Rulemaking Act (5 U.S.C. 581–590) establishes a framework for conducting negotiated rulemaking. The goal of a regulatory negotiation committee is to reach consensus on the language or issues involved in a rule. If consensus is reached, it is used as the basis of the Agency's proposal.

EPA initiated a convening process to determine the best way to work with industry and other interested parties in developing regulations for small SI engines. The conveners interviewed individuals in leadership roles in key organizations identified by EPA to determine what parties were interested in these regulations, what issues were important to interested parties, and whether a consultative rulemaking process would be feasible and appropriate. A copy of the convening report dated August 24, 1992, is available in the docket for this rulemaking.

The convening report recommended an exploratory meeting of interested parties to discuss, but not initiate, a consultative process. Time-forcing factors lending an air of urgency to issuance of the rule include: (1) The need of states to realize emission reductions from nonroad sources that are creditable toward Reasonable Further Progress requirements of the CAA, and (2) the potential threat to industry of patchwork regulation if a number of states opt into California's program in order to attain national air quality goals. The deadlines created by the settlement of the *Sierra Club* suit mentioned earlier led to even further need to issue a rule quickly.

The exploratory meeting recommended in the convening report was held in Ann Arbor, Michigan, on November 16–17, 1992. Participants decided that state and public interest representatives needed more technical information to fully understand some of the regulatory issues participants might face. It was also decided that another meeting was necessary to discuss the potential design of a consultative process for a small SI engine rulemaking. The technical briefing for state and public interest representatives was conducted in Ann Arbor on December 16, 1992. On January 28–29, 1993, a meeting to discuss consultative process design was held in Ann Arbor.

At the January meeting, it was suggested that EPA consider a two-phased approach to regulation of small SI engines. In the first phase, EPA would propose regulations for small SI engines through the normal regulatory process rather than a consultative process. The suggested Phase 1 regulations would be similar to California's Regulation for 1995 and Later Utility and Lawn and Garden Equipment Engines, modified as necessary to meet CAA requirements. (For example, EPA's proposal would modify CARB's program by including engines preempted from regulation in California.) The Phase 1 proposal would be completed as soon as possible, but no later than the spring of 1994. The final rule would be completed no later than spring of 1995. The second phase of regulation would be developed through the consultative process of regulatory negotiation. It would include issues such as useful life, in-use emission, evaporative emissions, refueling emissions, test procedure, and market-based incentive programs.

Today's action proposes that both phases of regulation for small SI engines be applied to the FIP areas. An overview of what EPA anticipates will be included in a Phase 1 program is outlined below. EPA believes that the Federal Phase 1 Standards will result in a 40 percent reduction in the HC inventory with a slight (less than 1 percent) increase in NO_X. Phase 2 small SI engine regulations are expected to achieve 90 percent reduction in the small SI engine baseline HC emissions inventory. The Agency expects that achieving a 90 percent reduction would not depend solely on more stringent exhaust standards, but rather a combination of strategies (i.e., a scrappage program or other programs to accelerate turnover, spillage control programs, fuels requirements and evaporative emission controls) that added together would result in the anticipated reduction. Negotiations have been underway since Fall 1993 and will continue for approximately 18 months.

The phased approach to regulation of small SI engines is incorporated in the *Sierra Club* v. *Browner* settlement. Phase 2 regulation is expected to apply federally and in California in approximately 2000–2001. Should the Agency's Phase 2 small SI engine program fail to provide for a 90 percent reduction from the current uncontrolled emissions inventory, EPA shall promulgate a more stringent program applicable to California, or the FIP areas, or propose fees for commercial operators of SI engines at or under 19 kW.

(b) Overview of Program to Control Emissions from SI Engines Under 19 kW. The general provisions that EPA expects to propose for the Phase 1 and Phase 2 rules, as well as the rationale for the key parts of the proposal, are briefly described in the following section.

EPA expects to propose to regulate the emissions of hydrocarbons (HC), oxides of nitrogen (NO_X), and carbon monoxide (CO) from certain new nonroad SI engines that have a gross power output at or below 19 kilowatts (kW) (small SI engines). An SI engine is an internal combustion engine in which the air/fuel mixture is ignited in the combustion chamber by an electric spark and are generally fueled by gasoline. The scope of these rules are expected to encompass a broad range of small SI engine applications, including farm and construction equipment, which states are preempted from regulating under section 209(e)(1) of the CAA. Anticipated exclusions from the rules are detailed below.

1. Engines used to propel marine vessels as defined in the General Provisions of the United States Code, 1 U.S.C. 3 (1992). A "vessel" includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water. 1 U.S.C. 3 (1992).

2. Engines used in underground mining or engines used in underground mining equipment and regulated by the Mining Safety and Health Administration (MHSA). See 30 CFR parts 7, 31, 32, 36, 56, 57, 70, and 75.

3. Engines used in motorcycles and regulated in 40 CFR part 86 subpart E.

4. Engines used in aircraft as that term is defined in 40 CFR 87.1(a).

5. Engines used in recreational vehicles. Recreational engines are those engines which have no installed speed governor and which have a rated speed of greater than or equal to 5000 revolutions per minute (RPM). Recreational engines are not used to

propel marine vessels and do not meet the criteria to be categorized as a Class III, IV, or V engine under this rule.

(c) Standards.

Phase 1

Under the expected Phase 1 proposal, exhaust emissions from small SI engines cannot exceed levels for a given engine class as listed in the table below ("Phase 1 Small SI Exhaust Emission Standards"). Engine classes are specified both by engine displacement, as measured in cubic centimeters (cc), and by the type of equipment the engine will power—either handheld or nonhandheld. The emission standards that EPA expects to propose are considered Phase 1 small engine standards.

PHASE 1 SMALL SI EXHAUST EMISSION STANDARDS

[In grams per kilowatt hour]

Engine class	Hydrocarbon plus oxides of nitrogen	Hydrocarbon	Carbon monoxide	Oxides of nitrogen
I	16.1	.....	402	.....
II	13.4	.....	402	.....
III	.....	295	805	5.36
IV	.....	241	805	5.36
V	.....	161	402	5.36

Class I: engines less than 225 cc in displacement

Class II: engines greater than or equal to 225 cc in displacement

Engines powering equipment defined as handheld must meet Class III, IV, or V emission standards as follows:

Class III: engines less than 20 cc in displacement

Class IV: engines at or above 20 cc to less than 50 displacement

Class V: engines equal to or greater than 50 cc indisplacement

Phase 2

Standards are currently being negotiated for Phase 2 through the regulatory negotiation process and will cover exhaust as well as evaporative emissions.

(d) Regulatory Scheme.

Phase 1

This rule is expected to propose the following regulatory scheme:

- Designation of product lines into groups of engines with similar emissions, and manufacturer emission testing of selected engines with a specified test;
- Labeling of engines, and alternatively, equipment labeling;
- Submission of an application for certification for each engine family;
- Inclusion of various certification requirements such as the prohibition of defeat devices;
- Issuance of an emission certificate of conformity for each engine family;
- Prohibition against sale of engines in the U.S. not certified by EPA;
- Requirement that equipment manufacturers use the appropriate handheld or nonhandheld certified engine in their equipment;
- Recordkeeping and reporting requirements;
- Design warranty provisions and prohibition on tampering;
- Inclusion of all farm and construction engines preempted under the CAA from state regulation;
- Development of an engine manufacturer's program to evaluate in-use emission deterioration;
- Requirement that, if catalysts are used in an engine family, catalyst durability must be confirmed by means of the evaluation procedure that is specified in this NPRM;
- Defect reporting;
- Importation provisions; and
- Production line Selective Enforcement Auditing (SEA).

Phase 2

The regulatory scheme for Phase 2 will be negotiated through the regulatory negotiation process.

3. Federal Requirements for SI Marine Engines

The EPA is currently in the process of developing a Federal rulemaking to control emissions from SI marine engines. The proposed standards will be expected to result in a 70–80 percent reduction in HC emissions from two-stroke outboard engines which comprise over half of the engines in this category. On average there will be a 50–60 percent reduction in emissions from the fleet of SI marine engines. However, as a result of controlling HC emissions, NO_X emissions are expected to increase by a factor of 2–4 (baseline NO_X for these engines, on average, is about 2 g/kWh). This Federal program will apply to FIP areas. EPA is under court ordered deadline for this regulation; the schedule is for the NPRM to be signed by the Administrator by September 30, 1994 and final rule signed by November 24, 1995. The general provisions that the Agency anticipates will be included in the proposal for regulation of SI marine engines are briefly described in the following section. Today, EPA is also proposing a system of emission based fees for use of SI marine pleasure craft in the FIP areas. If the Agency finds that the Federal program for controlling emissions from SI marine engines does not achieve the anticipated reduction, adjustments will be made to the stringency of the fees or the standards to compensate for any loss in benefit from the Federal program.

(a) Overview of Requirements for SI Marine Engines

EPA will propose to regulate the emission of hydrocarbons from SI marine engines. Included under this regulation will be emission standards for SI marine propulsion engines which include the following engine types: outboard, sterndrive (inboard/outboard), inboard, and personal watercraft (e.g., Jet Ski).

A compliance program involving pre-sale certification and in-use enforcement is also expected to be proposed for marine engines. The proposed program will be similar to the current on-highway engine program. EPA expects to include the following provisions:

- Designation of product line into groups of engines with similar emission characteristics (such groups are called engine families);
- Manufacturer emission testing of selected engines with the specified test procedure to demonstrate compliance with emission standards;
- Labeling of engines from each engine family;
- Submission of application for certification for each engine family by model year;
- Issuance of an emission compliance certificate for each engine family;
- Prohibition against sale of engines not certified by EPA;
- Recordkeeping and reporting;
- EPA confirmatory certification testing;
- Production line Selective Enforcement Auditing (SEA);
- In-use testing and enforcement;
- Warranty and prohibition on tampering; and
- Importation provisions.

Certain modifications to the on-highway program are expected to be proposed for this program. These modifications include: (1) only one emission test engine required, and (2) a national averaging, banking, and trading program modified to suit this industry.

For the FIP areas, EPA proposes that phased emission standards and certification of new engines commence with the 1998 model year for outboard, sterndrive and inboard engines, and 1999 model year for personal watercraft.

(b) Definition of SI Marine Engine.

A spark-ignition engine is an internal combustion engine in which the air/fuel mixture is ignited in the combustion

chamber by an electric spark. EPA is expecting to propose defining marine engines as any nonroad engine which is used on a "vessel" as defined in 1 U.S.C. Section 3 (1992).[72]

(c) Applicability. Under the expected proposal all SI marine engines must comply with the proposed emission standards, with some exceptions as discussed below.

Exclusions from the Proposal

Certain engines that are included within the proposed definition of marine engine just discussed are expected to be excluded from the Federal marine engine emission standards. SI engines expected to be excluded are the following:

(1) Engines used in marine "vessels" as defined in 1 U.S.C. Sections 3 (1992) which are used exclusively as marine auxiliary power generation units;

(2) Exported engines, either loose marine engines or marine engines in boats or vessels that are to be exported.

Exemptions From the Proposal

Pursuant to section 203(b)(1) of the CAA, the Agency is expecting to propose categories of exemptions from new SI marine engine regulations similar to the existing exemptions for new large nonroad CI engines (see 40 CFR part 89 subpart I). These include exemptions for purposes of research, investigations, studies, demonstrations, training, or for reasons of national security. Exemptions are justified in these cases because the sources are limited in number or scope so no environmental harm results, the particular use of the source is determined to further air quality research, and/or the exemption is vital to the security of the nation. (See 39 FR 10601, March 21, 1974 for history of on-highway exemptions policy.)

(d) Emission Standards. The numerical emission standards are expected to be proposed for the category of SI marine vessels which includes inboard engines, sterndrives, and outboard engines. EPA realizes that these standards will cover engines that use different technology, but EPA believes that creating separate standards based on categories such as 2- and 4-stroke engines sets up artificial barriers to competition in the market and will not achieve as efficiently reductions from this category as a single set of standards. EPA will in its proposal for the Federal program take comment on the scheme of classification and level of standards. Separate standards are expected to be set for HC and NO_X emissions on a brake-specific basis (i.e., grams of pollutant per brake kilowatt-hour). EPA realizes that there is a tradeoff between the level of HC emissions and NO_X emissions and intends to take comment on setting a combined HC+NO_X standard for this category of nonroad engines.

EPA believes that for current outboard engines these standards will be technology forcing. For other types of engines these standards may require better calibration and more advanced fueling systems. The emission standards will be proposed to take effect at the earliest possible date, as required by paragraph 213(b) of the Act.

SI marine engines are very rarely designed to operate on alternative fuels. EPA does not believe that new emission standards for marine engines will require increased use of alternative fuels. EPA therefore does not expect to propose procedures or emission standards for SI alternative-fueled marine engines. EPA does expect to request comment on the need for regulations and the potential for increased market share for SI marine engines that operate on alternative fuels such as natural gas, methanol, or ethanol.

In addition to the numerical emission standards described above, EPA expects to propose to prohibit direct emissions of crankcase vapors into the atmosphere. Motor vehicles have been subject to an analogous requirement since the first stages of emission-control regulation.

(e) General Enforcement Provisions. The Agency is expected to propose regulations that require marine sources to obtain certification and subject them to selective enforcement auditing and in-use enforcement. The Agency is also expected to propose regulations similar to those for on-highway vehicles under sections 203, 204, 205, and 208 of the Act.

(f) Compliance Dates for Certification. The Federal marine program as it applies to the FIP areas will phase standards in over time. EPA proposes that emission standards become effective in the FIP areas beginning in the 1998 model year for outboard, sterndrive, and inboard SI marine engines, and in the 1999 model year for personal watercraft SI engines. Companies considered small marine businesses will be defined in the Federal rule and would first be subject to emission standards no earlier than the 2000 model year.

(g) Averaging, Banking, and Trading. Provisions of the national enforcement program are expected to include an averaging, banking, and trading Program. EPA will not propose an averaging, banking, and trading program for marine engines specifically for the FIP areas. However, EPA does plan on proposing such a program for the Federal regulation.

c. Special FIP Measures. The Agency believes that the above Federal programs will have sound technical basis and will achieve projected emissions reductions. The Agency also acknowledges that the marine pleasure craft standards are likely to be technology forcing. However, the Agency also recognizes that many other sources, which have been previously regulated, will be required to meet new and more stringent standards than they are required to meet federally. For the purposes of equity and to achieve added emissions reductions from nonroad sources, the Agency proposes to and will take comment on a fees program for certain classes of these nonroad engines. The Agency is also proposing today a program to control emissions from engines used in recreational vehicles and nonroad and on-highway motorcycles as a special FIP measure.

(1) On-Highway Motorcycles and Nonroad Engines Used in Nonroad Motorcycles. The Agency intends to exclude from its regulation of SI engines at or under 19 kW, engines used in recreational vehicles because they have fundamentally different operating characteristics than other small SI nonroad engines. In general, engines used in recreational equipment are similar to engines used in on-highway motorcycles in that they use a continuously variable throttle (not a governor), have rated engines speeds in excess of 5000 RPM, and wide variations in both engine load and speed. These engines, like motorcycle engines, are primarily used to transport people. CARB has estimated that engines used in nonroad vehicles such as motorcycles, all terrain vehicles, go-carts and other nonroad recreational vehicles, contribute 21 tons of HC and 100 tons of CO per day to the statewide inventory. Further, EPA estimates that on-highway motorcycles and engines used in nonroad motorcycles, including dirt bikes, ATVs, and similar equipment contribute 3, 1, 30.3 tons of HC per day to the emissions inventories in the Sacramento, Ventura, and South Coast, respectively. To achieve reductions from this category of nonroad sources as well as to achieve reductions from on highway motorcycles and mopeds, EPA proposes to promulgate emissions restrictions for motorcycles and nonroad recreational vehicles similar to EPA's

[72] The word vessel includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water.

existing on-highway motorcycle program found in 40 CFR part 86 subpart E.

(a) Overview. EPA today proposes to promulgate a definition of on-highway and nonroad motorcycles applicable in the State of California for the purposes of the FIP, as well as standards for those classes of motorcycles and engines used in them. Today's proposal encompasses on-highway motorcycles, and engines used in such vehicles as mopeds, dirt bikes, all terrain vehicles, and go-carts. EPA is also proposing a more stringent set of exhaust emission standards applicable to all new on-highway and nonroad motorcycles sold in the State of California after January 1, 1996. EPA proposes that all other requirements of the current Federal motorcycle regulations contained in 40 CFR part 86 subparts E and F, apply to motorcycles sold in California, including provisions for certification, test procedures, and enforcement.

(b) Definition of On-highway and Nonroad Motorcycles. For the purpose of the FIPs, EPA proposes to use the definition of motorcycle in 40 CFR part 86 to refer to on-highway motorcycles and add the following definition for nonroad motorcycles.

A nonroad motorcycle means any motorized land vehicle designed for transporting persons or property and manufactured for sale, sold, offered for sale, introduced into commerce, or imported into the State of California and which has two wheels, or three or more wheels and a curb mass less than or equal to 680 kilograms; it does not include devices regulated by the State of California as other classes of motor vehicles or devices regulated by EPA as other classes of nonroad engines.

(c) Applicability. The Agency believes that it is necessary to control emissions from all on-highway motorcycles and engines used in nonroad motorcycles, as defined in the previous section, on a statewide basis to achieve needed emission reductions in the FIP areas. It is the Agency's intent that the standards proposed today, as well as the requirements of 40 CFR part 86 subpart E, apply to all on-highway motorcycles, and engines used in nonroad motorcycles regardless of displacement. The following are examples of vehicles covered by the definition of nonroad motorcycles: dirt bikes, all terrain vehicles, go-cart, and mopeds. It is the Agency's intent that engines used in these vehicles and similar nonroad vehicles meet the standards. It is also the Agency's intent that on-highway motorcycles with displacements less than 50 cc (3.1 cu. in.) meet the proposed standards.

(d) Standards. EPA proposes that all motorcycles sold in California meet a 0.8 g/km standards for HC, a 0.8 g/km standard for NO_X, and a 12 g/km standard for carbon monoxide.

Certification data from current technology on highway motorcycles indicates that over 50 percent of these motorcycles are certifying to exhaust HC emission levels at or below 0.8 g/km HC. EPA believes that by using existing on-highway motorcycle technology it is reasonable to expect that motorcycles should be able to achieve comparable emission levels for HC. The Agency understands that an 0.8 g/km standard may require substitution of 4-stroke nonroad engines for 2-stroke nonroad engines currently used in dirt bikes, ATVs, and similar vehicles. However, EPA is also aware that catalyst technology exists and is currently being applied to 2-stroke motorcycles and mopeds sold in other countries to meet stringent legal emissions levels in those countries. EPA believes that this simple oxidation technology is viable for reducing emissions from engines used in both on-highway and nonroad motorcycles to the 0.8 g/km HC and 0.8 g/km NO_X level.

The Agency has considered a 0.5 g/km HC standard for on-highway motorcycles and takes comment on restricting emissions from on-highway motorcycles to this more stringent level and on the applicability of this standard to the smaller displacement on-highway motorcycles under 50 cc (3.1 cu. in.).

Although the test data on NO_X emissions from motorcycles is more limited, experience with light duty cars suggests that with a catalyst, NO_X emission levels are approximately equal to HC emission levels. In addition, legal emission levels for motorcycles in Taiwan, beginning in 1996, will be 0.8 g/km for both HC and NO_X. Testing data submitted by one catalyst manufacturer shows that HC+NO_X levels range between 0.30 g/km and 1.88 g/km. The Agency realizes that there is a trade-off between HC emission and NO_X emission and solicits comment on the benefit of setting a combined standard of 1.6 g/km for HC + NO_X.

EPA also realizes that less emission data exists for nonroad engines used in nonroad motorcycles and solicits data from manufacturers as a basis for evaluating the level of the standards proposed today.

(e) Certification and Test Procedure. EPA proposes that the test procedure for on-highway and nonroad motorcycles will be the same as that procedure described in 40 CFR part 86 subpart F. EPA acknowledges that the test procedure described in 40 CFR part 86 subpart F, in general is performed on a dynamometer designed for two-wheeled motorcycles and that many motorcycles as defined above have more than two wheels. The test procedure described in 40 CFR part 86 subpart F, involves testing motorcycles as whole vehicles on chassis dynamometers designed for two-wheeled motorcycles, driving the same driving cycle (vehicle speed versus time) that is used for cars and light trucks.

Current Federal regulations contain a general provision for EPA to authorize special test procedures for vehicles which cannot be properly tested under the standard procedures. EPA believes it is appropriate to test all of the new motorcycles and engines included in today's proposal as whole vehicles under this same procedure used for current motorcycles. The special test procedure provision would be applied as necessary to test any vehicles which cannot be physically tested using current motorcycle dynamometers. For example, vehicles having more than one drive wheel on an axle exceeding the width of current motorcycle dynamometer rolls might be tested using normal passenger car chassis dynamometers, or motorcycle dynamometers with specially widened rolls. Vehicles with multiple drive axles would be handled, as much as possible, like four-wheel drive passenger cars and light trucks are currently tested, with all the power supplied through only one primary drive axle. If the foregoing adaptations of the currently available motorcycle and passenger car chassis dynamometers cannot be applied, EPA would expect to apply special procedures involving directly connecting the drive axle to a dynamometer, driven at an axle speed that corresponds to the required vehicle speed. EPA solicits comments on the test procedures outlined in 40 CFR, Subpart F, and its applicability to four-wheeled nonroad motorcycles. EPA specifically requests comments on J1088 as an alternative test procedure. For J1088 and other alternative procedures suggested, EPA specifically requests data to allow correlation between the stringency of the proposed standards as measured on the test procedure defined in 40 CFR, Subpart F, and any test suggested by commentors.

(f) Authority. As explained above, in promulgating a FIP under section 110 (c) of the Act, EPA may take any actions that the state could take. As section 209 of the CAA provides that California is not preempted from adopting and implementing a motor vehicle emissions control program provided its program satisfies the criteria of section 209(b),

EPA believes that it, acting on behalf of California in the context of a FIP, may adopt a motor vehicle program or supplement California's own motor vehicle program provided that EPA's actions would satisfy the criteria of section 209(b) for a waiver of Federal preemption. Moreover, EPA believes that it, acting on behalf of California in the context of a FIP, may adopt a nonroad engine program or supplement California's nonroad engine program provided that EPA's actions satisfy the criteria of section 209(e)(2) for a waiver of Federal preemption and provided that the program does not establish emission standards or accompanying enforcement procedures for any new nonroad engines that California, under section 209(e)(1) is precluded from regulating (i.e., new locomotive and new engines used in locomotives and new engines used in construction equipment or vehicles or used in farm equipment or vehicles and which are smaller than 175 horsepower). Section 209 provides that EPA is to grant California a waiver of preemption if the State determines that its standards "will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards."

Section 209 further provides that no waiver or authorization is to be granted if EPA finds that: (A) the determination of the State that the standards are, in the aggregate, at least as protective of public health and welfare as otherwise applicable Federal standards is arbitrary and capricious; (B) State standards are not needed to meet compelling and extraordinary conditions; or (C) the State standards and accompanying enforcement procedures are not consistent with section 202(a) (or are not consistent with section 209, as is the case of nonroad engines under section 209(e)). EPA has interpreted the consistency criterion as meaning that California standards and accompanying enforcement procedures must be technologically feasible within the leadtime provided, taking into account the cost of compliance, and that they not impose inconsistent certification test procedure requirements such that the same vehicle or engine could not be used to comply with both State and Federal certification requirements.

EPA believes that the on-highway and nonroad motorcycle program that would be applicable to vehicles and engines in California under the proposed FIP would satisfy the section 209 waiver criteria. Thus, California could undertake the on-highway and nonroad motorcycle program described above, and, therefore, EPA has authority under section 110(c) to undertake the proposed programs.

With respect to the protectiveness of the standards, all of the proposed standards are at least as protective as the otherwise applicable Federal standards.

With respect to the need to meet compelling and extraordinary conditions, EPA has repeatedly found that California's air quality problems satisfy the need criterion of section 209. Moreover, the magnitude of the reductions in emissions needed to reach attainment in the FIP areas, including mobile source emissions, provides ample evidence of the need for more stringent motor vehicle emission standards in California.

Finally, with respect to the criterion of consistency with section 202(a) or section 209, EPA believes that its proposed enhanced nonroad program is consistent with both the technological feasibility and certification elements of that criterion. EPA believes that the various elements of the program are technologically feasible within the leadtime provided, taking into account the cost of compliance. Moreover, no aspect of the program establishes any new certification test procedures that are inconsistent with either existing Federal or California test procedure requirements. Consequently, EPA believes that its proposed on-highway and nonroad motorcycle program satisfies this prong of section 209 as well.

In addition, as none of the classes of nonroad equipment EPA is regulating under this program are new farm or construction equipment or new locomotives, this program meets the requirements of section 209(e)(1).

(2) Fee on Marine Pleasure Craft. Although the new national emission standards for spark ignition engines in marine pleasure craft described above will result in substantial emissions reductions per engine, overall reductions in emissions from this category will depend primarily on the amount of fleet turnover after the new standards are introduced. Under conditions of normal turnover, EPA expects that approximately one half of the total fleet of marine pleasure craft will meet the new standard by 2005. However, even normal turnover may not result in enough emission reduction to accomplish the goals of this FIP. EPA believes that additional measures are needed to strongly encourage the use of only cleaner engines in the FIP areas. Therefore, EPA proposes to require that all owners of marine pleasure craft with spark ignition engines obtain an emission permit before operating their boats in the FIP areas during each area's ozone season beginning in 2004.

Under this proposed permit system, all operators of marine pleasure craft will be required to carry an emission permit on board their boats while operating in the FIP area. Since boats are often operated in areas other than where the owner resides, permits will be required only for operation of a boat within the FIP area, not for ownership of a boat within the FIP area. Boat-owners who reside in the FIP area but only use their boats outside the FIP area would not be required to purchase permits.

Two types of permits will be sold, annual permits and daily use permits. Owners of boats meeting the new emission standards described above would be eligible for permanent emission permits free of charge. Owners of all other boats could choose to buy either an annual permit which would allow them to operate their boats in the FIP area for the entire year, or a daily use permit which would allow them to operate their boat on a single specified day in the FIP area (owners could also purchase multiple daily use permits if they plan to operate their boats in the FIP area for only a few days per year).

The fees for emission permits will be based on the average excess emissions of pre-standard engines compared to engines meeting the new emissions standards described above. For the purpose of permit fee calculation, the engines of marine pleasure craft will be divided into the following classes: 4-cycle gasoline inboard, 4-cycle gasoline outboard, 2-cycle gasoline outboard, 4-cycle gasoline sterndrive, sailboat auxiliary engines, and personal watercraft (e.g., Jet Ski). EPA invites comment on whether these general categories are appropriate for permit fee calculation, or whether they should be further subdivided to reflect differences in emissions or use within a class (e.g., some of these classes, such as 2-cycle outboards, could be further subdivided based on horsepower to reflect the very wide range of horsepower, usage, and total emissions that might be seen within the class).

Average excess emissions per engine would be calculated separately for each engine class based on the difference between the sum of average HC and NO_X emissions for pre-standard engines and the sum of average HC and NO_X emissions for engines meeting the appropriate new standard. Total average excess emissions would then be calculated as the product of average excess emissions per engine for the engine class and the time of use for the engine class. For an annual permit, time

of use would be based on the average annual use for the particular engine class. For a daily permit, eight hours of continuous use would be assumed for all engine classes. EPA requests comment on other options for time of use when assessing fees for daily permits.

EPA currently estimates that a boat with a typical pre-standard 2-cycle gasoline outboard motor would be assessed an annual fee of approximately $400, based on typical emission rates and hours of use and using a rate of $10,000 per ton of excess emissions (this example assumes 35 hours of annual use, with HC emissions reduced from 118 g/hp-hr to 35 g/hp-hr as a result of the new standard while NO_X emissions increase from 2.4 g/hp-hr to 4.7 g/hp-hr; this example is based on EPA's best current estimates which may change as more information is received and as the engine standards are finalized). At this time, EPA believes that this fee level will effectively discourage the operation of pre-standard engines in the FIP areas. However, EPA will monitor the effectiveness of this fee level in discouraging operation of pre-standard engines, and increase the fee per ton if needed to discourage virtually all such operation.

To obtain a permit a boat owner would have to present to the permit office documentation regarding the engine class and whether or not the engine meets the new emissions standard. The boat's state registration documentation may be sufficient to ascertain the engine class. If not, one time physical inspections may be needed, in which case EPA would seek to delegate such inspections to local or state agencies. Engines meeting the new emissions standard will be required to be labeled as such by the manufacturers. Boat owners will be required to show that their boat engines have such a label in order to obtain a free permit. In the absence of such proof, the permit fee will be based on the assumption that the boat engine does not meet the new standard.

Some boat engine manufacturers may already be producing engines that meet the new standards, before the labeling requirements have been finalized. These manufacturers have the option of presenting to EPA evidence (in the form of emissions test data which meets EPA's test requirements for these engines) of which engines met the requirement before it went into effect. If EPA accepts this evidence, owners of such engines could qualify for a free permit if they can prove that their boat engine qualifies based on the serial number of the engine.

Emission permits must be prominently displayed at all times in boats operating in the FIP area under this proposal. EPA will enforce this permit system through the inspection of permits at boat ramps, marinas, and other access points, and through patrols of boating areas. EPA will have the authority to inspect boat engines, permits, and any other required documentation. Failure to display the proper daily or annual permit, falsification of a permit or of any documentation required to get a permit, or failure to surrender documentation or allow inspection of a boat or engine will be strictly prohibited and will be punishable by fines of up to $25,000.

As explained above, in promulgating a FIP under section 110(c) of the Act, EPA may take any actions that the state could take. As Section 209 of the CAA does not preempt states from regulating the use of marine engines, EPA believes that it, acting on California's behalf in the context of the FIP, may adopt this fee program.

(3) Measures for Nonroad SI Engines over 19 kW and CI Engines under 37 kW. The Agency will decide whether to propose and implement national control programs for emissions from heavy-duty SI nonroad engines greater than 19 kW and small CI nonroad engines under 37 kW by November 1996. These small CI engines are used in such types of equipment as generator units, pumps, air compressors, welders, and pressure washers. The heavy-duty SI engines are used in forklifts and a small percentage of farm tractors.

Today's proposal does not contain provisions for controlling emissions from these engines except for certain SI engines over 37 kW. The Agency does not today have information sufficient to determine whether such engines should be regulated in the context of section 213 (a)(3). The Agency solicits comments on the greatest degree of emissions reductions which may be achieved from these engines through the application of various technologies and information on the costs of such technologies; the time period within which manufacturers could implement technologies; and the safety, noise, and energy implications of such technologies.

d. Enhanced In-Use Compliance Program for Nonroad Engines Over 37kw. EPA is proposing an enhanced in-use compliance program for nonroad engines that is intended to apply to most of the larger nonroad engines, both compression ignition (CI) and spark ignition (SI). More specifically, it covers all nonroad engines at or above 37 kilowatt (kw)(50 horsepower (HP)) in size except for engines used in aircraft, locomotives, underground mining equipment, SI engines used in recreational marine engines and low speed CI (diesel) engines used in oceangoing ships. Most of these engine categories are dealt with in other portions of this FIP.

The proposal is very similar to the program for new heavy-duty onhighway engines. The program will contain tighter NO_X standards for the FIP areas. It will also have an HC standard and evaporative free requirements to prevent a shift to engines operating on high volatility fuels, such as gasoline. Finally, a "normal maintenance" recall program and engine rebuild requirements will be applied. Readers should refer to the onhighway descriptions of these programs (contained in Sections A. and B. of Appendix I) as well as Appendix I, Section C., regarding nonroad, for more information.

These nonroad engines are proposed to be regulated because of their significance to the FIP area emissions inventories. In 1990, emissions from nonroad engines constituted 24 to 27 percent of the NO_X emissions, depending on the FIP area concerned. NO_X emissions reductions of 40 to 70 percent are required for attainment of the ozone standard. These reductions are well beyond those expected from the soon to be adopted Federal nonroad standards. EPA's data shows that without control beyond the national standard, the percentage contribution of these engines will increase by almost one-third in each FIP area.

The standards being proposed are the same as those proposed for onhighway heavy-duty engines. Since the engines involved are often derived from onhighway engine designs, the technologies used for compliance in the onhighway sphere can also be applied here. These rules ensure that similar stringency is applied across engine categories in the FIP.

Many of the provisions for nonroad engines that are being proposed are similar to EPA's earlier proposed Federal nonroad program. That program was proposed in May of 1993 (58 FR 28809, May 17, 1993), and when finalized will provide details regarding definitions, test procedures, general certification and enforcement protocols. The reader is referred to that proposal for further information.

EPA is proposing to adopt the enhanced in-use compliance program described in Appendix I, Section C. EPA also requests comments on all aspects of its proposal and on any other

approaches to further reduce in-use emissions.

e. Programs for National Transportation Sources and Federal Activities. (1) Introduction. The litigation which resulted in today's FIP proposal arose at least in part from a feeling in California that the emission regulation of certain sources was not keeping pace with the attainment needs of California areas or with the stringency of control imposed on other sectors of the California economy. For today's FIP proposal, EPA is proposing controls for these sources, and this section details the mixture of new engine standards and innovative market- based controls that will be proposed.

The table below ("1990 Base Year Inventory of National Transportation Sources") [73] details the level of emissions from national transportation sources in each of the FIP inventories for the 1990 base year. The information contained in this table illustrates that while these sources are not as large as other mobile sources, their contribution to the emissions inventories warrants control by EPA.

1990 BASE YEAR INVENTORY OF NATIONAL TRANSPORTATION SOURCES

[In tons/day]

	Sacramento		Ventura		South Coast	
	VOC	NO_X	VOC	NO_X	VOC	NO_X
Locomotives	0.34	8.70	0.04	1.18	1.5	29.7
Military aircraft	1.0	0.7	0.27	0.24	7.7	3.3
Commercial aircraft	0.1	0.9	0.07	0.18	5.9	14.0
General aviation	0.4	0.1	0.23	0.25	1.1	0.1
Vessels	0.0	0.0	0.35	8.41	1.4	31.9
Percent of Total inventory	0.8	5.6	0.9	11.7	0.9	6.9

(2) Civil and Military Aviation

(a) General Description of Category

(*1*) Aircraft Operational Classes

Aircraft operations can be segregated into four general categories:

Commercial—aircraft operated on a scheduled basis by international, national, regional, and commuter air carriers, and unscheduled charter operators

Military—aircraft operated by the Department of Defense

General Aviation—aircraft privately owned and operated on a nonscheduled basis

Public—aircraft operated by federal, state, or local government agencies other than the Department of Defense

Aircraft in each category are operated in considerably different fashion. For example, commercial aircraft operate on a relatively fixed schedule while military aircraft operate according to specific mission requirements. For that reason, each aircraft category will be controlled separately under this proposed FIP program.

(*2*) Related Mobile Sources. Emissions related to aircraft operations are generated by a variety of mobile sources. Ground support equipment (GSE) includes vehicles such as aircraft tugs, baggage tugs, fuel trucks, maintenance vehicles, and other miscellaneous vehicles. Ground access vehicles include vehicles used by passengers, employees, freight operators, and other persons using an airport. These sources have been considered in developing this program.

(*3*) Need for Control. Aircraft and aircraft-related emissions as a category represent significant sources of air pollution in the FIP areas. In the South Coast air basin, the FIP area where airports represent the greatest portion of the inventory, aircraft operating at the five commercial airports alone contributed 0.3 and 1.1 percent of the total 1990 baseline emissions inventory for VOC and NO_X, respectively. At projected growth rates, aircraft at these five airports—Los Angeles, Ontario, Burbank, John Wayne, and Long Beach—will consume nearly 3.9 and 4.4 percent of the basin's allowable 2010 NO_X and VOC inventory, respectively, if left uncontrolled.

(*4*) Level of Control. EPA intends to reduce emissions resulting from aircraft and aircraft-related activities in the three California FIP areas to a level and at a rate commensurate with that required for stationary emission sources in those areas which are subject to the proposed emission cap rules described in section III.C.5. of this NPRM. This approach was selected by EPA for aviation primarily because of the difficulty in identifying specific control measures given the diverse operational nature of the aviation sector and the leadtime available for FIP development, the difficulty of requiring specific operational or procedural control measures for aircraft due to safety and operational flexibility concerns, and the desirability of achieving emission reductions comparable to those being demanded from other significant source categories.

Currently, the proposed stationary source rules include a range of potential emission reduction requirements. Consequently, the overall reduction targets for aviation reflect the same range of stringency. The proposed control levels for these sources are expressed as the percentage reduction from the respective 1990 baseline emissions inventory that must be achieved by 2005. The range of required reductions for each pollutant by area are shown below.

2005 AVIATION EMISSION REDUCTION REQUIREMENTS: PROPOSED RANGE OF PERCENTAGE REDUCTIONS FROM 1990 BASELINE EMISSIONS

Area	VOC		NO_X	
	Low	High	Low	High
South Coast	20	45	30	45
Ventura	20	45	30	45
Sacramento	20	45	N/A	N/A

The Agency will promulgate a specific percentage reduction target in the final rule based on public comments and any additional technical information.

(b) Commercial Aviation. (*1*) Overview. (*a*) Airline Focus and

[73] The inventories for locomotives are derived from assuptions made by EPA based on inventories acquired from the Booz-Allen reports entitled: *Locomotive Emissions Study* and *Report on Locomotive Emission Inventory: Locomotive Emissions by County.*

Specific Sources Covered. The FIP strategy for commercial aircraft operations is aimed at reducing total emissions from all emission sources under direct control of commercial airlines operating at all airports in each nonattainment area. The strategy is constructed so that each airline is responsible for its own compliance. "Commercial airlines" are defined as those air carriers operating aircraft with any of the following FAA operational certificates: Parts 121, 125, 127, 129, and 135.

Commercial airline emission sources include aircraft, aircraft auxiliary power units (APUs), GSE, and any other mobile sources under the control of airlines. For the purposes of this regulation, emission sources defined as "under the control" of a commercial airline include all sources owned or leased by the airline, and all sources whose operations are controlled under a contract agreement by the airline (for example, GSE servicing an airline that are owned and operated by a fixed-base operator under contract to the airline).[74]

Some GSE that service aircraft are owned by fixed based operators (FBOs) rather than airlines. Emissions from these vehicles must be included in the airport bubble since they are a direct result of aircraft activity. EPA proposes today to allocate these GSE to specific airlines based on servicing provided under contract agreements, and requests comment on possible alternatives to such an allocation strategy.

EPA proposes a target-based emission reduction program for these commercial aircraft emission sources. Each commercial airline will be required to comply with a declining emission limit, expressed in allowable emissions per passenger and freight handled. The proposed target-based program will include emission fees assessed on any airline that fails to meet this emission rate target. The proposed target has been selected so that, even with expected passenger and freight growth, compliance with the target by all airlines will result in total emissions declining at a rate and to a level equivalent to that required of many stationary sources in the same basin. EPA will through experience raise the level of the emissions fees as needed to achieve such aggregate emission reductions.

As described above, EPA currently intends to establish emission reduction requirements for commercial aircraft that are generally consistent with the emission cap requirements for stationary sources in the FIP areas. Although not firmly decided, the current stationary source control strategy for the South Coast requires that VOC and NO_X emissions be reduced by 20–45 and 30–45 percent, respectively, from the 1990 baseline inventory by 2005, through a series of uniform annual reductions of baseline emissions of each pollutant: 4–9 percent per year for VOC and 6–9 percent per year for NO_X, both starting in 2001. Stationary source requirements for the 2006–2010 period have not been established at this time. The requirements for Ventura from 2001–2005 are identical to that for the South Coast.

For Sacramento, the strategy requires a VOC reduction of 20–45 percent, with a uniform annual reduction of 4–9 percent. The timeframe for achieving this reduction is the same as for the South Coast and Ventura areas (i.e., 2001–2005). The stationary source control strategy for Sacramento does not require a NO_X reduction since other actions will be adequate to achieve the area-wide NO_X emissions level needed for attainment.

For this proposal, the overall reduction targets are expressed as a range of percentages; the final rule will contain a specific percentage reduction target. EPA requests comment on whether the stationary source emission reduction targets are appropriate for use with the commercial aircraft control strategy.

(*b*) Geographic Scope. As already described, today's proposal applies to all three affected California control areas: South Coast, Ventura, and Sacramento air basins. However, EPA requests comment on the desirability of removing the Ventura and Sacramento control areas from this commercial aircraft control strategy.

The Sacramento air basin includes a single commercial airport. Aircraft emissions from this airport contributed significantly less than one percent of the air basins total VOC and NO_X baseline emissions inventory for 1990. Current projections show that if uncontrolled, this airports emissions would consume less than one percent of the basins allowable 2005 inventory for VOC and NO_X. Additionally, the SIP and FIP for Sacramento are expected to achieve VOC and NO_X reductions adequate for attainment, not counting additional reductions from airports. This expectation is based on the best available, but still preliminary, analysis of current and future emissions. Further analysis may change the picture.

Similarly, the Ventura control area has only minimal commercial aviation activity; an extensive emissions control program for the limited emissions resulting from such activity may not be desirable given the resource expenditure necessary for implementation. The Agency, therefore, requests comment on whether it is necessary to implement a commercial aviation control program in Sacramento and Ventura.

(*c*) Control Period. EPA proposes to establish a fee-based program focused on controlling commercial aviation emissions only during the ozone season in each FIP area. Further, EPA proposes to assess fees on the basis of the season-long average of emissions per passenger and freight carried. There would be no enforceable expectation for emissions in a single day or month.

This extended averaging period differs from the stationary source cap program in which year-round control and monthly control periods are proposed. Because of the complex nature of operational scheduling, commercial aircraft operations appear to have much less potential to vary significantly over the course of the ozone season in comparison to stationary sources. This reduces the need to be concerned about particular days with significantly more emissions than average that could adversely affect attainment. In addition, if the program is fee-based rather than based on a specific emissions limitation, enforcement does not require a short control period to be practicable as it does for the stationary source cap program. The proposed program for commercial aviation is both novel in concept and stringent, and EPA does not wish to burden the industry with controls outside the ozone season if they are not essential to the air quality goals of the FIP. Furthermore, operational changes outside the ozone season may provide some opportunity to ease the compliance burden during the season.

The annual ozone seasons for each of the three FIP areas are:

South Coast—March through October
Ventura—April through October
Sacramento—May through October

Alternatively, EPA could establish a year-round fee program and apply fees separately in each month in order to even better ensure that emissions are controlled each day. Beyond its contribution to ozone attainment, year-round control of NO_X emissions from commercial aviation may aid efforts to comply with the particulate air quality standard, particularly in the South Coast control area. (Ensuring particulate air quality is not a requirement for this

[74] General aviation aircraft operated at commercial airports will be included in the general aviation control strategy as described in section III.D.4.e(2)(d). Today's proposal for public aircraft operated at commercial airports is described in section III.D.4.e.(2)(e).

FIP.) Since state and local regulation over commercial aviation emissions is preempted by the federal government, such control would have to come at the federal level. The Agency, therefore, requests comment on potential alternative compliance strategies.

(*2*) Key Regulatory Elements. (*a*) Summary. A detailed control strategy is described here for the South Coast FIP area, but will apply for all three control areas. Any differences in detail or emission reduction requirements for Ventura and Sacramento will be identified separately.

The control strategy for commercial aircraft proposed today relies on a fee system to achieve a series of annual emissions reductions from a baseline commercial aircraft emissions inventory. Airlines subject to the requirements of this program will report activity and emissions during the ozone season on an annual basis beginning in 1999. An airline's compliance with the program requirements will be determined for a given year by comparing an environmental performance factor, expressed as pounds of pollutant emitted per passenger-equivalent unit (PEU) as calculated in the annual report, against EPA's published pounds-per-PEU target for that year's ozone season. Airlines that exceed a particular year's pounds-per-PEU target will be required to pay a fee in proportion to the excess emissions. EPA is proposing pounds-per-PEU targets that will achieve the requisite annual emission reductions based on projected growth in passenger and freight activity. (A more complete description of the proposed PEU factor and emission targets is presented in section III.D.4.e.(2)(b)(*2*)(*b*).)

In order to obtain airline compliance with these pounds-per-PEU targets, the Agency will observe the airlines' responses to the initial fee level in 2001, and will adjust the fee level to a higher or lower level if needed. The final FIP regulations will contain commitments to this effect, and will specify the specific level to which the fees will be adjusted or a formula for determining such level. Comments on this adjustment process are requested. EPA expects that the final fee program for this source will be consistent with the Agency's Economic Incentive Program rules as discussed in section III.D.5 of this NPRM.

This commercial aircraft emission reduction program will apply to all commercial aircraft operators in the FIP areas, including domestic airlines, foreign airlines, and new entrant airlines. EPA recognizes the economic and social importance of accommodating new entrants and the expansion of existing airlines in any commercial aircraft emission reduction program. This control strategy attempts to accommodate these important concerns by not directly requiring EPA to allocate emissions or operational rights to individual airlines.

The methodology for determining the environmental performance targets reflects projected growth in air travel within the respective FIP control area. As a result, new entrants simply would be required to achieve the appropriate environmental performance targets upon initiation of service. Both new entrants and expanding airlines are automatically accommodated by the control strategy as long as growth beyond predicted levels does not occur. In event that activity grows faster than originally forecast, EPA will revise the performance targets, as discussed in greater detail later in this section.

Therefore, the Agency believes that the proposed program incorporates features which provide flexibility for new entrants or existing airlines to begin and expand environmentally responsible aircraft operations in the basin. Nonetheless, all airlines will face significant economic and technical challenges as a result of this program.

(*b*) Pounds per PEU Scheme. The FIP strategy for commercial aircraft operations will center on a schedule of declining emission performance targets (i.e., pounds per PEU) for the combined emissions from all commercial airports in each control area. Separate targets will be established for HC and NO_X emissions. These emission targets will yield benefits consistent with the percentage reduction from 1990 inventory for stationary sources. Ultimately, the emissions from commercial aviation in the South Coast and Ventura areas will be reducted by 20–45 percent and 30–45 percent from 1990 VOC and NO_X emission levels, respectively, by 2005. The goal for VOC emissions in the Sacramento area is 20–45 percent by 2005. As already discussed, there is currently no stationary source emissions cap for NO_X in Sacramento.

This control strategy fundamentally relies on the calculation of an emissions baseline as a reference point for determining future year emission limits during the control period. The Agency proposes to use currently available emissions inventory data for aircraft and aircraft-related activities to establish the requisite emissions inventory for the baseline year of 1990. Once established, the seasonal emission limits for each year can be calculated from the baseline inventory established according to the annual uniform schedule of percentage reductions described above.

The choice of 1990 as the baseline year is consistent with the Act's requirement for modeling reasonable further progress (RFP) and attainment of the ambient standards. However, aviation activity in 1990 may not be representative of typical operations, because the aviation industry experienced significant change during this period. Several air carriers, notably Eastern Airlines, ceased operations or stopped serving airports in the South Coast and Sacramento areas. Others such as Southwest Airlines had only a minimal presence in these areas during that period, but greatly expanded operations in subsequent years.

In addition, the Desert Shield/Desert Storm military action caused an increase in jet fuel prices and a rapid decline in commercial passenger traffic. For these reasons it may be desirable to use a two-year average, perhaps 1989–1990, for establishing a baseline inventory in preference to using 1990 data alone; this could lessen the effect of unusual circumstances on a single year's inventory. EPA requests comment on the desirability of using a two-year average for establishing a baseline inventory. Any such multi-year average, however, may require an adjustment to the emission performance targets in order to assure consistency with the stationary source cap requirements and EPA's demonstration of attainment.

Alternatively, EPA could utilize baseline reports from commercial airlines to establish this inventory. Given the importance of this baseline inventory in setting realistic emission limits and environmental performance targets, such industry baseline reports could provide information more representative of airline operations in the control area than generic default data currently being used EPA for some portions of the inventory.

For example, EPA currently has only estimated information on GSE and limited primary data concerning commercial aircraft operations in Ventura and Sacramento. These reports could also provide data on certain ground access vehicles that are directly under the control of airlines. These sources are presently unaccounted for in today's proposal due to insufficient information.[75] Therefore, baseline reports could provide additional detail and precision, albeit at the expense of an additional administrative burden for commercial airlines. Information that could be requested for such baseline

[75] See the Technical Support Document, available in the rulemaking docket, for further information.

reports is discussed in "Reporting and Recordkeeping" below. EPA requests comment on the desirability of requiring airlines to submit baseline reports, and on other possible alternative methods for establishing a reasonable baseline emissions inventory.

The Agency further proposes to modify the stationary source-related approach just described in order to "lock in" additional emission reductions that are expected to result from other non-FIP requirements such as the commercial aircraft fleet modernization that will occur in response to FAA noise reduction regulations. According to the Air Transport Association,[76] these requirements could generate a 40 percent reduction in VOC emissions by 2000 from 1990 levels, when the requirements are fully implemented. This represents the maximum period of effect for these requirements, however, since the affected aircraft would be retired eventually even in the absence of specific regulations. EPA estimates that the emissions reduction benefit resulting from noise reduction requirements declines to zero by 2010 because of such expected retirement schedules.

To ensure these potential emission benefits occur, the Agency proposes to modify the stationary source approach for developing the commercial aircraft baseline inventory and seasonal emission limits as follows. The target for basin-wide emissions will be the lower of either the emissions level calculated from the percentage-reduction-from-1990 schedule being proposed for the stationary source cap program, or the emissions level that is expected to result from non-FIP regulatory requirements such as the fleet modernization under the noise reduction requirements (i.e., emission improvements accompanying the retirement of older, dirtier aircraft). The Agency requests comment on this "lock-in" approach and potential alternatives that would ensure progress and attainment under the FIP.

The two tables below present examples of the proposed ozone season emission inventory limits for VOC and NO_X in the South Coast area. The emission limits in these tables are presented for illustrative purposes and for the purpose of facilitating public comment only. They do not represent the final values from which the enforceable emission performance targets will be derived, since EPA will continue to refine the baseline emissions inventory, aviation activity projections, and the effect of noise-driven fleet modernization based on information received during the comment period.[77]

PRELIMINARY VOC EMISSION LIMITS FOR COMMERCIAL AIRLINES IN THE SOUTH COAST AIR BASIN

Control period	Range of VOC limits (tons/day)		Range of cumulative reductions (percent)	
	Low	High	Low	High
1990	7.3	7.3	N/A	N/A
2001	7.1	6.7	4	9
2002	6.8	6.0	8	18
2003	6.5	5.4	12	27
2004	6.2	4.7	16	36
2005	5.9	4.0	20	45

[*Note*: These emission limits reflect currently available data on aircraft, auxiliary power units, and ground service equipment only. They do not include the proposed lock-in VOC reductions from the noise-driven fleet modernization forecast.]

PRELIMINARY NO_X EMISSION LIMITS FOR COMMERCIAL AIRLINES IN THE SOUTH COAST AIR BASIN

Control period	Range of NO_X limits (tons/day)		Range of cumulative reductions (percent)	
	Low	High	Low	High
1990	13.7	13.7	N/A	N/A
2001	12.9	12.5	6	9
2002	12.1	11.3	12	18
2003	11.3	10.0	18	27
2004	10.4	8.8	24	36
2005	9.6	7.6	30	45

EPA proposes to use a constant annual reduction between 2001 and 2005 in determining the seasonal area-wide emissions limits, since this straight-forward and simple approach is being proposed for the stationary source cap program. EPA requests comment on the appropriate schedule of reduction (i.e, faster or slower phase-in) for the seasonal emission limit even though the final (2005) emission limit would not change.

EPA will establish enforceable environmental performance targets that will serve as the primary mechanism to achieve the annual emission limits for commercial aircraft operations in each FIP area. These area-wide performance targets will be calculated for each ozone season from 2001 through 2005 using the following formula:

Performance target (lbs/PEU)=seasonal emission limit (lbs) / seasonal projected activity (PEUs)

Passenger equivalent units (PEUs) will reflect the projected number of passengers and the amount of cargo carried, as described below. The example environmental performance targets presented for illustrative purposes in the tables above use EPA's current PEU activity forecast, which

[76] See letter from R. Kettler, ATA to R. Wilson, EPA, dated December 27, 1993, available in the rulemaking docket.

[77] A detailed derivation of the emission limits for all areas is contained in the Technical Support Document, which is available in the public docket.

assumes an annual linear growth rate of approximately 1.5 percent per year from 1990 through 2005 based on information from the Southern California Association of Governments (SCAG).

Individual airlines will determine their compliance with these basin-wide performance targets by calculating their annual pounds-per-PEU performance using the following formula:

Performance result (lbs/PEU)=actual seasonal emissions (lbs) / actual seasonal activity (PEUs)

This performance will be compared against the basin-wide targets to determine compliance; non-compliant airlines will pay an emissions fee proportional to their excess emissions, as discussed in greater detail below.

PEUs will reflect both the actual number of passengers carried and the actual tonnage of cargo transported on commercial airlines. EPA will establish in the final FIP a conversion factor for combining passenger and freight movement into a single PEU total. The airlines have reported using as a "rule of thumb" 200 pounds of payload for each passenger, which includes the weight of the passenger and his or her luggage. EPA proposes to use this conversion factor of 200 lbs/passenger to convert cargo weight into PEUs. EPA requests comment on whether this is an appropriate and equitable value.

EPA will develop a forecast of control area airline PEU activity for the control period (2001–2005) to develop each year's environmental performance targets. EPA proposes today to use currently available activity projections for the South Coast from the South Coast Air Quality Management District for this purpose. Similar existing projections will be used for Ventura and Sacramento, as discussed in the Technical Support Document.

Certain discrepancies may arise, however, between current forecasts and actual activity some years in the future. If actual PEU activity is higher than EPA forecast, compliance with the annual pounds-per-PEU level could result in total emissions higher than the basin-wide targets. If actual activity is lower than EPA forecast, the promulgated pounds-per-PEU limit will be more restrictive than actually needed. For that reason EPA will periodically review the PEU forecast, given its importance in establishing the environmental performance targets.

This review will occur approximately every three to five years at a minimum. EPA will revise the area-wide PEU forecast in a subsequent rulemaking action if the periodic review indicates that the forecast is significantly inaccurate. EPA also will revise the seasonal environmental performance pounds-per-PEU targets in the same rulemaking action in the event that the PEU forecast is revised. EPA also requests comment on alternative methods for establishing activity factors (and the resulting environmental performance targets) that may be automatically updated based on prior-year operational data.

The two tables below present examples of the proposed seasonal environmental performance targets for VOC and NO_X in the South Coast area. As with the emission limits presented earlier in this section, these example targets are provided for illustrative purposes only and do not represent the final enforceable emission performance targets.

PRELIMINARY VOC EMISSION PERFORMANCE TARGETS FOR COMMERCIAL AIRLINES IN THE SOUTH COAST AIR BASIN

Control period	Range of VOC performance targets (lbs/PEU)	
	Low	High
1990	0.087	0.087
2001	0.072	0.068
2002	0.068	0.061
2003	0.064	0.053
2004	0.060	0.046
2005	0.057	0.039
2005+	0.057	0.039

[See note on previous tables.]

PRELIMINARY NO_X EMISSION PERFORMANCE TARGETS FOR COMMERCIAL AIRLINES IN THE SOUTH COAST AIR BASIN

Control period	Range of NO_X performance targets (lbs/PEU)	
	Low	High
1990	0.162	0.162
2001	0.132	0.128
2002	0.122	0.113
2003	0.112	0.100
2004	0.102	0.086
2005	0.093	0.073
2005+	0.093	0.073

For 2006 and beyond, EPA proposes to retain for now the same pounds-per-PEU limit used for 2005 in all three areas, pending promulgation of the additional rules envisioned under today's proposed strategy for 2010 attainment in the South Coast and the preparation of maintenance SIPs for the Ventura and Sacramento areas. Comment is invited on this aspect of the proposal.

(*c*) Fee System. EPA will establish, and as necessary adjust, the level of a fee-based compliance system in consultation with the FAA to achieve the seasonal commercial aircraft emissions targets for each pollutant. Each commercial airline will be expected to meet the seasonal pounds-per-PEU environmental performance target as described above. Any airline that exceeds the target in any ozone season will pay an emissions fee proportional to the excess emissions. Expressed differently, the fee will be applied only to the incremental emissions which are in excess of the performance target, not to the airline operator's total seasonal emissions. Through an iterative process, EPA will set the emissions fee at a level designed to discourage such noncompliance.

EPA requests comment on a triggering mechanism that would prevent implementation of the fee system as long as the area-wide commercial aircraft emission allowance target is achieved. Beginning with the 2001 annual report, EPA could use airline annual emissions/activity reports to determine total actual area-wide commercial aircraft emissions. If this total emissions quantity did not exceed the allowance for that year, airlines could operate undisturbed by the FIP. If the total actual emissions quantity did exceed a given year's allowance, however, the emissions fee system would be implemented for that year and would remain in effect for all subsequent years.

It is important that the fee paid by the airlines for excess emissions be high enough to encourage adherence to the pounds-per-PEU limit but not so high as to needlessly reduce industry profits or to drain away funds that should be spent for mitigating emissions. For the other fee systems discussed in this FIP, EPA proposes a base fee of $10,000/ton of pollutant. The following example describes the impact of a $10,000/ton fee on a commercial airline under the proposed control strategy. The 1990 emissions per PEU are 0.087 pounds of VOC per PEU and 0.162 pounds of NO_X per PEU using current EPA data (see discussion above). The 2005 example environmental performance targets as presented in Tables D and E are 0.039 pounds of VOC per PEU and 0.073 pounds of NO_X per PEU . Assuming that there is no improvement in environmental performance from the current uncontrolled rate, a maximum fee for 2005 can be calculated as follows:

VOC Fee: (0.087 lbs/PEU–0.039 lbs/PEU) X $10,000/ton divided by 2000 lbs/ton = $0.24/PEU for VOC

NO_X Fee: (0.162 lbs/PEU–0.073 lbs/PEU) X $10,000/ton divided by 2000 lbs/ton = $0.45/PEU for NO_X

On this basis the maximum fee would be $0.69 per PEU. This is equivalent to approximately $120 per landing plus takeoff, for an average airplane. To put this excess emissions fee in the context of other fees, collected from commercial aircraft operators for other purposes, current landing fees at LAX are $1.56/1,000 pounds of gross landing weight; for a typical Boeing 737 this is about $178 and for a Boeing 747 about $913. From another perspective, the FAA allows airports to apply passenger facility charges of $3 per passenger to pay for qualified airport improvements.

The $10,000/ton emission fee, therefore, may be an inappropriate starting point for commercial aircraft, since the likely impact is so small, that between 2000 and 2005 upwards adjustment is very likely to be needed. EPA believes that a substantially higher fee may be necessary for commercial aircraft in order to ensure compliance with the seasonal environmental performance targets. On the other hand, the expectation of larger fees after 2001 may have an effect on its own. Also, there are enough fee cycles between 2001 and 2005 that a fee level which will produce the desired reductions by 2005 should be reachable by 2005 even if the fees initially are based on $10,000 per ton. EPA requests comment on what fee levels will achieve the objective of discouraging noncompliance without being excessive, and on what the starting level of the fees should be.

EPA believes that fee collected under this program must be submitted to the United States treasury and can not be redirected for air pollution mitigation projects or other purposes. The Agency requests comment, however, whether this is true for fees collected from foreign flag air carriers under international aviation agreements. For a general discussion on the disposition of collected fees see section III.A.2.b.

(*d*) Averaging and Trading. The Agency proposes to allow an airline to calculate its average seasonal environmental performance across the entire area in order to determine compliance with the emission rate target. This approach will provide airlines with the flexibility to shift operations within the basin to meet demand in an environmentally beneficial manner; an airline could move some of its operations to a less-congested airport to take advantage of reduced taxi times and resultant emissions reductions, for example. It also allows an airline to operate at some airports in excess of the pounds-per-PEU level and offset the excess at other airports where emission control may be more economical. EPA requests comment on the feasibility and desirability of determining compliance in such a manner.

EPA also requests comment on including an emissions credit program as part of the control strategy proposed today. Any commercial airline that achieves emission reductions greater than those required could sell or otherwise transfer credits thus generated to other commercial airlines, which in turn could use the credits to comply with the pounds per PEU target and minimize or avoid paying emissions fees. Such a credit program would provide commercial aircraft operators with an incentive to reduce emissions to a level below that required, thus rewarding those airlines with the ability to operate in an efficient and environmentally beneficial manner. A credit program also would accommodate those airlines that cannot achieve their individual emission rate targets because of certain operating circumstances.

Simple, direct airline-to-airline credit trades could be incorporated into EPA's annual reporting and fee calculation program fairly easily with little extra resources on EPA's part. An expanded credit system in which credits become a commodity that can be purchased and re-sold would require more monitoring and enforcement to prevent error and fraud. EPA would be likely to allow such a system only if a state or local agency took responsibility for the work of keeping it honest and accurate, given the expected limits on EPA resources to implement all aspects of the FIP.

EPA notes that the RECLAIM credit trading program for NO_X emissions was recently adopted in the South Coast, and is an example of cross-source trading of excess emission reductions relative to well quantified baselines and requirements for further emission reduction. The RECLAIM program covers certain NO_X source types that were most amenable to emissions quantification and verification. Such a cross-source trading system has obvious attractions in terms of achieving a given environmental goal, while allowing the most economically efficient business choices consistent with that goal.

EPA anticipates that commercial airlines may be interested in a program that provides the option of purchasing emission credits to allow more operational flexibility. Since the RECLAIM program operates off a declining schedule of allowable emissions from the subject sources, rather than from the declining emissions caps established by the FIP, RECLAIM NO_X credits are not necessarily surplus to the FIP and cannot be used by sources, including commercial airlines, to meet their FIP emission limits or to reduce their fee liability. Given EPA's concern about the adequacy of its implementation resources, EPA is not proposing to establish a cross-source trading program of its own. However, EPA welcomes comments on whether and how state or local agencies could help operate a credit trading system which would be in keeping with the FIPs control levels and which would be available to the airline industry.

(*e*) Reporting and Recordkeeping. (i) Compliance plans. The stationary source cap program includes a requirement for affected sources to submit compliance plans that describe planned emission reduction measures. EPA could establish a similar requirement for commercial airlines as part of today's proposed control strategy. Such compliance plans would be submitted by airlines in advance of the control period and would describe in some detail the various emission reduction measures planned for the 2001–2005 control period. Compliance plans also could include information on expected activity during the control period, which would provide EPA with an opportunity to review the PEU forecast and update the environmental performance targets if necessary. Most importantly, compliance plans could provide an opportunity for the FAA to review airline emission reduction plans for safety considerations.

Compliance plans would impose significant administrative burdens on commercial airlines, EPA, and the FAA, however. The Agency therefore requests comment on the desirability of requiring airlines to submit compliance plans, and on the information that should be provided in such plans should they be required. EPA does not contemplate that compliance plans if required would become legally binding on the airlines that submit them since that would impede business flexibility and is not essential to the effectiveness of the program. However, if EPA does require compliance plans, deliberate misrepresentation of an airlines plans may be made a violation of the FIP.

(ii) Baseline reports. As described above, EPA requests comment on requiring airlines to submit baseline reports that provide emissions data for the baseline year of 1990, or some alternative baseline reporting period as

discussed in section III.D.4.e.(2)(b) above. Baseline reports would provide EPA with additional detail and precision for the purpose of establishing the baseline emissions inventory, the seasonal emission limits, and, ultimately, the seasonal environmental performance targets. Any revisions to the emission limits and environmental performance targets would be made after notice and opportunity for public comment.

One alternative for implementing a baseline reporting requirement, is to require commercial airline operators to report data concerning aircraft operations into or out of the basin for their particular airline in the baseline year of 1990 (or for 1989 and 1990 for the purpose of calculating a two-year average). Airlines would submit this data to EPA no later than 180 days following finalization of this rule. These reports could also provide information on ground access vehicles under the direct control of airlines for incorporation into the control strategy. More specifically, the baseline reports could include the following information to be provided by airlines:

- Aircraft type and model, engine type and model, and number of landing/take-off operations (LTOs).
- Taxi/idle time by engine for each flight.
- Auxiliary Power Unit (APU) operating time.
- Ground Support Equipment (GSE) population by type.
- GSE activity by fuel type, engine size, and annual use hours.

EPA recognizes that detailed information may not be available in each of these categories for 1990. In these instances affected airlines could report estimated data; such estimates would be accompanied by a description of the estimation methodology used, including any supporting data. Alternatively, EPA could establish a set of default values for use in the absence of detailed data, as described above. The Agency requests comment on these and other baseline report alternatives.

(iii) Annual compliance determination reports. Beginning with a report describing activity during the 1999 ozone season, the FIP will require commercial airlines to submit annual reports within 60 days of the close of each calendar year. These reports will include information on aircraft-related emissions and airline activity for the previous year's ozone season.

Commercial airline operators will be required to submit annual reports describing regulated aircraft-related activities and emissions in each control area for their airline during the preceeding year's ozone season beginning in 1999. These annual emissions/activity reports will be submitted to EPA within 60 days of the close of each calendar year; the first report thus would be due by March 1, 2000. Initiating these annual reports in 1999 will provide airlines and EPA with an opportunity to assess data-gathering and -analysis requirements well in advance of the first emission targets in 2001, as well as providing airlines with important information on their performance needs prior to the first round of required reductions. Subsequent annual reports will be used to determine compliance with the seasonal emission targets.

Failure to submit an annual emissions/activity report will subject an airline to EPA enforcement. Affected airlines will be required to maintain appropriate data collection equipment and procedures necessary to complete the annual report in a satisfactory manner. Failure to maintain such equipment and procedures also will subject an airline to EPA enforcement.

Annual emissions/activity reports will include the following information for aircraft and aircraft-related operations during the seasonal control period:

- Flight number for each flight.
- Aircraft type and model for each flight.
- Engine type and model for each flight.
- Taxi/idle time by engine for each flight.
- Auxiliary Power Unit (APU) operating time.
- Number of passengers carried for each flight.
- Weight of non-passenger cargo for each flight.
- Ground Support Equipment (GSE) population by type.
- GSE activity by fuel type, engine size, emission control level, and number of hours used.

Airlines will be required to track and report actual data for the above information categories. Default values will not be accepted for the purposes of determining compliance with the environmental performance target.

Reporting airlines will be required to calculate their VOC and NO_X emissions for the ozone season using the above data and enter these emissions on the report form. The Agency anticipates using existing EPA documents for the emission calculation methodology. Comments are requested on the desirability of issuing additional specific technical guidance concerning emissions calculations for aircraft and aircraft-related operations. Reporting airlines also will be required to calculate their total PEUs using passenger and cargo data, as well as their pounds/PEU emission rate for VOC and NO_X, and enter these results on the report form.

An airline's compliance with a seasonal environmental performance target will be determined by comparing actual pounds-per-PEU performance against the target. An airline whose actual performance exceeds the target will be required to submit a fee proportional to the resultant excess emissions, as described in "Fee System" above. This fee will be remitted along with the annual compliance determination report.

An airline's annual emissions/activity report will include a statement signed by a corporate officer affirming the report's accuracy. Failure to provide accurate information in the annual emissions/activity report will be considered a FIP violation subject to EPA enforcement. Reporting airlines will be required to maintain copies of their annual reports for three years, including all relevant calculation worksheets and supporting data.

(*f*) Exemptions. EPA requests comment on the desirability of providing exemptions from the requirements of this control program for certain types of commercial aircraft operations or unusual situations. Atypical aircraft operations beyond the control of an airline and not anticipated in the design of the operations data collection system, such as in-flight emergency situations requiring emergency landings, could be exempted from reporting requirements and would not count toward an airline's environmental performance. Also, certain small commercial aircraft operators might be unnecessarily burdened under this program relative to the emissions reductions that might be obtained. EPA requests comment on the desirability and feasibility of establishing a de minimis exemption for this control program. Additionally, the Agency requests comment on the desirability of waiving part or all of any fee incurred by individual airlines that can demonstrate unreasonable economic hardship or burden on interstate commerce. Finally, comments are solicited on appropriate procedures and criteria for granting exemptions to foreign flag air carriers to ensure compliance with international treaties, bilaterial agreements, or when the Secretary or Deputy Secretary of the Department of State find that granting such an exemption is in the national interest of the United States.

(3) Legal Authority and Regulatory Interactions. As noted in this preamble, EPA has broad authority under section 110(c) to promulgate regulations in a FIP when states have failed to submit a state plan or have submitted defective state plans. *See Southland Terminal Corp.* v. *EPA*, 504 F.2d 646, 669 (1st Cir. 1979). The courts have not required EPA to demonstrate explicit authority for promulgating specific control measures in FIPs. Instead, EPA may exercise its broad authority under section 110(c) unless such authority is expressly prohibited under the Act, other statutes, or the United States Constitution. EPA's general regulatory authority and its authority under section 110(c) include the ability to impose and enforce pollution fees. *See* 42 U.S.C. Sections 110(a)(2)(A); 172(c)(6).

Congress has also granted express authority to EPA to set emissions standards for certain sources of pollution, such as aircraft and new locomotive engines. *See* 42 U.S.C. Sections 7547, 7571 (a)(2). In vesting EPA with authority to promulgate aircraft emissions standards, Congress recognized the authority of the Federal Aviation Administration (FAA) to regulate aircraft design and manage the navigable airspace to assure safety and efficiency. Sections 231 and 232 of the Act establish a cooperative scheme in which EPA is required to consult with FAA in setting emissions standards, and FAA is charged with enforcing those standards. 42 U.S.C. Sections 7571–7472. The president may disapprove any standard after notice and an opportunity for a hearing, based upon a finding by the FAA that the standard would create a hazard to safety. Additionally, in section 233, Congress preempted the states from enacting or enforcing any emission standards for aircraft that did not conform to the federal standards. *Id.* Section 7573.

EPA's broad powers under section 110(c) provide the legal authority for promulgating the control strategy proposed in the FIP—an emissions fee system based on a declining performance target expressed in per passenger emissions that can be achieved through either operational or technological means. EPA is not exercising its authority under section 231 to promulgate technology forcing emission standards for aircraft engines as the control strategy in this FIP. Nevertheless, the proposed control strategy maintains cooperative interaction between EPA and FAA and recognizes FAA's expertise in aircraft safety and navigation. EPA has consulted with FAA in drafting the proposed control strategy and will continue to consult and cooperate with FAA in finalizing and implementing the control strategy.

EPA has determined that the proposed control strategy is well within the broad scope of powers under section 110(c) and that the strategy is not prohibited under any provisions in the Act. As explained elsewhere in this preamble, EPA has solid legal authority for fee systems to encourage emission reductions. Further, EPA believes that the proposed control strategy is not prohibited by or in direct conflict with other federal regulations and statutes, such as the Airline Deregulation Act of 1978 ("ADA"), the Airport Noise and Capacity Act of 1990 ("ANCA"), or the Federal Aviation Act, which establishes FAA for overseeing aircraft safety, the efficient use of the navigable airspace, and the national air transportation system.

The proposed program is designed to ensure that substantial emission reductions are achieved by the aviation industry. However, the strategy neither establishes a hard and fast emissions budget or cap for individual commercial airline operators, nor specifies compliance measures. Instead, the program relies on environmental performance targets or emissions rate goals with fees for excess emissions. The approach leaves each operator with the discretion to choose the best compliance strategy for achieving environmental goals and satisfying market demands.

A commercial airline may choose to satisfy the emission reduction requirements with compliance measures ranging from relatively straightforward options to very challenging, more difficult approaches. EPA's preliminary analysis suggests that the lower end of this range includes such measures as converting ground service equipment to cleaner power sources; increased use of single engine taxiing; implementing procedural improvements to reduce congestion and taxi/idle times; purchasing cleaner, current production aircraft; or possibly purchasing emissions credits.

At the upper end of this range, airlines may choose to tow aircraft rather than taxi with onboard power; substantially improve load factors; pursue the production of new engine designs with low-NO_X staged-combustion systems which are presently nearing production for certain applications; or develop additional clean engine technology. An airline which continues to have excess emissions after choosing from among these possible measures will pay emission fees on its activities. It might then choose to limit activity to reduce its total fee liability.

Concerns have been raised that this strategy may require airlines to choose operational measures that, for safety reasons, should be left to the discretion of the pilot in command. For example, the FAA has advised that the decisions to reduce use of reverse thrust and increase use of single-engine taxiing should ultimately be those of the pilot.

Beyond these choices, concerns have been raised that compliance with the no-fee emission reduction targets may depend on technology-forcing aircraft engine development, and that the liability for noncompliance fees may directly or indirectly result in a limitation on activity. EPA requests comments on the likelihood that, and the point within the range of proposed emission reductions (e.g., 30–45 percent for NO_X) at which, such measures as advanced engine development may be required. The Agency also seeks comment on the legal and policy implications of a strategy that has the potential to create an economic incentive for airlines to limit operations at airports in the FIP areas. EPA also requests comments on the legal and policy implications of the proposed strategy if, after public comment and further study the Agency determines that at the upper end of the emissions reduction range under consideration, the requirement may have the potential to induce airlines to choose between such options as encouraging implemention of aircraft operational measures that currently are left to pilot discretion for safety reasons on the one hand, and limiting the number of operations at the airport on the other. Finally, comment is requested on the relationship between EPA's legal authority under section 110(c) and section 231, should the strategy result in the regulated industry having as its only options, outside of activity limits, reliance on either technology-forcing aircraft engine advances to meet the emission reduction targets, or paying the proposed fees.

Regardless of the means by which compliance is achieved, the proposed control strategy does not appear to mandate or indirectly require an accelerated fleet turnover that would potentially conflict with the schedule established under ANCA for reducing noise by the end of 1999 (See 49 U.S.C. App. Section 2157 (a)), because the first FIP controls would not apply until 2001 and the most stringent controls would not be required until 2005. The proposed control strategy also appears consistent with the statutory requirements and mandate for the FAA

under the Federal Aviation Act, 49 U.S.C. App. 1348.

During the drafting of the proposed control strategy, EPA considered but rejected requiring the airport proprietor to implement and enforce regulation of the commercial airlines. EPA rejected this concept and chose for EPA and FAA to implement and enforce the proposed strategy because the proprietor has more limited authority over the commercial airlines and because the courts have held that there are limits on EPA's ability to mandate municipal entities to control the behavior of others by requiring specific measures. *See Brown v. EPA*, 521 F.2d 827 (9th Cir. 1475), *vacated on other grounds*, 431 U.S. 99 (1977).

The proposed control strategy treats all commercial airlines identically, and the proposed strategy envisions compliance by international air carriers as well as domestic airlines. EPA believes that international air carriers are required to comply with all applicable rules and regulations, including air quality laws. Therefore, EPA is not proposing to treat foreign air carriers any differently than the domestic commercial airlines, subject to any supervening requirements in treaty obligations. During the comment period on the proposed control strategy, EPA will be contacting the Department of Transportation, the Department of State, and other federal agencies to ensure consistencies with relevant rules, regulations, and agreements. EPA will also explore any additional requirements or flexibility for the handling of fees collected from foreign carriers.

(*4*) Ground Access Vehicles Controlled by Other FIP Elements. The proposed control strategy only applies to aircraft and related emission sources that are under the direct control of commercial air carriers. This is because the other major sources of emissions operating at airports, such as GAV and stationary sources, are being substantially controlled under other regulations. Emissions from significant stationary sources are controlled under stationary source rules implemented by the state and local agencies or the FIP. Emissions from GAV are comprehensively regulated under state rules and other FIP measures. Also, in conjunction with promulgating the proposed strategy, EPA is recommending amending provisions in the Airports and Airways Improvement Act ("AAIA"), 49 U.S.C. Section 2210, that limit the airport proprietor's ability to spend landing fee revenues on projects that reduce GAV emissions through promoting mass transit or eliminating congestion.

(*5*) Issues for Specific Comment. EPA requests comment on the desirability of removing the Ventura and Sacramento control areas from this commercial aircraft control strategy.

EPA requests comment on whether stationary source emission reduction targets are appropriate for use with the commercial aircraft control strategy.

EPA requests comment on the desirability of using a two-year average for establishing a baseline inventory, although EPA notes that any multi-year average must represent 1990 emissions in some manner consistent with Clean Air Act requirements.

EPA requests comment on the desirability and feasibility of modifying the basin-wide emissions target to lock in emissions reductions that will result from non-FIP requirements such as the Airport Noise and Capacity Act.

EPA proposes today to allocate GSE operated by fixed-base operators to specific airlines based on servicing provided under contract agreements, and requests comment on possible alternatives to such an allocation strategy.

EPA requests comment on potential alternatives to the ozone-season control period proposed today.

EPA requests comment on the appropriate schedule of reduction for the seasonal emission cap even though the final (2005) emission cap would not change.

EPA requests comment on a triggering mechanism that would prevent implementation of the fee system as long as the area-wide commercial aircraft emission allowance target is achieved.

EPA requests comment on what fee levels will achieve the objective of discouraging noncompliance without being excessive.

EPA requests comment on alternative methods for establishing activity factors that may be automatically updated based on prior-year operational data.

The airlines have reported using as a "rule of thumb" 200 pounds of payload for each passenger, which includes the weight of the passenger and his or her luggage. EPA requests comment on whether this is an appropriate and equitable value.

EPA requests comment on the possible incorporation of an emissions credit program as part of the control strategy proposed today, and on ways to involve state and local agencies in order to make more trading opportunities available to the airlines.

EPA requests comment on the desirability of issuing additional specific technical guidance concerning emissions calculations for aircraft operations.

EPA requests comment on the desirability of requiring airlines to submit baseline reports, and on possible alternative methods for establishing a reasonable baseline emissions inventory.

EPA requests comment on the current emissions inventory methodology that uses airport-specific average summer day, mid-morning mixing heights for July and August 1990 as the basis for calculating aircraft climbout and approach emissions. (The amount of time spent in each of these operational modes depends on the height of the inversion layer.) Alternatively, a single default mixing height (e.g., 3000 feet above ground level) could be used for all aircraft operations. This could simplify the calculation procedure, but may not be as representative.

EPA requests comment on the desirability of requiring airlines to submit compliance plans, and on the information that should be provided in such plans should they be required.

EPA requests comment on the desirability of providing exemptions from the requirements of this control program for certain types of emergency or atypical commercial aircraft operations beyond the control of aircraft operators.

EPA requests comment on the desirability and feasibility of establishing a de minimus exemption for this control program.

The Agency requests comment on the legal and policy implications of a strategy that has the potential to create incentives to limit operations at airports in the FIP areas.

EPA requests comment on the relationship between EPA's legal authority under sections 110(c) and 231 if the strategy results in the regulated industry having as a principal option, reliance on technology-forcing aircraft engine advances to meet the emission reduction targets.

Persons submitting comments on these issues or other specific aspects of today's proposal should consider and discuss the possible impact of their comments on other elements of the control program, particularly when such comments propose alternative strategies that would achieve smaller or larger emission reductions from commercial aviation.

(*6*) Aviation Working Group Issues/ Concerns To gather information used in preparing today's action, the Agency formed a working group composed principally of representatives from EPA, FAA, various State and local regulatory

authorities, airport operators, and airlines. The mission of the working group was to acquire emission inventory data, assess inventory methodologies, and identify operational and technological issues regarding potential control strategies.

The proposed environmental performance target/fee control program represents a new and innovative strategy for aviation. EPA has attempted to address many of the issues and concerns raised by the working group members, but recognizes that significant issues and differences of opinion remain. In order to facilitate public comment on these issues, EPA has requested comment on specific topics throughout the description of the proposal. Nonetheless, EPA is taking an additional step to ensure that concerns raised by the airline industry are fully aired as part of this rulemaking. The industry's concerns, as submitted by the Airline Transport Association,[78] are summarized as follows:

- Further regulation of aircraft emissions under the FIP is unnecessary because VOC emissions from aircraft have already been reduced and will continue to decrease substantially through the next decade. Fleet modernization due to market forces and phase out of Stage II aircraft will substantially decrease VOC emissions.
- Any FIP requirements for aircraft emission reductions would be illegal per section 110(a)(5)(C) of the Clean Air Act. It would also run counter to the jurisdiction of DOT to ensure a safe and efficient air transportation system.
- Emission reductions required by the FIP would ultimately require limiting the number of flights, which would have a devastating effect on the region's economy.
- Airlines will be subject to NO_X reductions under a regulatory scheme being developed by the International Civil Aviation Organization (ICAO). This international approach is necessary to keep from placing U.S. airlines at a competitive disadvantage in the global marketplace.
- Any FIP proposal that directly or indirectly affects aircraft operations would unwisely and unlawfully impinge on the control of the Federal Aviation Administration (FAA) over the safety and efficiency of airport operations. The pilot in command is the final authority as to the operation of the aircraft. Measures such as single engine taxiing, derated takeoffs, and limiting use of reverse thrust on landing may pose safety hazards.
- EPA has no authority to prescribe a bubble to control airport or airline emissions. Proposal of an airline or airport-wide emissions cap would require either operational changes that raise serious safety and efficiency concerns or a reduction in the number of flights. These would violate either the Federal Aviation Act, FAA regulations or the Airline Deregulation Act of 1978.
- Airport proprietors are preempted from exerting operational controls with regard to aircraft and airlines.
- Use of a bubble would be unworkable, since neither EPA nor airport proprietors have the expertise or the resources to supervise and enforce restrictions on the hundreds of businesses and operations that are potential emission sources at an airport.
- Control of domestic aircraft emissions under the FIP would discriminate unfairly against U.S. air carriers. Foreign carriers, military and general aviation must be subject to the same controls as commercial domestic carriers.
- Any emissions decreases from the closure or realignment of military airfields must be credited to the aviation sector as a whole.
- Although the Clean Air Act requires EPA to use a 1990 baseline for determining overall emission reduction goals for the FIP, EPA should allow the use of other years for particular sources. A 1987 baseline year for aircraft would be more equitable, because individual airlines have been voluntarily reducing their VOC emissions since that date by phasing in quieter and cleaner engines.
- As an alternative to allowing an earlier baseline year, the rule might provide that the benefit of percentage reductions by those industries that have made the least pre-1990 emission reductions be shared with industries that made the most pre-1990 progress.
- ATA questions the authority of EPA to regulate airline ground service equipment (GSE) emissions.
- The airline industry maintains that EPA has unfairly focused on airline GSE regulation, while ignoring similar off-road vehicles used by other industries.
- The airline industry has provided evidence that GSE emissions amount to nearly 40 percent of airline-controlled emissions, in contrast to the substantially lower percentage estimated by EPA. Thus, there may be much greater opportunity for emission reductions from GSE than EPA has previously contemplated.
- To the extent that GSE emission regulation is permissible, EPA should develop a reasonable phase-in schedule for such regulations to allow for the development of appropriate controls and to work through the associated technical problems.

The Agency requests comments on the concerns and issues raised by the airline industry.

(c) Military Aviation. (*1*) Overview. (*a*) Military Air Base Operations. Military air bases are defined for the purpose of this proposal as facilities owned and operated by the Department of Defense with the primary mission of aircraft operation. Aircraft operation emissions, defined here as emissions from aircraft themselves, dominate total emissions at a military air base. Like commercial airports, ground support equipment and ground access vehicles also contribute to a military air base's total emissions. Mobile source-related emissions from these "other base operations" sources have never been fully inventoried. EPA has established a working group in conjunction with the Department of Defense (DOD) to compile and assess complete emission profiles for all air bases. The information that is currently available is contained in the Technical Support Document, which is available in the rulemaking docket for today's proposal.

Table F lists the military installations in the control areas where aircraft activity has been identified, ranging from active air bases with intensive activity, to bases with only minimal transient operations. The South Coast Air Basin contains most of the installations. As an example of their significance in FIP areas, emissions from military aircraft operations in the South Coast air basin currently are about 20 percent of those generated by commercial aircraft operations, or about 0.3 percent of the total South Coast Air basin's 1990 baseline emissions inventory based on current inventory data.

A military air base usually has specific aircraft based on-site; the operational characteristics for these aircraft can vary widely depending on the specific mission requirements for the based unit or units. Transient operations resulting from military aircraft based elsewhere can comprise a significant portion of a military air base's total aircraft operations, depending on specific military requirements, but most of these transient operations are unscheduled and difficult to characterize. The military aircraft fleet experiences relatively slow turnover; aircraft remain in service for many years, and new airframe designs enter the fleet at a relatively slow pace.

The ongoing base closure and realignment process introduces an important element into the process of

[78] For more detail see the letter from R. Kettler, ATA to R. Wilson, EPA, dated December 27, 1993, available in the rulemaking docket.

developing a control strategy for military aircraft operations. The Secretary of Defense and the Defense Base Closure and Realignment Commission have recommended a series of defense base closures across the nation, including the FIP areas, as well as a concurrent sequence of "realignment" actions with shifts in the location and intensity of military activity. The closure of several air bases within the control areas represents the more significant impact on the control strategies described here. Of the seven military air installations located in the South Coast area, three are scheduled for closure and one will be realigned. Aircraft operations at the realigned installation are expected to decrease. (See the table below for the air bases recommended for closure.) As a result of the Base Realignment and Closure (BRAC) process, emissions from military aircraft will be significantly reduced by the year 2000. For example, emissions of VOC and NO_X will decline by at least 50 percent in the South Coast control area as a result of air base closures, according to current information. (See the Technical Support Document for further discussion.)

Certain bases are slated for re-use by civilian entities following closure; this re-use may include aircraft activity. Some of any such activity may represent relocation of current or future growth in civilian aviation from other airports in the respective air basins; some may be activity which would not have occurred in that basin but for the availability of the closed base.

Military Air Bases in California FIP Areas

Military Agency

South Coast Air Basin

Production Flight Test-Air Force Plant 42—Air Force
El Toro MCAS [closing]—Marine Corps
Los Alamitos AAF—Army National Guard
March AFB—Air Force
Norton AFB [closing]—Air Force
San Clemente Island—Navy
Tustin MCAS [closing]—Marine Corps

Sacramento Air Basin

Mather AFB [closing]—Air Force
McClellan AFB—Air Force

Ventura County

Channel Islands—Air National Guard
Point Mugu NAWS—Navy

Abbreviations

AAF—Army Air Field
AFB—Air Force Base
MCAS—Marine Corps Air Station
NAWS—Naval Air Weapons Station

(*b*) Control Strategy. As with commercial operations, the EPA examined various options for reducing total emissions from military aircraft operations and other base operations. These options included: (1) exempting military aircraft operations from FIP requirements while maintaining a cap on all other mobile source emissions from other base operations at military air stations; (2) an absolute cap on total emissions (including aircraft) under the direct control of the Department of Defense; and (3) a target based program using an allowable emission rate and a fee for excess emissions above this rate, like that proposed for commercial airports.

EPA proposes the first of these three options. EPA is proposing to exclude military aircraft operations from FIP requirements for national security reasons, as explained in more detail below. Applying restrictions on military aircraft operations will inevitably degrade training and combat readiness. Restrictions would impair the ability of the Department of Defense to perform assigned missions (including humanitarian and natural disaster relief, surveillance, and logistic support).

The options available for reducing emissions from military aircraft without requiring a significant decrease in the number of aircraft operations are minimal. Military aircraft are designed to specific mission requirements including power, maneuver, lift, and load. Application of control technologies to existing aircraft would degrade characteristics inherent in military aircraft design. Arbitrary reductions in aircraft operations that may be required to meet the second or third alternative control strategies listed above may be inconsistent with training and operational requirements necessary for national security. In selecting this proposal to exempt military aircraft operations from the FIP requirements, EPA has considered the approved base closings within California which will provide significant reductions in current emissions from stationary, aircraft and other mobile sources under the direct control of the Department of Defense. One consequence of these closures is that the reductions in operations least harmful to military readiness have already been made. The incremental risk to readiness of further reductions in operations is therefore that much more.

The DOD established an internal FIP working group in December 1992 to examine the problems associated with potential FIP strategies, identify impacts to military operations and readiness, and collect data from military installations in the FIP areas. Several concerns have been identified. The principal concern is that although military aircraft operations contribute a very small portion of the total area-wide emissions, they would be severely restricted within an emissions cap. On military air installations, the predominant source of mobile emissions is aircraft and aircraft support operations. Severe restrictions will inevitably degrade training and combat readiness necessary to minimize the risks associated with military aviation. An emission cap or reduction in training operations may impair the ability to perform assigned national missions (including humanitarian relief, surveillance and logistics support). The options available for reducing mobile source emissions from military air stations without requiring a decrease in aircraft operations are minimal.

Another issue is the limited ability for DOD to transfer aircraft to military air stations outside the FIP areas. To move a specific aircraft type requires that the receiving installation have the necessary infrastructure to accommodate that particular aircraft type. Additionally, permanent moves of military assets and personnel are also not fully at the discretion of the military. Any significant base closure action or realignment that meets certain thresholds requires that the action be presented to the BRAC Commission and subsequently be presented to Congress.

Based on the impact the second and third possible FIP control strategies (listed above) would have on military readiness, and the already scheduled decrease in military aircraft operations, EPA proposes that military aircraft be exempt from the FIP. EPA requests comments on excluding military aircraft from the FIP control strategy.

The proposed FIP program will control mobile source emissions from other base operations under the control of DOD. These sources include APUs, GSE, captive vehicle fleets, privately-owned vehicles, and any other mobile sources operated within an air base's boundaries. The military bubble also will include DOD-controlled non-aircraft emissions sources that operate at locations other than military bases, such as ground equipment based at civilian airports. The bubble will be basin-wide rather than air base-specific, given the variability introduced by base closure and realignment activities, as well as the need for operational flexibility.

EPA proposes to impose a declining cap on total emissions for controlling these other base operations emissions from all air bases within each FIP area.

This avoids the difficulty of having to allocate baseline emissions among multiple entities (e. g., perhaps down to individual air bases). This approach also takes advantage of the military's centralized command structure; DOD (or each branch of the armed forces) can mandate air base performance at a certain emissions level (excluding aircraft emissions) commensurate with environmental objectives while maintaining the flexibility to stage specific missions and other functions among various bases inside or outside of the basin. This control strategy provides individual base commanders with the flexibility to implement specific operational and procedural measures necessary to achieve the specified emissions goal, and avoids having EPA attempt to implement specific control measures for military operations. The centralized command structure means that a single entity is the focus of the control strategy.

An absolute emissions cap approach does not require a projection of activity in future years, one of the required assumptions for a program based on allowable emissions per activity unit. Finally, a control strategy that fundamentally relies upon the environmental efficiency of operations, such as the emission rate-based program proposed for commercial aircraft, appears less desirable for military air bases given the inherent unpredictability of military operations.

EPA also seeks comments on the second alternative approach, to establish a declining cap for an emissions bubble which includes military aircraft emissions and therefore requires reductions in aircraft emissions also. Further, comments are requested on the desirability of the third possible control approach, an approach that includes aircraft emissions but is based on a target average emission rate per aircraft operation with a fee for emissions above the target. This third approach would be similar to that being proposed today for commercial aviation.

With respect to the second and third possible control approaches, several additional issues have been identified if military aircraft operations are included within the scope of a bubble program. EPA requests comment on the following issues.

If emissions from aircraft are included, a fee system based on an emission rate target (i.e., the third approach), consistent with the proposed strategy for commercial airlines, or a variation of the second approach but with a fee for emissions in excess of the cap, may be more equitable and desirable than an absolute emissions cap that applies uniquely to military aviation. Emissions that exceed the emissions target would be subject to emission fees instead of an enforcement-related fine or penalty. The emission target would apply to air emissions only during the ozone season in each FIP area. The method of determining the excess emissions and the resulting fee would be addressed in subsequent rulemaking.

Another issue identified involves the method of allotting the emission caps or emission rate targets by the EPA. To be most effective, the DOD Working Group recommends that any caps on total emissions, targets for total emissions, or emission rate targets which include aircraft emissions be allocated to the individual Military Departments. Each Military Department will be responsible for attaining the target for installations under its control. This system is consistent with existing DOD command structure and can be readily implemented. Trading between Military Departments and between installations is proposed. Trading is applicable only to installations within the same FIP area.

To reduce the potential impact on aircraft operations of an emissions cap or emission rate target which includes aircraft emissions, the DOD working group identified as essential the ability to trade excess emission reductions between stationary and mobile sources. Maximum flexibility and minimal operational impacts can be achieved by allowing trading between stationary and mobile sources, in addition to trading between all types of military installations within the same FIP area. In other words, major reductions or elimination of a stationary source may allow continued essential flight operations. EPA acknowledges this concern and supports such trading programs as created by State and local governments as discussed elsewhere in today's proposal.

Of particular concern to the Navy with respect to the second and third options identified above is the inclusion of Naval Auxiliary Landing Field San Clemente Island (SCI) in the list of military air installations regulated by the FIP. SCI is an isolated and remote area, with few emissions sources, either mobile or stationary, other than aircraft. The impact on aircraft operations will be substantial, as almost the entire amount of required reductions will have to be a result of decreased aircraft operations. SCI is the primary training location for Navy pilots prior to carrier deployment. This training is vital and represents a significant military readiness issue. SCI is located 55 miles southwest of Long Beach. Meteorological data indicates that SCI emissions do not impact the South Coast Air Basin, and at best the contribution of air emissions from SCI to the South Coast air quality is not well defined. Consistent with EPA's request for comment on exempting Sacramento and Ventura areas from the FIP commercial airport requirements, EPA also requests comments on exempting emissions from on or near San Clemente Island from the FIP control strategy, if aircraft are ultimately included in the final rule.

The proposed emission reduction requirements under a bubble concept for military air bases—regardless of whether it includes aircraft emissions—would be generally consistent with the emission cap requirements for stationary sources in the FIP areas. Although not firmly decided, the current stationary source control strategy for the South Coast requires that VOC and NO_X emissions be reduced by 20–45 and 30–45 percent, respectively, from the 1990 baseline inventory by 2005, through a series of uniform annual reductions of baseline emissions of each pollutant: 4–9 percent per year for VOC and 6–9 percent per year for NO_X, both starting in 2001. Stationary source requirements for the 2006–2010 period have not been established at this time. Until modified in a future rulemaking, the 2005 cap will apply through 2010.

The requirements for Ventura from 2001–2005 are identical to that for the South Coast. For Sacramento, the strategy requires a VOC reduction of 20–45 percent, with uniform annual reduction of 4–9 percent. The timeframe for achieving this reduction is the same as for the South Coast and Ventura areas.

For this proposal the overall reduction targets are expressed as a range of percentages; EPA anticipates establishing a specific percentage reduction target in the final rule. EPA requests comment on whether these stationary source emission reduction targets are appropriate for use with the military air base control strategy.

A military air base can utilize any of a variety of emission reduction options, at the discretion of the Department of Defense and the base commander, to meet the annual emissions target. For example, reductions in ground equipment could be obtained through GSE electrification and restrictions on ground traffic within base boundaries. If the final rule does include emissions from military aircraft, a base commander may choose to restrict aircraft taxi procedures, perhaps by mandating specific direct routes to and

from runways, or by towing aircraft into takeoff position; certain training procedures could be altered to minimize the frequency of high-emission operating modes within the basin mixing zone.

(*c*) Geographic Scope. The control program for military air bases will cover the three FIP areas: South Coast, Ventura, and Sacramento Air Basins. The Agency requests comments on the need to control air base emissions in each area based on air quality effects or equity considerations. In particular, EPA requests comments on exempting emissions from on or near San Clemente Island from the FIP control strategy, if aircraft are ultimately included in the final rule.

(*d*) Control Period. EPA proposes to control military air base emissions only during the ozone season in each FIP area. Further, EPA proposes to require compliance with the program based on the season-long average of emissions. As already described, such operations may be highly variable. Although this variability tends to argue for a shorter compliance (e.g., a monthly period as in the stationary cap program), the longer period seems preferable to provide military commanders with the flexibility to conduct operations as necessary. EPA requests comment on the desirability of the seasonal compliance demonstration versus shorter periods.

(*2*) Key Regulatory Elements. (*a*) Summary. EPA proposes to specify in the final FIP a linear declining cap on total mobile source emissions from military air bases in each FIP area, excluding emissions from aircraft themselves. This declining cap will be designed to achieve the emissions reduction targets for each area as described under "Control Strategy." Military air bases will submit a baseline emissions report and annual compliance determination reports similar to those required for commercial airlines as discussed previously. Military air bases are defined for the purpose of this proposal as facilities owned and operated by the Department of Defense with a primary mission of aircraft operation. The Department of Defense also will be responsible for submitting baseline emissions reports and annual compliance reports for military operations that occur at civilian facilities in the control area.

(*b*) Baseline Inventory and Emission Caps. EPA currently does not have sufficient data for all subject emission sources included in the proposed military air base control program to establish a reasonable baseline inventory. EPA, therefore, will require each military air base in the control area to calculate and report total subject emissions for the baseline year of 1990 within 180 days following finalization of this rule. Information to be included in the baseline report is described in "Reporting and Recordkeeping" below. The military bubble will be the sum of emission inventories from all air bases in the basin.

EPA requests comment on the desirability of using an alternative baseline scheme, given the variability introduced by operations related to Desert Shield/Desert Storm during 1990. One alternative could be to require air bases to submit data for 1989 and 1990 so that a two-year average inventory can be calculated. The DOD working group recommended that installations have the option of identifying the baseline year, between the years 1989 and 1992, which resulted in the most representative total emissions. The DOD working group also requested a one time adjustment of the baseline inventory be allowed, based on actual inventory data, once the FIP requirements are in effect. The one time adjustment could help eliminate errors based on assumptions and estimates used in developing the baseline.

EPA will establish in a subsequent rulemaking action a series of declining seasonal emissions allowances for NO_X and VOC as described above using the modified baseline emissions inventory. Both the baseline inventory and the seasonal targets will be expressed as allowable tons of pollutant emitted on average per day during the control period.

An additional concern regards the requirement for baseline inventories for installations that are closing. The DOD working group further recommended that inventories not be required for bases closing before 2000. Emission sources are already being phased out and there would be no benefit derived from funding such inventories in terms of helping to design emission control strategies for those bases. On the other hand, the estimates of emissions eliminated by base closures will affect the effective stringency of a declining cap program if the baseline for the cap was prior to closure since there will be credit for base closings.

(*c*) Averaging and Trading. EPA proposes to determine compliance for military air base operations by averaging emissions across the control area, rather than establishing specific seasonal emission limits for individual air bases. Such a control strategy would provide the military with the flexibility to transfer operations between air bases as needed to meet realignment requirements or other specific mission needs, as long as the overall emissions reduction target is met. Alternatively, the Agency could establish seasonal emission allowances for each military air base in the control area. EPA requests comment on the desirability of using area-wide averaging to determine military compliance, and on possible alternative compliance determination schemes.

The Agency also requests comment on the inclusion of military air base operations in any civilian emission credit trading scheme if such a program is established by a local government. Such an expansion could provide the Department of Defense with additional incentive to implement emission reduction measures that generate tradable credits, or provide a mechanism for obtaining credits from other sources to ensure compliance should unforeseen difficulties arise. (See the discussion of averaging and trading for commercial aviation for more detail of this topic.)

Several of the military air installations in the FIP areas have already been identified for closure (Table F), and military operations will cease at the identified bases prior to the year 2000. These reductions do not even consider BRAC 95 which could result in further reductions. The DOD Working Group recommends that any emission reductions resulting from closure or realignment should be credited to the Military Department. These credits would then be available for transfer by the Military Department as part of the President's five point plan for community redevelopment at closing bases and/or to meet service Department needs within the specific FIP areas.

(*d*) Annual Compliance Determination. Beginning in 1999, military air bases will be required to submit annual emissions reports as described below. The total military emissions inventory from subject mobile sources at all air bases in the area will be compared to the given year's seasonal emissions target to determine compliance with the FIP requirements.

(*e*) Reporting and recordkeeping. (i) Compliance Plans. The stationary source cap program includes a requirement for affected sources to submit compliance plans that describe planned emission reduction measures. EPA could establish a similar requirement for military air bases as part of today's proposed control strategy. Such compliance plans would be submitted by Department of Defense in advance of the control period and would describe in some detail the various emission reduction measures

planned for air base operations in the control areas.

Compliance plans would impose a significant administrative burden on EPA and the Department of Defense, however. EPA therefore requests comment on the desirability of requiring compliance plans, and on the information that should be provided should they be required. EPA does not contemplate that these plans, if required, would legally bind the military, since that would impede flexibility and is not essential to the effectiveness of the program. However, any deliberate misrepresentation in the compliance plan may be made a violation of the FIP.

(ii) Baseline Reports. As discussed above, EPA currently does not have sufficient information to establish a reasonable baseline military air base emissions inventory from which annual emission targets can be developed. EPA therefore will require military air bases to collect and report data concerning both aircraft operations and other air base operations in the baseline year of 1990, or alternative years as discussed in "Baseline Inventory and Emission Caps" above. These reports will be submitted to EPA no later than 180 days following finalization of this rule. These reports would be used by EPA to calculate the military's air base emissions baseline; seasonal emission targets will be established in a subsequent rulemaking action as a series of reductions from this baseline.

These baseline reports will include, but may not be limited to, the following information to be provided by each military air base:

- Aircraft type and model, engine type and model, and number of landing/take-off operations (LTOs)
- Times in mode by engine for each flight
- Auxiliary Power Unit (APU) operating time
- Ground Support Equipment (GSE) population by type
- GSE activity by fuel type, engine size, and annual use hours
- All other off-highway equipment activity by fuel type, engine size, and annual use hours
- Vehicle miles traveled (VMT) by highway certified vehicles (federal owned, contract personnel, privately owned, etc.) operated within air base boundaries

Although EPA is not proposing to include aircraft emissions in the FIP program, aircraft emissions are included in the above list of reporting items. EPA believes that information on aircraft operations and emissions will allow it to better review the submitted information on emissions from other sources. Comment is requested on the necessity and usefulness of this information to EPAs implementation of the FIP and to local air quality planning activities.

EPA recognizes that detailed information may not be available in each of these categories for 1990. In these instances military air bases may report estimated data; such estimates would be accompanied by a description of the estimation methodology used, including any supporting data. The Department of Defense will be required to identify a reporting entity for military operations at civilian airports; EPA also requests comment on alternative schemes for tracking and reporting such activity.

(iii) Annual Compliance Determination Reports. Beginning with a report describing activity during 1999, the FIP will require military air bases to submit annual reports within 60 days of the close of each calendar year. These reports will include information on emissions for that year's ozone season, as described below. EPA will use these reports to determine the military's compliance with the seasonal emissions targets. Initiating these annual reports in 1999 will provide the Department of Defense and EPA with an opportunity to assess data gathering and analysis requirements well in advance of the first emissions target in 2001, as well as providing the DOD with important information on its performance needs prior to the first round of required reductions. Failure to submit annual emissions reports will be subject to EPA enforcement.

Annual emissions reports will include the following information:

- Aircraft type and model for each flight during the ozone season
- Engine type and model for each affected flight
- Times in mode by engine for each affected flight
- Auxiliary Power Unit (APU) operating time during the ozone season
- Ground Support Equipment (GSE) population by type
- GSE activity by fuel type, engine size, and seasonal use hours
- All other off-highway equipment activity by fuel type, engine size, and seasonal use hours
- VMT by highway certified vehicles operating within air base boundaries during the ozone season

Military air bases will be required to track and report actual data for the above information categories. Default values will not be accepted for the purposes of determining annual compliance with the military's emissions target. As with baseline reports, the Department of Defense will be required to identify a reporting entity for military aircraft operations at civilian airports; EPA also requests comment on alternative schemes for tracking and reporting such activity.

Military air bases will be required to calculate their total hydrocarbon and NO_X emissions for the report year's ozone season using the above data and enter these emissions on the report form. Emission calculation methodology will be taken from existing EPA-approved documents. EPA also requests comment on the desirability of issuing additional specific technical guidance concerning emissions calculations for military aircraft operations.

(*f*) Exemptions. EPA requests comment on the desirability of providing exemptions from the requirements of this control program for certain types of military air base operations. For example, emissions resulting from actions in response to emergencies, such as those that support operations of the United States forces introduced into hostilities, introduced into situations where involvement in hostilities is indicated, actions to resolve in-flight emergencies, or rendering emergency humanitarian or natural disaster relief should be exempt from reporting requirements and not count towards the military's environmental performance. Other actions which should also be included in this category are those to extinguish wildfires and immediate responses to the release or discharge of oil or hazardous material in accordance with approved Spill Prevention and Response Plans or Spill Contingency Plans. In addition, certain small military facilities with only minimal aircraft activity might be unnecessarily burdened under this program relative to the emissions reductions that might be obtained. Therefore, EPA requests comment on the desirability and feasibility of establishing a de minimis exemption for this control program.

(*3*) Legal Authority. Section 118 of the Act requires all federal agencies, including the Department of Defense, to comply with rules and regulations promulgated under the Act in the same manner and to the same extent as non-governmental agencies. 42 U.S.C. Section 7418.

(*4*) Issues for Specific Comment. EPA requests comment on the proposed exemption of military aircraft from FIP requirements on the basis of national security considerations, and on the alternative proposals described in this section.

EPA requests comment on whether stationary source emission reduction targets are appropriate for use with a military control strategy.

EPA requests comment on the manner in which non-Department of Defense government-operated aircraft emission sources should be included in this FIP control strategy. EPA requests comment on the desirability of exempting such sources from the requirements of the control program.[3]

EPA requests comment on potential alternatives to the seasonal control period proposed today.

EPA proposes to use 1990 as the baseline year for each military air base to establish a baseline emissions level, but also requests comment on the desirability of using an alternative baseline scheme, given the variability introduced by operations related to Desert Shield/Desert Storm.

EPA requests comment on the desirability of using area-wide averaging to determine military compliance, and on possible alternative compliance determination schemes.

EPA requests comment on the desirability of issuing additional specific technical guidance concerning emissions calculations for military air base operations.

EPA requests comment on alternative methods of tracking and reporting emissions resulting from military operations at civilian airports.

EPA requests comment on providing exemptions from the requirements of any control program for certain types of emergency or atypical military operations.

EPA requests comment on the desirability and feasibility of establishing a de minimis exemption for any control program.

EPA requests comment on national preparedness and response flexibility versus the degree and scope of the proposed emissions control program.

Persons submitting comments on these issues or other specific aspects of today's proposal should consider and discuss the possible impact of their comments on other elements of the control program, particularly when such comments propose alternative strategies that would achieve smaller or larger emission reductions from military air bases.

(d) General Aviation. (*1*) Source Description. The general aviation category consists of privately-owned aircraft operated under FAA Parts 91, 133, or 137. As such, it encompasses aircraft types with a variety of different engines, including piston, turboprop, and turbine. It also includes both fixed-wing and rotary-wing aircraft. Most general aviation aircraft are owned and operated by private individuals. Other aircraft are owned and operated by businesses. Much of the general aviation fleet is old, with few significant technological improvements in emissions performance expected in the foreseeable future.

General aviation aircraft operate at a variety of facilities in the control areas, ranging from large commercial airports to small privately-owned airstrips and helipads. The table below ("Civil Airports in FIP Areas") lists the civil airfields in the control areas, based on information provided by the FAA and discussed in the Technical Support Document. In addition to these civil airfields, FAA data for 1991 lists 198 helipads in the South Coast control area, 3 helipads in the Sacramento control area, and 12 helipads in the Ventura control area; this includes private helipads, medical facilities, and various local government facilities.

Civil Airports in FIP Areas

South Coast Air Basin

Avalon Bay
Bear Creek
Big Bear City
Billy Joe
Brackett Field
Burbank-Glen.-Pas.
Cable
Catalina
Chino
Compton
Corona Muni.
El Monte
Ernst Field
Flabob
French Valley
Fullerton Muni.
Goodyear Blimp Base
Hawthorne Muni.
Hemet-Ryan
John Wayne.
Long Beach Muni.
L. A. Internat'l
Ontario Internat'l
Pebbly Beach
Perris Valley
Pines Airpark
Redlands Muni.
Rialto Muni.
Riverside Muni.
Santa Monica Muni.
Shepherd Field
Skylark Field
Torrance Muni.
Two Harbors
Van Nuys
Whiteman Airpark

Ventura County

Camarillo
Conover Air Lodge
Oxnard/Ventura
Santa Paula.

Sacramento Air Basin

Boeckmann Ranch
Bottimore Ranch
CHP Academy
Cameron Airpark
Flying B Ranch
Flying R
Franklin Field
Holtsmans
Lauppes Strip
Lucchetti Ranch
Mosier
Natomas
Rancho Murieta
Riego Flight Strip
Rio Linda
Sacramento Executive
Sacramento Metro.
Sky Way Estates
Spezia
Sunset Skyranch
Tenco Tractor
Van Vleck
Vestal Strip

Much less specific information is available concerning the emissions resulting from general aviation activity than is available for commercial and military aircraft operations. The FAA collects some information on general aviation operations at airports with FAA-operated (or contractor-operated) control towers, but these data are not comprehensive, and do not capture operations occurring at non-tower-controlled facilities. In particular, the lack of data specifically addressing general aviation operations by type of aircraft makes an accurate assessment of the emissions from this source more difficult.

(*2*) Overall Control Strategy. Although general aviation operations represent a small fraction of total emissions in most FIP areas, EPA is proposing to include this source in the FIP control strategy along with commercial and military aircraft operations as part of the broad, comprehensive control scheme for these areas. As described below, developing an effective comprehensive control strategy for this source, and effectively administering it, is an especially challenging task due to the diverse aircraft types and usage, the great number of individual owners/operators, and the large number of airfields in each most FIP areas. Nonetheless, if this source were excluded from the FIP, the potential reductions from this category would have to be achieved from another source.

Today's proposal would establish an operations fee to reduce the emissions from general aviation activity during the ozone season in each FIP area. The

Agency intends that the proposed approach provide the same level of benefits as the emission cap requirements for stationary sources in each of the FIP areas. (See section III.D.4.e.(2)(a)(4), above, for the specific percentage reductions.) Comments are also requested on three alternative control schemes. EPA has chosen not to apply a comprehensive emission cap to this source because the significant data requirements and level of EPA involvement in such a program make that strategy impractical.

In developing the proposed strategy, EPA notes that there appear to be few, if any, regulatory options for innovatively reducing emissions from general aviation aircraft, given the age and emissions performance of the general aviation fleet, and the economic status of the general aviation industry. Unlike many other sources, improving the emissions performance of these aircraft through new, industry-wide emission standards is problematic. Even if cleaner engines could be made available, the general aviation fleet is unlikely to experience significant introduction of cleaner alternatives, since fleet turnover is relatively low (sales of general aviation aircraft in fact have declined in the past several years).

This is not to suggest that emission benefits are unavailable through the careful selection of aircraft/engine combinations or the possible limited introduction of new models in the future. Rather, there are no substantially cleaner alternatives to current technology engines for the vast majority of the fleet. Therefore, the strategies that rely on turnover to cleaner technologies are unavailable in this instance.

Operational and procedural measures such as reduced-power takeoffs and direct routing from hardstand to runway also would be difficult to implement for general aviation on an area-wide basis, given the widely varying aircraft and facility characteristics found amongst general aviation operations. These measures also offer little opportunity for emission reduction, due to minimal congestion at most general aviation airports, short taxi distances, and relatively low power-range engines. As a result, the only available measures that would provide significant emission benefits appear to involve activity reductions.

The diverse and diffuse nature of general aviation operations creates significant obstacles for any emission control program. General aviation aircraft and the facilities at which they operate are controlled by a large and varied group of individuals and organizations. General aviation operations typically occur on a highly variable schedule and many operations can occur at completely uncontrolled airports. Despite these difficulties, EPA believes that an emission reduction program for general aviation could be implemented. The specific proposed control measures and alternatives discussed below reflect varying degrees of direct EPA involvement and participation by the general aviation community, with resultant variation in the certainty of obtaining emissions reductions.

The control strategy applies to general aviation aircraft operated at commercial airports as well as those operated at public and private general aviation facilities. It does not apply to civilian general aviation aircraft operations at military bases; these are included in the military control strategy described above.

Comments are specifically requested on the need to control emissions from general aviation in each area based on local air quality concerns, given the potential difficulty and likely resource-intensive nature of administering an effective program.

(3) Key Regulatory Elements. The EPA proposes an operations fee program to reduce emissions from general aviation activity. By implementing a fee system, EPA can avoid establishing direct allocation of landing slots for general aviation as discussed later in this section, thereby maintaining the flexibility that is desirable for general aviation operations.

EPA specifically proposes two options for an operations fee program. The first option implements a takeoff fee for all general aviation operations in the affected areas. Conceptually, the fee would be high enough to limit general aviation activity without making such activity prohibitively expensive. The second program option also implements a takeoff fee for all general aviation activity in these areas, but would incorporate a lifetime fee exemption for engines/aircraft meeting "clean" emission levels. For example, aircraft engines with emissions comparable to the levels originally required by EPA in 1973 (38 FR 19088), but subsequently withdrawn, would be deemed "clean" for the purpose of this program and would receive a lifetime exemption from any FIP general aviation takeoff fees. Certified engines/aircraft would be identified by a certificate or decal.

As with commercial aircraft, EPA proposes an initial fee based on $10,000 per ton of pollutant, and will commit in the final FIP to review the effect of this fee and adjust it upwards if necessary to achieve the target emission reductions. Emissions per LTO based on a representative fleet of general aviation aircraft are: [79]

VOC—0.394 pounds per LTO
NO_X—0.065 pounds per LTO

On this basis the takeoff fee can be calculated as follows:

($10,000/ton)×(0.394 lbs/LTO) divided by 2,000 lbs/ton=$1.97/LTO for VOC

($10,000/ton)×(0.065 lbs/LTO) divided by 2,000 lbs/ton=$0.325/LTO for NO_X

The total fee thus would be $2.30 per LTO. In light of this low dollar amount, and since EPA would plan in any case to adjust the fee upward to get the desired effect, the Agency requests comments on whether it is reasonable to depart from the $10,000 per ton level generally being used for all proposed fee systems in this NPRM, and start with a higher fee in the final rule for general aviation.

The Agency also requests comment on differentiating the fee to reflect the varying pollution potential of different aircraft (e.g., single- versus twin-engined and piston versus turbine powered). As a further differentiation, EPA requests comment on a variable fee structure for specific airports where other emission reduction schemes have been implemented by the airport proprietor beyond those required by the FIP or other regulations. This would encourage control measures such as vapor recovery.

A takeoff fee would be assessed by selling one-time takeoff permits. The program would be administered and ultimately enforced by EPA, presumably at each airport. Denial of takeoff permission is the most practical means of enforcement for most general aviation applications, given the number of individual pilots that would be involved in such a program. The Agency is consulting with the FAA in this regard, and requests comments on the legal authority for and practical consequences of enlisting FAA assistance in this program. At uncontrolled public and private airports, proprietors or owners may be able to refuse services such as tie-down facilities or refueling to noncomplying aircraft. Otherwise, EPA would have to have a presence or a credible prospect of enforcement against noncomplying pilots in order to enforce the program.

In order to accurately track and help enforce the proposed fee program, EPA will require owners or operators of civil airports in the control areas with general

[79] See Volume IV, Chapter 5 of EPA's *Procedures for Emission Inventory Preparation.*

aviation activity to obtain a general aviation operations certificate and submit seasonal aircraft activity reports during the ozone season. This will provide EPA with the information necessary to verify that general aviation emission reductions are occurring as intended. Military air bases with general aviation activity will not be subject to these requirements, since such activity will be included in an air base's environmental performance evaluation as described in section III.D.4.e.(2)(c) above.

All civilian airports in the control areas with general aviation activity will be required to obtain a general aviation operation certificate no later than December 31, 2000. Applications for these certificates will be submitted to EPA by March 20, 2000 and will include the following information:

- Airport name
- Airport location, including latitude and longitude
- Number of general aviation operations in 1999
- Number of general aviation aircraft based at the airport
- Services provided at the airport

This information will provide EPA with a measure of current activity levels, which in turn will be used to evaluate the effectiveness of the emission reduction program that is implemented. Beginning January 1, 2001, airports with general aviation activity in the absence of a certificate will be subject to EPA enforcement.

Beginning with the 2001 ozone season, civil airports will be required to submit seasonal activity reports during the ozone season on general aviation activity. These reports will include the following information:

- Airport name as indicated on the General Aviation Operation Certificate
- Total number of general aviation operations for the reported season
- For each general aviation operation during the reported season, the aircraft's FAA registration number ("N" number)

These reports will be submitted to EPA no later than the 60 days following end of the ozone season, and will be used to track the effectiveness of the activity reduction program that is implemented. Airports with general aviation activity during the control period that fail to submit reports will be subject to EPA enforcement.

The Agency recognizes the potentially burdensome nature of the above comprehensive reporting and recordkeeping scheme, and requests comment on the desirability and need for such a program element.

EPA is also interested in receiving comment on the desirability of providing exemptions from the requirements of this control program for certain types of general aviation aircraft operations. General aviation activity at non-tower controlled facilities could be exempted from this program; such activity likely represents only a small fraction of total general aviation activity and would be difficult to control under any of the programs discussed today, relative to the limited emissions benefits likely to result from such control. In addition, atypical aircraft operations beyond the control of a general aviation aircraft operator, such as emergency operations, could be exempted from the requirements of this control program.

The Agency also requests comments on three alternative concepts for reducing emissions from this source. Under the first alternative, EPA would implement a slot program for general aviation operations in the control areas. Such a program would require EPA to develop a baseline general aviation activity inventory and a series of declining activity targets designed to achieve emission reduction targets for each control area. The declining activity targets would be expressed as a number of allowable operations during an ozone season.

Operation "slots" would be distributed to the general aviation community; perhaps through an annual auction. General aviation operations that occur during the ozone season without an approved slot would be subject to enforcement. The program would require registration with EPA for each facility where general aviation operations occur, so that EPA can establish and track an accurate general aviation activity inventory. A slot program provides a great deal of certainty that emission reductions are taking place, but at the expense of an extensive administrative burden imposed on the general aviation community and the government.

Under the second alternative, EPA would establish an environmental surcharge on the sale of aviation fuel distributed to facilities that service and refuel general aviation aircraft. This surcharge would be set at a rate high enough to reduce general aviation activity without making such activity prohibitively expensive. The assumption in this case is that declining fuel use on the part of the general aviation community represents declining operations with resultant emissions reductions.

Airport proprietors could be responsible for collecting this surcharge each time that a general aviation aircraft refuels; alternatively, those parties supplying aviation fuel to general aviation facilities could collect the surcharge upon delivery of fuel to the facility. In either case, the surcharge would be remitted to the federal government on a regular basis along with a report detailing fuel use during the reporting period. Fuel costs are small relative to the total costs of owning and operating a general aviation aircraft. As a result, the effect of an environmental fuel surcharge is uncertain and the fee may need be quite large relative to the present cost of fuel in order to ensure the activity reductions. Also, refueling an aircraft with non-conforming fuel (e.g., aviation fuel imported from outside the area or automotive gasoline used in certain piston-powered aircraft engines) would have to be made an illegal act in order to prevent cheating.

Under the third and final alternative, EPA would implement a annual emissions registration fee for each general aviation aircraft residing in the FIP area. EPA would issue these certificates indicating that all applicable fees had been paid. As with the other programs described here, the FIP emissions registration fee would be set high enough to reduce operations. Airport proprietors or owners may be required to refuse services such as tie-down facilities or refueling to aircraft operators without the appropriate certificate. This alternative has the distinct disadvantage that it bluntly increases the cost of ownership without regard to how much any individual aircraft is used.

(*4*) Issues for Specific Comment. EPA requests comment on potential methods for obtaining verifiable and enforceable emission reductions from general aviation operations other than the emission reduction programs described today.

Comments are specifically requested on the need for an emissions control program for general aviation operations in each control area based on local air quality concerns.

EPA requests comment on whether the proposed operations fee is appropriate given the program's objective of reducing emissions from general aviation activity in the control areas.

EPA requests comment on the possibility of FAA assistance in EPA implementation of the proposed takeoff fee program at tower controlled airports.

The Agency solicits comment on the legal and policy implications of a strategy that has the potential to create economic incentives for general aviation to limit operations at airports in the FIP areas.

EPA requests comment on differentiating the operations fee structure for specific airports where other emission reduction schemes have been implemented by the airport proprietor.

EPA requests comment on the need for a comprehensive reporting requirement for general aviation airport owners/operators.

EPA requests comment on three alternative emission reduction concepts for general aviation: takeoff slot program; environmental surcharge on general aviation fuels; and registration fee program.

EPA requests comment on the desirability of providing exemptions from the requirements of this control program for certain types of general aviation aircraft operations, such as operations at non-tower controlled facilities or atypical operations.

Persons submitting comments on these issues or other specific aspects of today's proposal should consider and discuss the possible impact of their comments on other elements of the control program, particularly when such comments propose alternative strategies that would achieve smaller or larger emission reductions from general aviation.

(e) Public Aviation. EPA requests comment on the manner in which public aircraft emission sources should be included in the FIP control strategy. Such sources range from aircraft operated by federal agencies such as the Coast Guard and the Forest Service to aircraft operated by local governments, for example police helicopters. EPA does not have sufficient inventory data concerning such aircraft operations to assess their contribution to the overall emissions inventory in the control area, although such emissions are likely to be limited relative to other aviation sources. It may be desirable to exempt these types of aircraft operations from a specific FIP control program, given their importance to the local community and the limited emissions benefits that likely would result from their control. EPA requests comment on the desirability of such an exemption.

(3) Locomotives. (a) Introduction. Locomotives and locomotive engines contribute approximately 5 percent, 1 percent and 2 percent of the total NO_X emissions in the Sacramento, Ventura and South Coast areas respectively. As with all emission sources, NO_X emissions from locomotives and locomotive engines in the three California FIP areas must be reduced for the areas to reach attainment in the most equitable and cost effective manner possible. Locomotives are not significant sources of HC at this time.

In 1990 Congress passed major amendments to the Clean Air Act of 1970. New Section 213(a)(5) of the Act directs EPA to promulgate the first national regulation governing emissions from locomotives. EPA is required by statute to promulgate final national rules for the control of locomotive emissions by November 15, 1995. Final issuance of the national rule for locomotives is legally required within eight months of the date required for promulgation of the final rule for this FIP, and well in advance of the date required for compliance with the FIP regulations. Because of the imminence of the national rule for locomotives and because EPA's commitment to it is legally guaranteed, EPA believes it is appropriate to give credit in the FIP for the emissions reductions that will result from the national rule for locomotives. Moreover, since the locomotive rulemaking is national in scope, it would be inappropriate to foreshorten consideration of it solely to conform to the FIP schedule.

Some special issues are present in the development of locomotive emission regulations. These issues include the relationships between: (a) Locomotive life, rebuild practices and emissions benefits, (b) the mode selected for freight transportation and its effects on emissions, (c) interstate commerce and state and national standards and (d) the requirement for national control and the different emission control requirements in different areas of the nation. Each of these problem areas is briefly discussed in the following paragraphs.

The first point requiring special attention is the long life of locomotives and procedures used to keep the locomotive operating reliably throughout its life. Locomotives are typically operated by their original owners for millions of miles over periods of thirty years or more. At the end of these periods, the locomotive may be scrapped or sold to a smaller railroad and continue in service for many more years. During this total life of a locomotive, the engine and other components of the propulsion system undergo several rebuilds which restore the components to an essentially new condition. Typically these rebuilds occur on a five to seven year schedule. As a result of the long life spans of locomotives and their engines, replacement rates are low and it takes forty or more years for fleet turnover to occur.

This issue can have, if not addressed, a substantial effect on benefits of emission controls when applied to locomotives. First, because of the very slow turnover rate, the effects of emissions standards applicable to freshly manufactured locomotives require forty or more years to be fully realized. At this rate, the full effects of emissions standards applicable to freshly manufactured locomotives [80] will not be realized until midway into the twenty-first century. Second, because locomotives are rebuilt at several points during their total life, emission control regulations, if limited to a traditional useful life, would only be effective for a small fraction of the total life of a locomotive. If EPA only regulated locomotives or locomotive engines for a useful life, traditionally defined as miles and/or time operated to the first remanufacture,[81] the bulk of emission reductions possible would not be realized.

If a national program were to use the traditional useful life definition, many cost effective emissions reductions would be lost. California regulators, EPA, and the railroad industry have recognized this potential loss of benefit. A federal rule which relied on traditional useful life practices would achieve only small reductions and would deprive states of a means that could be helpful in their attainment of the health based standards for ozone and particulate. However, CARB regulators have expressed concerns that a federal rule would not require reductions sufficient to the needs of their state.

The second point of concern pertains to the amount of emissions produced from the movement of freight by different transportation modes. Information currently available to EPA shows that truck-based freight movement generates more pollutants per ton of freight hauled than rail-based forms of freight movement. Estimates quantifying the difference indicate that locomotives are on the order of three

[80] A freshly manufactured locomotive is a locomotive assembled completely from unused constituent parts.

[81] EPA has not as yet developed a specific definition for "remanufactured". EPA expects, however that the definition of remanufactured to be included in the national rule will encompass the replacement or reconditioning of those parts or components of the engine or locomotive that limit or control exhaust emissions. The emission control performance of the replacement or reconditioned parts built into the locomotive or locomotive engine at remanufacture will be required to be such that the locomotive complies with the applicable standards. The parts or components that EPA presently expects to include in remanufacturing requirements include: pistons and rings, cylinder liners, cylinder head, fuel injectors and controls, injection pump and controls, camshaft, valves, charge air cooler, turbocharger, and any emission control components incorporated into the locomotive by the manufacturer.

times cleaner than trucks on an emissions per ton moved basis. While stringent regulations would theoretically reduce emissions from locomotives, their actual effect could be to increase total emissions. This result is due to the substantially increased operating and equipment costs for the railroads caused by overly stringent control requirements. These increased costs would be reflected in the price of hauling freight and could even eliminate rail carriers from the market. In both of these cases customers would switch to trucks for the movement of their freight. Any freight normally carried by rail that is hauled by trucks instead of by rail will increase the overall emissions level, given railroads' overall efficiency benefits, ton per mile emissions, and productivity even at current emissions levels. The effects of any such shift are very undesirable in the South Coast. For this reason, it is essential that the current balance of rail based freight and truck based freight not be shifted toward increased use of truck based systems.

The third point of special concern is the effect that emission standards for locomotives could have on interstate commerce and on international commerce at ports. A substantial portion of the freight and people moved by railroads in California is on trips beginning and/or ending outside of the state. This fact raises two issues. The first is that much freight never has to enter California and would avoid the state if it saved money. The movement of that freight supplies jobs not only in the railroads, but also to tugboat operators, port operators, truckers and shippers in California. It also supplies revenue to the state. EPA is concerned that this FIP not affect California's economy unnecessarily.

Another concern is the effect that a patchwork of state locomotive regulations across the nation will have on interstate commerce. Depending on the treatment of remanufactured locomotives under this FIP and the national rule, such a patchwork could come to exist (see discussion of remanufactured engines). It would be exceedingly difficult for railroads that must cross multiple state lines to comply with multiple state emission levels. If a train had to proceed through several states with differing emission standards, either the locomotive(s) would have to meet the lowest state emission standard for the entire trip or the railroad company would be forced to change locomotives at state boundaries. Facilities for such changes do not exist. Even if such facilities were to exist, the process of changing locomotives at state borders would add significantly to operational costs and shipping times and could also result in increased idle emissions. For these reasons, safety regulations regarding locomotives and trains have historically been national. Lack of cohesive, uniform national regulations for locomotives could be expected to disrupt interstate commerce.

An additional complication exists in the form of the different promulgation deadlines required for the FIP, California's SIP, the national locomotive rulemaking and California's locomotive regulatory efforts. The FIP proposed today is not scheduled to be finalized until February of 1995. Meanwhile California will develop State Implementation Plans which must show attainment in the relevant areas and EPA will propose a national locomotive program. Additionally, CARB will submit a recommendation to the California legislature on a state rule for locomotives and will begin work on a regulation.

EPA is required by statute to promulgate a final national rule for the control of locomotive emissions by November 15, 1995. Since passage of the Clean Air Act in 1990, EPA has scheduled its investigative, research, contracting and rulemaking efforts towards meeting this November 15, 1995 deadline. Because this rulemaking is the first of its kind for locomotives, EPA has a full schedule of technical and operational issues to address. Many of these issues are not fully resolved at this time. Therefore, in describing the effects of a national rulemaking on California FIP areas in terms of emission reductions, EPA must base its estimates on a draft of its proposed national rulemaking that has not been fully developed. EPA stresses that the proposed national rulemaking described here, for purposes of estimating emission reductions in the California FIP areas, is preliminary and may be modified in the NPRM for the national locomotive rulemaking that EPA expects to propose in November of 1994.

A final additional issue exists regarding the level of emission reductions appropriate for California, the South Coast and the nation as a whole. South Coast authorities have indicated that they would like to see a 90 percent reduction in rail emissions in the South Coast. CARB has indicated that an 80 percent reduction statewide would be appropriate. EPA, as described below, is considering reductions on the order of 65 percent to 70 percent for the nation, phased in over several years. EPA is also proposing today substantially larger reductions, and a more swift implementation schedule, for the South Coast. Trying to fit different national, state and local needs together is difficult in the best of circumstances. When the potential economic and environmental costs of inappropriate requirements are as significant as they are here, it is much more difficult.

EPA's proposed locomotive FIP regulations are described below in three parts. The proposed regulations for freshly manufactured locomotives are the same as those EPA intends to propose in November for the national locomotive program. For remanufactured locomotives, EPA is considering two options. The first is a national program for such engines which requires that existing locomotives meet a significant reduction and that locomotives complying with national standards meet those standards throughout their full operating lives. The second is a California-only program with the same requirements. Under that option, California could replace such a California-only program with more stringent requirements if it finds such requirements are appropriate. The final part of this proposal is a fleet averaging standard program for the South Coast only.

(b) Freshly Manufactured Locomotives. This section describes EPA's current thinking regarding its planned November 1994 proposal for regulation of new locomotives and engines used in locomotives nationally. As described above, EPA is still analyzing data in preparation for that rule and hopes that it will receive additional useful data in response to this NPRM. At this time, EPA intends to propose that freshly manufactured locomotives and locomotive engines built between January 1, 2000 and December 31, 2004, be required to meet a NO_X emission standard no higher than 7.0 g/bhp-hr. EPA is carefully studying the possibility of lower standards, and is asking for comment on a NO_X standard as low as 5.0 g/bhp-hr. Estimates of emission rates from in-service locomotives range from 13.5 to 12.0 g/bhp-hr. This requirement represents approximately a 42 percent to 48 percent reduction in NO_X emissions from uncontrolled levels.

EPA is also currently planning to propose in November 1994, a second tier standard. Under this standard, beginning on January 1, 2005, freshly manufactured locomotives and locomotive engines will be required to meet a NO_X emission standard no higher than 6.0 g/bhp-hr. EPA is also considering standards more stringent than this number, to approximately 4.0

g/bhp-hr. EPA requests comment on the feasibility of these standards, especially on the use of diesel fuel. Again, on the basis of an average locomotive and an average train, this requirement represents a reduction of between 61 percent to 65 percent in NO_X emissions from uncontrolled levels when fully phased in.

EPA also intends to set standards for hydrocarbons, carbon monoxide, particulate and smoke emissions for freshly manufactured locomotives and locomotive engines. To the extent EPA regulates remanufactured engines, the standards for these pollutants will also apply to these engines. The standards that become effective in 2000 will be set at levels that approximately equal present emission levels. For the standards that become effective in 2005 for freshly manufactured locomotives, EPA is presently considering some increase in the stringency of the particulate standard.

Emission controls on freshly manufactured locomotives would achieve only limited emission reductions in the time frame required for compliance under the California FIPs without some effort to significantly enhance turnover. EPA's best estimate of emission reductions resulting from freshly manufactured locomotives is approximately a 5 percent to 7 percent reduction in locomotive NO_X emissions in 2005, and a 11 percent to 14 percent reduction in 2010.

(c) Remanufactured Locomotives. While EPA's authority to regulate freshly manufactured locomotives is clear from section 213(a)(5), EPA has not yet determined whether to regulate remanufactured engines in its national rule. National regulation of remanufactured locomotives would alleviate many of the concerns described above regarding interstate commerce and could potentially avoid intermodal shift. It would also get quicker and more lasting reductions in emissions for the nation than would a rule which only regulated freshly manufactured locomotives. However, it would be designed to achieve reductions appropriate for the nation and may not be as aggressive as regulations applied to other sources in California. EPA is therefore proposing two options for remanufactured engines, a national approach and a California only approach.

It is important to keep in mind that there are at least two types of remanufactured engines. First, there are those engines built before the effective date of EPA's regulations on new locomotives. Most of these engines can be remanufactured to achieve emissions levels lower than they are currently meeting. Second, there are those engines built to comply with EPA's national regulations on new locomotives. If EPA does not regulate remanufacture of these engines, most of the engines will be unregulated after they reach their first rebuild. Depending on the emissions standard they are designed to meet and the technology used to meet it, these engines could be remanufactured to meet substantially more stringent levels. On the other hand, requiring them, after remanufacture, to continue to meet the emissions levels they were designed to meet would not add any cost.

A national or state remanufactured engine emission standard could affect either or both groups of engines. EPA is discussing them together because they raise very similar legal and enforcement issues. Additionally, it is our understanding that CARB is considering regulations that will affect both groups of engines. Commenters are encouraged to consider the requirements and note any differences that need recognition in their comments. EPA also requests comment on any other alternative plan or plans to achieve meaningful emission reductions from remanufactured engines.

(*1*) Option I: National Regulations. Under Option I, a national locomotive program would be proposed in November 1994 which would regulate locomotives and locomotive engines remanufactured after January 2000. These locomotives and locomotive engines would be required to comply with an emission standard such that emissions would not exceed approximately 8.0 g/bhp-hr, for locomotives manufactured prior to January 2000, or the standard the engine was originally certified to meet, for locomotives manufactured beginning in January 2000. EPA expects that this option will be generally feasible for locomotives and locomotive engines manufactured after January 1, 1973 and would apply until scrappage to all locomotives affected.

According to the American Association of Railroads the usual time between rebuilds for Class I railroads is approximately 6 years. Therefore, most, if not all affected locomotives should be remanufactured within six years of the program being implemented, i.e. by January 2006. EPA's best estimate of emission reductions attributable to this option, including the reductions achieved from freshly manufactured locomotives, is approximately a 35 percent to 43 percent reduction in 2005, and a 38 percent to 46 percent reduction in 2010 from the unregulated baseline, depending on the assumed levels for today's unregulated engines.

EPA is still considering the proper standard for remanufactured engines built before the implementation date of the national rule. EPA is considering standards as low as 6.9 g/bhp-hr, approximately the national standard that has been proposed for new nonroad engines above 37 kw. The railroads have requested that EPA also consider a cap on the potential costs of remanufacture to meet lower emissions levels. While EPA is taking their recommendation under advisement, we do not currently intend to promulgate such a requirement. Cost cap provisions create definitional difficulties, and are potentially abused.

EPA is concerned that emission rates, expressed as grams of emissions per brake horsepower hour (g/bhp-hr), of pre-1973 engines may be significantly higher than corresponding rates from newer locomotives. Achieving significant emission reductions from these engines is expected, however, to be challenging and potentially costly. These engines, by the year 2000, will be almost exclusively used by Class 2 and 3 railroads [82] or for switching. They will therefore have relatively low usage and emissions rates when expressed as grams per year. Since the benefits from emission control could be low, expressed as an annual mass of emissions, and the costs of control high, the application of controls to these locomotives may prove to be inappropriate. EPA is continuing, however to evaluate the practicality of requiring these locomotives to be remanufactured or possibly requiring that these locomotives be repowered to achieve emission reductions. [83] Another solution may be to move these older locomotives out of non-attainment areas. However, there are concerns that any requirement may impose economic burdens on Class 2 and 3 railroads that tend to operate older engines, and which may not be able to absorb the economic burden.

Option I would be applicable nationwide, with emission reduction benefits realized across the nation. EPA would be proposing this option under

[82] Railroads are designated class 1, 2 or 3 railroads based upon their annual revenue. In 1992, the requirement for designation as a class 1 railroad was annual revenue of 251.4 million dollars, the requirement for a class 2 designation was annual revenue from 20.1 to 251.3 million dollars, and railroads with annual revenue of 20.0 million or less were designated as class 3 railroads. These numbers are annually adjusted for inflation.

[83] Repowering is the complete replacement of an existing engine and generator, including the engine block, with a new engine and generator compatible with the new engine.

its Section 213 authority. The requirement would preempt states from regulating both freshly manufactured and remanufactured locomotives or locomotive engines. States could however still regulate operational practices such as idling and speed.

(2) Option II: California Only Requirements. The second remanufacturing option would include the same requirements as the first option but would limit the requirements to locomotives operating in California. There would be no remanufacturing requirements for pre-2000 locomotives or post-2000 locomotives after their initial useful life for the rest of the nation. This option would produce approximately the same percent emission reductions for California as would be provided for the entire nation under option I. An enforcement mechanism would be required to ensure that only locomotives remanufactured since the effective date of the program, to the California standards would be permitted in California.

EPA is proposing this option by taking the narrowest reading of its authority under Section 213(a)(5). Under this reading, EPA may only regulate brand new engines and the states have authority to regulate in use engines. Therefore, California would have the authority to replace this program with a program it believes is more appropriate. Additionally, other states could choose to develop their own requirements or to adopt requirements designed for California. Each state could promulgate different standards for remanufactured locomotive engines. As described above, the result of such a scenario could be a disruption of interstate commerce and a corresponding shift to trucks and/or increase in transportation costs.

(d) Additional Measures for the South Coast. (1) Fleet Average Standard Program. The reductions required for the South Coast to attain the air quality standards by 2010 cannot be achieved without significant reductions in every source of emissions. EPA estimates the national program for freshly manufactured locomotives would reduce emissions in the South Coast by approximately 5 percent to 7 percent by 2005 and 11 percent to 14 percent by 2010. The addition of either option 1 or option 2 for in service locomotives would result in total reductions of NO_X emissions in the South Coast of approximately 35 percent to 43 percent in 2005 and 38 percent to 46 percent in 2010.[84] As the total NO_X reduction from all sources required in the South Coast is 70 percent, EPA would like to achieve percent reductions of this magnitude from the rail industry. These requirements call for a more stringent program regulating locomotive emissions. EPA's plan to further regulate locomotive emissions in the South Coast, hereafter referred to as the "South Coast locomotive fleet average standard program," is designed to achieve reductions on this order.

EPA is not currently proposing to require additional locomotive control measures for the Sacramento and Ventura FIP areas. EPA believes that Sacramento does not need further NO_X reductions beyond the programs described above to meet its attainment requirements. Ventura's train traffic is very limited, and any additional program there would only achieve small benefits, with costs out of proportion to the benefits received. EPA determined that further reductions are necessary for the South Coast, due to its massive non-attainment problems, and the significance therefore of any source of pollution. Locomotives currently contribute 2 percent of South Coast NO_X and that percent contribution would be expected to rise without further regulation, due to the regulation of other South Coast emission sources.

EPA proposes and asks for comment on the following locomotive NO_X emission reduction plan for the South Coast. All railroad locomotives or locomotive engines used by a railroad company in the South Coast area would be averaged together to achieve an average emission standard level. EPA proposes that NO_X emission levels from the regulated sources must be no greater than 5.5 g/bhp-hr by 2007 and 4.0 g/bhp-hr by 2010. Average emission levels would be calculated for each railroad company based upon fuel usage and engine emission levels. For each ton of emissions over this average, a noncompliance fee will be assessed based on the $10,000/ton figure used for on highway heavy-duty engines. EPA is interested in including other locomotive emission sources[85] in the average but has very little information regarding use or emissions levels. Commenters are urged to provide this information.

This program preserves as much flexibility as possible for railroad companies to meet the additional emission reductions in the South Coast. This flexibility will allow individual railroad companies to reduce emissions in the most cost effective manner possible for their companies. EPA believes that an averaging program will be the most cost effective method of reducing locomotive emissions in the South Coast.

Starting January 1, 2007 and effective until December 31, 2009, each individual railroad company that operates within the South Coast will be required to meet on average, an emissions level of 5.5 g/bhp-hr. Starting January 1, 2010 and in effect thereafter, each individual railroad company that intends to operate within the South Coast will be required to meet on average an emissions level of 4.0 g/bhp-hr. Average emissions would be calculated based on fuel usage. The g/bhp-hr level of a locomotive engine would be multiplied by the gallons of fuel that an engine consumed during a given year within the South Coast nonattainment area. The products of the locomotives' g/bhp-hr level and fuel usage would be summed for all of the engines in a railroad company's fleet. The resultant sum would then be divided by the total gallons of fuel used. The resultant g/bhp-hr average must be at or below 5.5 g/bhp-hr for the years 2007–2009 and below 4.0 g/bhp-hr for 2010 and thereafter. This calculation is summarized in an equation in the regulations.

EPA realizes there may be alternatives to basing the average calculation on fuel usage such as basing the average calculation on mileage or hours of operation. These two alternatives do not necessarily reflect emissions level well because they take improper account of idling. However, EPA is interested in comments regarding the appropriate measure.

EPA is proposing that electrified mileage be counted as producing zero emissions as long as the electrical powerplants supplying the electricity are located outside of the South Coast. If the powerplants were inside South Coast, some calculation of the pollutants created from the production of the electricity consumed would have to be used. Additionally, a conversion factor to equate kilowatt hours used to gallons of fuel used would be necessary so appropriate credit may be given for electrification for purposes of calculating the emissions average. The Department of Energy recently proposed a rule, (**Federal Register** Vol. 59, No. 24, February 4, 1994), that specifies how to

[84] Actual emission reductions for the South Coast from the national program may be slightly lower than the national average because locomotives moving freight out of and into this area tend to be somewhat newer than the national fleet. Newer locomotives are generally cleaner than older locomotives; thus the emission reductions due to an emissions standard for a newer fleet would not be as large as that for an older fleet.

[85] Additional sources may include but not be limited to the following items: track maintenance equipment, locomotive maintenance equipment, and roundhouse emissions.

calculate such a conversion factor. EPA requests comment on this proposal.

Additionally, EPA is proposing to allow companies to pool their operations for measurement of the emissions average. This proposal could facilitate investment in electrification or alternative fuel usage. By combining an investing company's average emissions with that of another company, the electrified or alternative fuel railroad company could help subsidize its investment.

EPA does not see the need for an emissions cap with this program. A cap may be necessary because the averaging program is based upon fuel used. EPA believes it unlikely that the amount of fuel used by railroad companies will increase in the South Coast. The trend in current engine design is toward increased fuel efficiency, and railroad companies place a high premium on saving fuel. It is in the best economic interests of the railroads to do so. EPA thus expects the positive trend in fuel efficiency to continue. The only way there could possibly be an increase in emissions or less emissions reductions for the rail sector than projected, due to increased fuel usage, would be for the railroad industry to experience rapid expansion. If this were to happen, actual net emissions in the South Coast would probably be positively affected because it would mean that more freight was being hauled by rail instead of truck. Alternatively it could be as a result of expansion in mass transit trains. In either case, the net emission impact in the South Coast would be in a positive direction. EPA therefore is not proposing an actual emissions cap at this time, however EPA requests comment on the need for including a cap on emissions produced from locomotive sources.

This regulatory program is aimed exclusively at the South Coast FIP area. Moreover, EPA's authority to propose this program is at least partially derived from California's own authority. EPA therefore encourages California authorities to manage this program or propose a program that achieves similar reductions. EPA believes that California would be more sensitive to the specific issues and problems of implementing a program of this nature. If California were to agree to manage this program, California would handle the administration and enforcement of this program. In any event, California will retain the right to regulate operational changes in the railroad industry within California. This includes but is not limited to time spent idling, rail lubrication, and operating times, etc.

(2) Compliance. EPA is proposing under the South Coast locomotive fleet average standard program that each railroad company that intends to operate locomotives or locomotive engines within the geographical confines of the South Coast should designate certain locomotives or locomotive engines which will operate within the South Coast. When these locomotives or locomotive engines operate in the South Coast, fuel usage for each locomotive type shall be recorded by the locomotive operator. Such records shall be submitted to EPA in March of each calendar year for the preceding year of operation and be kept for a period of five years. EPA will specify in its national regulation what test procedure and method will be used for certifying an engine at a particular emissions level.

EPA proposes that each individual railroad company which owns or operates locomotive emission sources within the South Coast keep a roster of engines and locomotives that operate within the South Coast. This roster would include the locomotive type, the engine type and relevant emission characteristic data on the engine. Summary rosters shall be reported to the Administrator yearly, and supporting data is proposed to be kept for a period of 5 years thereafter. Locomotives and locomotive engines that are designated to operate within the South Coast would be marked by a permanent identifier on the engine and labels displayed prominently on both sides of the exterior of the locomotive which will identify the locomotive as a South Coast designated locomotive.

EPA would reserve the right to audit any locomotive emission source in regard to performance and compliance, that EPA finds operating within the South Coast. EPA inspectors would be given rights of access to inspect railroad property and equipment. Any non-South Coast designated locomotive or locomotive engine or locomotive emission source that EPA finds operating in the South Coast without being properly identified or without proper maintenance could face instant fines as high as $25,000 per day of operation.

Each company that operates locomotives is responsible for meeting its individual fleet average emissions standard. EPA proposes to assess annual noncompliance penalties for companies similar to those described for heavy-duty noncompliance in section 3(D)(3) of this document. Each company that operates one or more locomotives will have to show compliance each year with the fleet average emissions standard. Any excess emissions produced beyond the average will be assessed an annual noncompliance fee of $10,000 per ton of emissions produced. This penalty is in addition to any charged for a violation as described in the preceding paragraphs.

(3) Authority. EPA is proposing this South Coast emission averaging standard program under its broad remedial authority under section 110(c). No provision of section 213, section 209, or any other sections of the Clean Air Act, clearly prohibits EPA from exercising its section 110(c) in the manner proposed herein.

(4) Emission Reductions. EPA believes the average g/bhp-hr level for line haul locomotives and locomotive engines operated by class 1 locomotives in California is approximately 13.5 g/bhp-hr. This estimate was developed from train data and locomotive emission data supplied to EPA by railroad companies that operate within California, and locomotive engine manufacturers.[86] The railroads have however claimed that the average emission level of locomotives operating in California is 12 g/bhp-hr. While they have provided no accounting of that average level, and the 13.5 g/bhp-hr level was calculated from data provided by the railroads, EPA has used both levels in its estimates of the benefits of this program. The range provides for conservative estimates both of the current emissions impact of locomotives and the reductions from this program. Other locomotives, those operated by class 2 and 3 railroads and switcher locomotives operated by class 1 railroads have g/bhp-hr levels higher than 13.5 g/bhp-hr.

To calculate a minimum emission reduction, one can assume that all locomotives are at 12 or 13.5 g/bhp-hr. EPA's 2007 requirement that railroad emissions average 5.5 g/bhp-hr would therefore provide overall emission reductions of 54 percent to 59 percent. The 2010 requirement that railroad emissions average 4.0 g/bhp-hr would therefore provide overall emission reductions of 67 percent to 70 percent. Since the current overall average emissions, due to switching operations and class 2 and 3 operation, must be higher than 13.5 g/bhp-hr, a reduction in excess of 70 percent is likely.

EPA believes the reductions necessary to meet the 5.5 g/bhp-hr emission average will be achievable through the use of clean diesel technology and operational changes. Some use of

[86] Memo from Peter Hutchins to Chester J. France. February 14, 1994, "Current Emission Levels and Duty-Cycles."

alternative fuels may be necessary to supplement the emission reduction achieved by clean diesel and operational changes or to allow significant growth. Electrification, under strong consideration for at least some South Coast lines would greatly facilitate compliance and reductions. EPA requests comment on what types of engines or strategies may be required to comply with this program.

EPA does not anticipate that additional measures of reduction will be required at this time. However several options, which EPA could not finalize due to technological issues, but could develop later as provided by section 182(e)(5) of the CAA, are widespread use of electrification and the use of fuel cells.

(5) Other Options. EPA requests comment on three other options being promoted by the South Coast, the CARB and the AAR, respectively. The South Coast Air Quality Management District is proposing that a 90 percent reduction in railroad emissions in the basin be required by the year 2010. This proposal requires electrification of all locomotive operations, including switching. They have not yet determined how such a project could be funded. For this reason, EPA is not proposing this option.

The CARB is considering an option that would require an 80 percent reduction in locomotive NO_X emissions statewide by 2003. Emissions of HC and CO would be allowed to rise and emissions of particulates would be reduced after 2003. It appears likely that this level of reduction could require that all locomotives used in California operate on a fuel other than diesel, with natural gas being a likely candidate. Alternatively, electrification of a number of lines may be necessary. EPA is concerned about the practicality and costs associated with electrification, and is therefore not proposing this option.

The AAR has proposed that linehaul locomotives be required to average 6 g/bhp-hr by the year 2010. This proposal could presumably build from national standards on new locomotives and some regulation of remanufactured locomotives. However, it does not affect switching and other non-line operations, such as loading and unloading. The effect of that omission has been variously estimated at from 5 to 30 percent of emissions depending on the geographic area. Because this program does not achieve sufficient reductions, EPA is not proposing this option. However, EPA requests comment on this and the other two options.

(4) Marine Vessels/Ports. (a) Background and Program Description. Marine vessels are the largest uncontrolled source of emissions of NO_X and SO_X in California. According to a study prepared by Sierra Research, Inc.,[87] marine vessels account for approximately 40 percent of all SO_X emissions and 12 percent of all NO_X emissions from both mobile and stationary sources statewide (Sierra report, p. 3). While most emissions associated with marine vessels occur at sea, a great deal occur while the vessel is at port, during maneuvering and hotelling activities (hotelling refers to the time a vessel "spends moored or at anchor, for such purposes as loading or unloading cargo or awaiting a berth"—Booz-Allen report,[88] p. II–16). Both at-sea and in-port emissions are of concern for ambient air quality in the South Coast area, since emissions from vessels at sea can be transported onshore by prevailing winds, and since emissions from vessels at port are added to those already occurring from stationary facilities at a port.

The contribution of diesel marine engine emissions to local air quality is influenced by at least two factors. The first concerns the nature of the engines themselves. Large marine vessels have high NO_X emissions because of the nature of the machinery and equipment used to power them. These vessels are typically powered by very large diesel engines that are optimized for power and fuel consumption, and those optimization processes (such as high temperatures) tend to boost NO_X emissions. In addition, marine engines are usually old and unregulated, and generally do not have many of the combustion improvements that are incorporated into new on-highway engines to reduce particulate matter and NO_X emissions.

The second determinant is the time spent and frequency of activity at or near port. Analysis of 1989 data shows that about 10 percent of the vessels in California's ports accounted for more than 50 percent of the emissions from marine vessels (Sierra report, p. 9). Control strategies are more effective which focus on those ships that contribute the most to air quality problems while in port. If those ships can be targeted, any reduction in their emissions will have a large impact on air quality.

Similarly, control strategies are more effective which target those ships that stop often in California. Vessels that do not frequently use South Coast ports do not contribute as much to local air quality problems. Based again on 1989 data, approximately 60 percent of the vessels at California's ports made merely one or two trips per year, each contributing only a relatively small fraction to total emissions (Sierra report, p. 9).

EPA has considered several strategies to achieve reductions in ship emissions. One potential emission control strategy would be to require vessels to be outfitted with NO_X and SO_X control equipment. There are several technologies available, and these technologies are associated with different levels of emissions decreases, ranging from 25 percent to 90 percent, depending on the nature, age, and condition of the ship's engine and equipment.[89] For example, fuels with ultra-low sulfur content can reduce SO_X emissions by as much as 96 percent and cause measurable NO_X decreases as well (Sierra report, p. 25). Selective catalytic reduction (SCR) can reduce NO_X emission by as much as 90 percent. Water/fuel emulsion technology can reduce NO_X by approximately 25 percent (Sierra report, p. 34). These technologies are discussed in more detail below.

At the same time, many of these techniques have substantial drawbacks, including increased capital and operating costs. NO_X control techniques are generally expensive and often difficult to retrofit on older vessels (although they can be cost-effective to incorporate on new engines) and may be costly to maintain.[90] In addition, many NO_X control technologies are also associated with a decrease in fuel efficiency of up to 5 percent (Sierra report, p. 71). Also, results depend on certain operating characteristics. For example, optimal SCR results depend on a steady-state operation mode. Reductions are less certain during maneuvering procedures when engine speed is constantly changing; yet, this is the kind of operation that is typical while a vessel is near or in-port. Controlling SO_X by fuel composition changes may be problematic for compliance reasons. This is because vessels would be required to use low-

[87] Regulatory Strategies for Reducing Emissions from Marine Vessels in California Waters, prepared for California Air Resources Board by Sierra Research, Inc., Report No. SR91–10–01 (October 4, 1991).

[88] Inventory of Air Pollutant Emissions from Marine Vessels, Final Report, prepared for State of California—Air Resources Board, by Booz-Allen & Hamilton, Inc. (March 1991).

[89] See the Sierra report, pp. 22–32 for a more complete discussion of these technologies.

[90] Retrofitting ships with aftertreatment technologies is very difficult because of onboard space limitations. Building upwards (where space is available) can raise the center of gravity. If the center of gravity is above the center of buoyancy, the ship will be destabilized.

sulfur fuel only when they are in the vicinity of the California coastline and in California ports. While they operate at sea, ships could use conventional fuels. This means that vessels can be equipped with two kinds of fuel tanks: one for clean fuel for use in-port, and one for ordinary fuel for use at sea. However, for obvious reasons, it would be hard to verify that vessels use low-sulfur fuel while near shore or in-port.

Because of these and other potential drawbacks, EPA believes that it would be preferable at this point in time to avoid mandating the use of these control technologies by all ships when they are in California ports. There are at least three reasons why other solutions should be pursued at this time. First, as shown above, not all ships are high emitters. Therefore, it does not make sense to mandate special technologies for all ships, since this would mean imposing costly retrofits on some existing ships that are not high emitters. Second, and more importantly, not all ships spend a lot of operating time in California ports. It does not make sense to mandate permanent, expensive control technologies for ships that visit California ports only once or twice a year which, as noted above, is the case for approximately 60 percent of the vessels that use California's ports.

Finally, the regulation of oceangoing marine vessels registered in the United States has been traditionally undertaken by the United States Coast Guard, and through international organizations such as the International Maritime Organization (IMO), for ships registered outside the United States. International trade may be significantly harmed by unilateral and contradictory actions taken by various countries around the world mandating different control methods and technologies for vessels engaged in international trade. EPA believes that it is appropriate at this time to avoid unilaterally mandating the use of control technologies or other methods on ships that are inconsistent with the technologies currently being advocated by the United States in the IMO.[91] This is especially important in the South Coast region because approximately 80 percent of the larger marine vessels that call on the LA ports, for example, are registered in foreign countries. EPA believes that it is important to create a regime that will encourage all ship operators and owners to reduce their emissions of NO_X and SO_X while in California ports without creating significant problems for international trade.

Emission control strategies must also take into account economic realities. Ships and ports bring more than pollution to California. They also perform the obvious function of transporting products and raw materials to the area for manufacturing and production purposes, and they bring jobs and money. Many millions of dollars of imports and exports travel through the Ports of Los Angeles and Long Beach every day, on their way from the Midwest to the Far East or vice versa. Any program for the control of emissions from ships and ports must also consider the effects of such a program on this trade and on the South Coast economy. Inappropriate treatment could move the trade out of the area, or even out of the country, with corresponding economic effects. While it is true that trade has centered in the South Coast because the area is well situated to accept it, having adequate facilities for moving and processing the products delivered, it is also true that emission control strategies should stress appropriate regulations which would balance emissions reductions with possible negative impacts on trade.

For all of these reasons, EPA is proposing a flexible control strategy for the reduction of emissions from ships at port. This strategy will rely on economic incentives to encourage operators and owners of ships that frequently use California's South Coast ports to take the steps necessary to reduce their emissions. Specifically, this strategy involves imposing user fees for ships that use ports in the South Coast region. These fees will be based on the level of emissions of a ship using the port, among other things. EPA is proposing a three-tier fee structure, as more thoroughly described below. Like other emission charges proposed today, the ship fee will be based on a price of $10,000 per ton of NO_X emissions emitted to the atmosphere.

In addition to encouraging ship operators and owners to install and use emission control systems, the program contains two other features that should help reduce marine vessels' contribution to California's pollution while ships are berthed in port and while they are operating at sea. First, ship operators may receive a reduction in the fees outlined below if they use onshore power sources instead of internally generated power while they are at port (this is called "cold ironing"). Second, ship operators may receive a reduction in fees if they use a relocated Santa Barbara shipping channel. EPA is proposing that this shipping channel be located at least 70 miles from the shore to decrease the amount of marine emissions that are transported onshore by prevailing winds. Both of these aspects of the program are described in greater detail below. No fee will be assessed any shipper who uses the lowest emitting class of engine, cold irons and avoids the Ventura air basin.

There are several advantages to this type of emission control program. First, it allows a ship operator or owner to make decisions about which control technologies to adopt, if any, based not only on the characteristics of a particular vessel but also based on the extent to which the vessel uses South Coast ports. Those ships that use South Coast ports more frequently will be faced with higher annual fees and therefore will have a greater incentive to install more efficient emission control devices to reduce those annual fees. Vessels that use these ports infrequently are not faced with the same level of annual fees and would therefore probably elect to pay the fee instead of installing more expensive emission control devices. EPA believes this is a fair strategy because these vessels contribute less to overall regional air quality problems than those vessels that use these ports more often. At the same time, payment of a fee by a vessel that infrequently uses port facilities is justified because the vessel is contributing to local air quality while it uses the port.

A final advantage to this kind of emission control program is that the fees collected could be used to help ship owners and operators reduce their ships' emissions, thus advancing additional emission benefits. For example, the fees could be used to help ship owners and operators purchase and install emission reduction equipment, through loans or grants or other financial assistance programs. It should be noted, however, that the Miscellaneous Receipts Act requires EPA to submit any fees paid pursuant to this program to the U. S. Treasury. Therefore, in order to use the fees collected under such a program for emissions control, it is necessary for California or the South Coast to develop a replacement program that would supersede this proposed EPA program. Then, the fees would be paid to the State of California or the South Coast Air Quality Management District instead

[91] The IMO is currently developing an international agreement to control emissions from ships on international voyages. The IMO subcommittee working on this project (Bulk Chemicals Handling) was charged by the IMO with achieving a 30 percent worldwide reduction in ship NO_X emissions and a 50 percent SO_X reduction. The subcommittee is currently considering a rule for new engines only. The resolution of this issue will clearly have significant ramifications for this FIP. See Section (2)(A) Fee Categories, below, for additional discussion of this effort.

of to EPA, and those organizations could use the funds for such purposes. By adopting a replacement program, California or the South Coast could take steps to decrease any adverse economic impacts resulting from the program.

EPA is proposing to begin instituting the port fee schedule described below in 2001. This date is beneficial for two reasons. First, EPA hopes that in the intervening seven years, the California and IMO efforts to regulate ship emissions and the Coast Guard effort to move the shipping channel will have all borne fruit. Thus, 2001 allows enough time to respond to these changes and work out details about the form of this program in light of them. Second, by beginning to develop this program nine years before the attainment date, EPA allows time to adjust the fees and discounts to achieve the necessary emissions reductions at the least cost, as described below.

EPA anticipates that the ships and ports fees program described in this preamble will achieve an approximately 30 percent NO_X emission reduction in the South Coast. This estimate is based on the assumption that the 10 percent of the ships which create 50 percent of the emissions due to frequent visits will have on average 30 percent lower emissions after implementation of the program. This reduction will likely be achieved by ship operators and owners using newer ships for their California trips, by using better fuels, and by using timing retard technology, at least in the short run. A further 7.5 percent NO_X reduction should be achieved through increased cold ironing. The remaining 7.5 percent NO_X reduction will come from isolated use of available low emitting engines, such as turbines and SCR equipped ships, by the remaining 90 percent of the ships visiting the ports of Long Beach and Los Angeles.

In response to these fees and to ongoing actions by the Coast Guard to protect the Monterrey Bay Sanctuary, EPA expects most ship owners or operators will choose shipping routes that will take them away from Ventura's coast. This will have the effect of reducing the transfer of marine emissions to the coast in that area. The user fees will have this effect because the vast majority of ships that currently use the shipping channel that takes them along the shoreline close to Ventura will stop or have stopped at the Ports of Long Beach or Los Angeles. Under the proposed emission reduction strategy, these ship owners and operators can reduce the user fees they will be charged at these ports by using a relocated shipping channel that takes them away from the coastline. EPA believes that the discounts associated with using the relocated channel will be sufficient to eliminate most of that traffic. In addition, the Coast Guard has undertaken a study to evaluate the impact of relocating California shipping channels.[92] Such relocation may be necessary to reduce environmental damage to the Monterrey Bay Sanctuary due to ship traffic. As part of that study, the Coast Guard has requested comments regarding relocation of the channel near Ventura. EPA has recommended to the Coast Guard that the channel near Ventura should be moved as far as feasible from the coast. Such a decision by the Coast Guard will also reduce airborne marine emissions in Ventura.

These emission reduction estimates were made without sufficient knowledge of the effects of a fee on the behavior of shippers. Shippers may find it easy to reschedule their ships so that only the lowest emitting ones are used in the South Coast. On the other hand, shippers may have difficulty reducing their emissions if equipment and/or installation services are insufficient to meet demand. EPA intends to monitor the fee's effects and adjust the fees and discounts as necessary to achieve a NO_X emission reduction approximately similar to that required under the stationary source cap.

The following sections describe in greater detail the components of this fee-based control strategy. As described in Section III.D.4.e (5), this program does not apply to military vessels. EPA requests comments on all features and calculations associated with this proposed program, as well as the proper application. As described above, EPA is proposing to apply the program to the two major South Coast ports for ocean going ships: the Ports of Los Angeles and Long Beach. EPA requests comment on applying the program to all basin ports, all California ports, or only as proposed.

(b) Control Strategies—Fee System Based on Emission Levels. (*1*) Fee Categories. The goal of this proposal is to encourage the use of cleaner marine engines. A number of emission control technologies for reducing NO_X from marine diesel engines are described in the following section. Although the emission reduction strategies described in the following section each contain a range of reduction potential, there appears to be a number of technologies that offer the potential to achieve reductions of 30 percent or greater. Also, reductions of greater than 80 percent are possible through three options: Selective catalytic reduction (SCR), steam turbine engines and gas turbine engines. Other technologies, such as natural gas engines, may also achieve reductions in excess of 80 percent.

EPA proposes to encourage the use of cleaner marine engines through a three-tier fee program based on emission reductions from a diesel engine baseline. The first tier is a 0–10 percent fee (90 percent fee reduction) for engines that achieve greater than or equal to 80 percent NO_X reduction compared to typical marine diesel engines.[93] These could include SCR-equipped diesel engines, steam turbine engines or gas turbine engines, or engines equipped with other technologies that can be shown to achieve such reductions. The second tier is a 50 percent reduction from the full fee for engines that achieve greater than or equal to 30 percent and up to 80 percent NO_X reduction compared to typical marine diesel engines. Such engines could include such technologies as injection timing retard, engine fine tuning, EGR, water emulsification, and selective non-catalyst reduction, or other technologies that can be shown to achieve such reductions. The third tier would be a full fee for engines that do not achieve at least a 30 percent reduction in NO_X emissions from the baseline.

This fee structure can easily be adjusted to incorporate standards set out by the International Maritime Organization (IMO). The IMO is currently developing an annex to MARPOL (Marine Pollution Convention) 73/78 to control air pollution from ships on international voyages. Target emission reductions for the annex are a 30 percent reduction in NO_X and a 50 percent reduction in SO_X. As part of the compliance verification procedure, the IMO is currently considering type approval (i.e., test bed confirmation), and onboard surveys and re-surveys. The onboard surveys would consist of a simplified test for verification based on measuring NO_X and O_2 concentrations. For these surveys, the IMO is currently considering test procedures drafted by the International Standards Organization (ISO) for measuring emissions at site (ISO/DIS 8178–2: Reciprocating internal combustion engines—Exhaust emission measurement—Part 2: Measurement of gaseous and particulate emissions at

[92] See 58 FR 44634, August 24, 1993, for the Coast Guard notice announcing this study.

[93] Please review Section (4) Discount for Staying Outside the Region, for a description of when the 0 or 10 percent options apply.

site). EPA requests comments on the use of this test procedure to establish fee levels based on measured emission levels from marine engines.

Based on information supplied by Japan as input into the IMO air pollution annex development, NO_X emission levels showed the best correlation with engine speed as compared to other parameters. Slow speed engines generally have higher thermal efficiencies and therefore higher NO_X than medium and high speed engines. Many delegations to IMO believe the data provided by Japan to be the best published information on emission rates for the range of marine engines. Based on this data, Japan has proposed that a 30 percent NO_X reduction could be achieved by NO_X limits for the IMO air pollution annex of the form:

NO_X (g/kW-hr)=$45 \times n^{-0.2}$

where n is engine speed in revolutions per minute EPA proposes that the second tier fee level coincide with the IMO proposal. In other words, those engines that meet the proposed IMO standards are proposed to be eligible for a discounted fee (i.e., be categorized in the second tier fee level). To accomplish this, EPA proposes that the baseline emissions level, for fee calculation purposes, be of the form:

NO_X (g/kW-hr)=$64.3 \times n^{-0.2}$

where n is engine speed in revolutions per minute for any given RPM range, this equation calculates an emission rate baseline. The equation proposed by Japan for the IMO annex thus represents a 30 percent reduction in emissions from this baseline. Therefore, engines which can achieve emission reductions of greater than or equal to 30 percent from this baseline (i.e., that meet the IMO proposed standard) will be eligible for a fee discount (a 50 percent discount for engines achieving 30 percent to less than 80 percent NO_X reduction and a 90 percent discount for engines achieving greater than or equal to 80 percent reduction in NO_X).

The main caveat with this strategy is that the IMO emission standards are still under development. In addition to the proposal for NO_X limits based on engine speed, another proposal under consideration by IMO is for NO_X limits to be set based on specific fuel consumption of the engine. EPA requests comments on the appropriateness of the proposed baseline emissions equation or other approaches for the purposes of calculating fees.

The full fee level is proposed to be based on the above equation to generate the baseline emission rate. Also, the full fee level is proposed to be based on a fee of $10,000/U.S. ton of NO_X, which is consistent with other fee levels proposed in this FIP. To obtain total tons of NO_X emitted, the number of hours of operation in the port area must be reported, as well as the rated power for each applicable engine on board. Thus, ships which enter and leave their berth efficiently will receive a lower fee. A load factor of 80 percent[94] of rated output is assumed, which is a typical load for vessels that are cruising at sea. For berthing and hotelling operations, a load factor of 25 percent is assumed for main propulsion engines. For auxiliary power generators, a load factor of 50 percent is assumed. EPA is proposing that cruise hours are determined as the hours that an engine operates when the ship is between 3 and 100 miles from port; and maneuvering/hotelling hours are hours that an engine operates when the ship is less than 3 miles from port. Both the cruise time and the maneuvering/hotelling time are proposed to be reported for each main propulsion engine and auxiliary engine of each ship entering port. CARB has indicated that emissions from these distances may affect shore pollution levels. However, EPA is currently evaluating, with the assistance of the State Department and Coast Guard, the appropriateness of applying these fees to foreign flag vessels in light of international maritime law and international trade concerns. EPA requests comment on the appropriateness of the distances proposed.

The way the proposed fee structure would work is illustrated by the following example. Based on the above equation, a 10,000 kW MCR (maximum continuous rating), 500 RPM engine would emit NO_X at a rate of 18.6 g/kW-hr ($64.3 \times (500)^{-0.2}$) at MCR. If this engine operated within the port area for 6 hours in cruising mode (0.8 load factor) and 12 hours in maneuvering and hotelling operations (0.25 load factor) it would be assessed a fee of about $16,000 ([18.6×10,000×0.8×6×$5.00×1 lb/453.59 gr] + [18.6×10,000×0.25×12×$5.00×1 lb/453.59 gr] = $16,000). By using technologies that achieve between 30 and 80 percent reduction, this fee would be reduced to $8,000 ($16,000×.50). Technologies achieving over 80 percent reduction would be charged $1,600 ($16,000×.10). Discounts described below will be applied on a percentage basis to these base fees, provided that no ship meeting the requirements for the 10 percent fee category, cold ironing and avoiding the Ventura Air Basin will be charged any fee.

These fees would be in addition to any fee assessed by the port for docking or other benefits. EPA requests comments on: the appropriateness of this fee calculation methodology, whether or not other methodologies are more appropriate, and how likely the proposed scheme encourages the use of technologies that would achieve the emissions reduction objectives. Specifically, EPA requests comments on the appropriate load factors for engines during cruising (at sea) and maneuvering/hotelling operations, and on the level of discount for the three fee levels.

(2) Emission Reduction Technologies. A number of technical designs/engine modifications are known to reduce, or are technologically feasible for reducing, emissions of NO_X from marine diesel engines. These technologies are presented in the table below and more fully discussed in the following text. Also, these technologies form the basis of the three-tier fee level described in the previous section.

New engines can easily achieve the IMO specified reductions and have achieved the lowest levels shown. Retrofitting some of these technologies, however, can be difficult.

Emission Reduction Strategies for Diesel Marine Engines

Technology	NO_X reduction[a] (percent)
Injection timing retard	10–30
Engine fine tuning	20–40
Exhaust gas recirculation	20–50
Water emulsified fuel	20–50
Selective catalytic reduction	90+
Gas turbines	83
Steam turbines	87
Speed reduction	45

[a] Reduction estimates were derived from CARB Mail-Out #91–42 and information gathered by the NO_X working group of the Bulk Chemical Handling (BCH) Subcommittee of the International Maritime Organization.

(a) Retarded Injection Timing. A feasible and simple means of reducing NO_X from diesel engines is by retarding injection timing. This method lowers the peak combustion temperature and pressure in the cylinder, resulting in lower levels of NO_X. This strategy has been estimated to reduce NO_X emissions by 10–30 percent. However, disadvantages include higher specific fuel consumption, lower power, harder startability, and higher levels of HC, CO,

[94] Load factor estimates were derived from "Inventory of Air Pollutant Emissions from Marine Vessels, Final Report, prepared for State of California—Air Resources Board, by Booz-Allen & Hamilton, Inc. (March 1991).

particulate matter and smoke emissions. To recover the lost fuel economy and performance or to reduce the amount of injection timing retard, additional technologies that improve fuel atomization have been employed. Fuel atomization can be improved by increasing fuel pump pressure, improving fuel pump advance strategies, and incorporating smaller injector nozzle tip holes.

(*b*) Engine Fine Tuning. Engine fine tuning includes modification of essential engine components and could result in 20–40 percent reduction in NO_X emissions. More specifically, engine fine tuning could include modifications in the injection system, charge air system, and combustion chamber design. Such changes on new onhighway engines have already achieved more than 50 percent NO_X reductions. However, retrofitting such changes on existing engines makes equally large reductions for marine vessels unlikely.

(*c*) Exhaust Gas Recirculation. Exhaust gas recirculation involves recirculating some of the exhaust gas back into the intake manifold. This lowers the combustion temperature and therefore can lower NO_X emissions by as much as 20–50 percent. For marine engines, the applicability of EGR is complicated by the quality of the fuel. Sulfur and soot from combustion gases can cause increased wear of piston rings, valves, and other components. Therefore, EGR is more likely to be used with engines running on cleaner distillate fuels.

(*d*) Water Emulsified Fuel. Water emulsification of the fuel is a technique which also lowers maximum combustion temperature, reducing NO_X by 20–50 percent without an increase in fuel consumption. There are at least two ways to accomplish the emulsification during combustion: in the combustion chamber or in the fuel tank. Combining water and fuel for the first time in the chamber requires significant changes to the cylinder head to add an injector. Combining water with fuel in the tank may introduce combustion problems due to unstable emulsion. Also, this technique requires a significantly redesigned fuel handling system to overcome the potential risk of corrosion and to maintain power output. In any event, extra liquid storage availability is necessary to retain similar range.

(*e*) Selective Catalytic Reduction (SCR). One of the most effective, but also most complex and expensive, means of reducing NO_X from large diesel engines is with the use of selective catalytic reduction (SCR). Emission reductions in excess of 90 percent can be achieved using SCR. In SCR systems, a reducing agent, such as ammonia, is injected into the exhaust and both are channelled through a catalyst where NO_X emissions are reduced. These systems are being successfully used for large stationary source applications which operate under constant, high load conditions.

A number of disadvantages are apparent for the use of current technology SCR systems on ships. The SCR system is effective only over a narrow range of exhaust temperatures. The effectiveness of the system is decreased at reduced temperatures exhibited during engine operation at partial loads. Also, excess ammonia in the exhaust (referred to as "ammonia slip") can occur during transient operation, where control of optimum ammonia injection is difficult. However, non-toxic urea can be used in place of toxic ammonia.

SCR is currently being used in the South Coast region on three new ships built with the technology incorporated (not retrofitted). Retrofitting ships with this technology is problematic and raises significant space and cost concerns. The SCR systems are very bulky and require high investment, operational, and maintenance costs.

(*f*) Speed Reduction. A potential operational method for reducing NO_X is speed reduction. By reducing speed, the load requirements on the engine are reduced. Speed reduction cannot be applied to all different ship types and sizes in the same manner, and may be beneficial only for certain types and sizes. Also, speed reduction does not address emissions from auxiliary engines. In addition, many coastal areas already have factors that limit vessel speed; for example, amount of traffic, distance to the shore and port, and water depth. Since speed reduction will affect the amount of cargo transported within a specified time, additional transport capacity or travel time must be accounted for when calculating emission benefits from such a strategy. EPA requests comments on how speed reduction could be figured into the fee scheme.

The technologies listed above are not intended to be an all- inclusive list of potential emission reduction technologies. EPA requests comments on other technologies that may be employed to reduce emission of NO_X from diesel marine engines. Comments should address the emission reduction potential, technological feasibility, cost, and safety issues of additional NO_X reduction methods.

(c) Control Strategies—Discount for Using Port Facilities While Hotelling. As noted earlier, marine vessels account for approximately 12 percent of all NO_X emissions from both mobile and stationary sources in the State of California. According to the Booz-Allen & Hamilton study, emissions from maneuvering and hotelling activities make up a large portion of those emissions. That report shows that maneuvering and hotelling activities by commercial vessels contribute an average of approximately 64.9 tons of NO_X to local air quality every day (Booz-Allen report, p. A–2). This amount is equal to an average of 16 percent of daily average NO_X emissions from all fishing, harbor, and commercial vessels that use these ports. For the South Coast, ship berthing and other ship port operations for commercial vessels contribute approximately 26 tons of NO_X emissions per day, of which 16.5 tons are attributable solely to hotelling operations.

Emissions from vessels at port affect local ambient air quality in the same way as stationary sources, in that the vessels assume the characteristics of large stationary plants when they are berthed in a port. According to the Sierra report, "total SO_X and NO_X emissions from marine vessels currently exceed the corresponding total (i.e., combined emissions) for the 100 largest SO_X and NO_X stationary sources in California" (Sierra Report, p. 70), which includes all of the state's larger power plants, oil refineries, and cement plants. This huge contribution is in large part because the stationary sources are subject to emission controls while the marine vessels currently are not.

A significant portion of the time a ship spends in a port is spent moored or at anchor, for loading or unloading purposes. In addition, vessels also spend time waiting for a berth. Typically, during the loading and unloading periods, a vessel uses its own engines to generate power for steam generation, auxiliary electrical power, hot water, and so on. This is referred to as hotelling. In this respect, ships act like stationary power plants while in port, contributing large amounts of NO_X emissions to local air quality in the same way as stationary sources.

There are several reasons why ships use their own power sources for hotelling. First, it is simpler for a ship to continue using its own power instead of taking the time to tap into port power facilities. Second, it is difficult and time-consuming to start a ship's very large primary and auxiliary engines once they have been shut off. Third, shore and vessel power characteristics and connecting hardware are sometimes incompatible. Because the time spent in

port is relatively short, it often does not seem worth the trouble to spend the time connecting to port facilities or even ensuring that such connections are possible.

To reduce these emission levels, it is necessary to encourage ship operators to use port power facilities instead of generating power on board. The proposed control strategy will accomplish this by providing a discount to the port fees described in the previous section for ships that use port power facilities.

The amount of the discount is proposed to be equal to the average contribution to NO_X emissions levels from commercial vessels attributable to hotelling. This is because cold ironing would reduce NO_X emission by an equivalent amount. On a statewide basis, the Booz-Allen & Hamilton study estimates the portion of average daily NO_X emissions attributable to hotelling of commercial vessels to be 7.38 percent (Booz-Allen report. p. A–2). Requiring vessels to use port power facilities will reduce discharges of NO_X from these vessels by an equivalent amount. Therefore, using the Booz-Allen data, the amount of the discount for using port power facilities would be 7.38 percent. If average daily contribution of NO_X emissions by commercial vessels is limited to the South Coast, the relevant reduction is 24.12 percent, which would be associated with an equivalent discount. EPA requests comments on these discount levels and whether the average state or South Coast figures should be used.

As described above, EPA proposes to consider maneuvering (berthing) operations in calculation of the base fee.[95] Berthing operations must be powered by the ship's engine; ships cannot be powered by onshore power plants during those maneuvers. In addition, even if such emissions could be eliminated, berthing operations account for only about 9 percent of total NO_X emissions from commercial vessels. Therefore, EPA is not considering additional fee discounts for reductions in berthing emissions.

The primary argument against offering a discount for using local onshore power facilities when at port is that using those port facilities simply displaces emissions from one area to another. In other words, although the ship is not discharging NO_X and SO_X, the power plant that is supplying the electricity is. Thus, hotelling will cause an increased demand for electricity from the power plant, which will result in an increase in electric output from that utility. The power plant, in turn, will increase emissions to meet that increased demand.

EPA does not believe this is a concern for the South Coast region for at least three reasons. First, approximately half of the power generated in California is generated by technologies that do not generate harmful ground-level ozone-producing air pollutants.[96] Second, the NO_X emissions that are discharged by the generation of electricity using technologies based on petroleum products (primarily natural gas) are much less than those that are generated by today's ships for the same amount of energy.[97] This is because onshore electric power plants operate at optimal steady-state conditions, are required to use emission control systems, and generally use cleaner fuel than that used in ships. Finally, the power plants from which the electricity would be drawn for hotelling are located far from South Coast population centers. This means that any increase in emissions at the power generation source will occur away from the South Coast area, in areas that have less severe, if any, air quality problems.

EPA solicits comments on whether the full discount as proposed above should be allowed, or if that discount should be reduced to account for the displaced emissions. EPA also solicits comments on how the discount is calculated.

(d) Control Strategies—Discount for Staying Outside the Region. Emissions from marine vessels operating in the Santa Barbara Channel can be transported onshore by prevailing winds and can contribute to onshore air pollution in the South Central Coast Air Basin (which includes Ventura, Santa Barbara and San Luis Obispo Counties). Particularly of concern (for FIP purposes) are the offshore NO_X emissions that drift onshore and that can impact Ventura County's air quality. As discussed in section III.H. of this NPRM, ships are estimated to represent 15 percent of Ventura's total current NO_X emissions. Most of the offshore sources that contribute to NO_X emissions include: Outer Continental Shelf (OCS) activity (which represents support crew and supply boats), exploratory drilling vessels and oil platforms, tugs and tankers, recreational marine, U.S. Navy and Coast Guard vessels, and large foreign and U.S. vessels.

Because of the reported 1990 emission inventory from marine vessel activity that occurs offshore and external requests to evaluate moving the shipping channel lanes, EPA is proposing to offer, as part of the emission reduction strategy described in this proposal, incentives for ships to use a relocated Santa Barbara shipping channel. This relocated channel would take marine vessels farther from land and reduce the amount of emissions that are transported inland. These incentives are intended to reduce the impact of marine vessel emissions on ozone concentrations in Ventura County.

The proposed control strategy for Ventura County targets both NO_X and VOCs for reduction in order to attain the ozone standard. Because the emissions from marine vessels represent a substantial portion (CARB estimates show approximately 12 percent statewide) of total emissions of NO_X, control of marine vessel emissions is potentially an important control strategy. EPA's proposed control strategy focuses primarily on the reduction of NO_X emissions from vessels, since they are nominal contributors to VOCs in Ventura County.

Summertime meteorological data for Ventura County indicate that emissions from marine vessels could be transported to Ventura County by prevailing air currents. This is also consistent with the meteorological data for the specific episode days chosen for photochemical modeling. The meteorological data indicates that the emissions from marine vessels could be transported onshore, and therefore have the potential to impact ozone concentration in Ventura County. However, the actual impact of the emissions on the ozone concentrations in Ventura County depends on the time the emissions arrive in the onshore area as well as the interaction of the marine vessel emissions with the emissions from other sources.

CARB has suggested that emissions from up to 100 miles out from the coastline have a significant impact on ozone concentration in the California coastal air basins. EPA is in the process of evaluating CARB's data to justify this distance. EPA believes that these uncontrolled mobile sources have the potential to affect the air quality onshore. EPA further believes that the farther out from shore the ship's activity, presumably, the more apt those emissions are to disperse before reaching the coast. EPA requests comment on the effect of offshore

[95] See Section (2)(A) Fee Categories, above, with regard to proposed fee calculations.

[96] EPA calculations, based on figures from ICF, Inc., "Methodology for Analyzing the Environmental and Economic Effects of Electric Vehicles: An Illustrative Study," prepared for US EPA, September 1991 (Draft).

[97] See ICF., Inc. study, cited above.

activity on onshore air quality and the proper distance to which the channel should be moved.

EPA believes that it has authority to offer port charge rebates for operational changes such as controlling speed, cold ironing or, as described here, moving offshore. EPA FIP authority under section 110(c) of the Clean Air Act allows EPA to regulate sources contributing to air quality degradation provided EPA is not so prohibited. While the U.S. has historically allowed that nations do not have sovereignty in truly international waters, a surcharge provision of this type is significantly different. It applies charges to ships while they are in U.S. waters, and merely discounts the charges in light of operational changes the ships make, at their option, within and outside U.S. waters. EPA is unaware of any provision of a statute or international agreement that would prohibit such an approach.

In addition, the U.S. Coast Guard is directed to reconcile the need for safe access routes with the needs of all other reasonable uses of the area involved, and has the experience in the areas of vessel traffic management, navigation, and ship handling. Also, the National Oceanic and Atmospheric Administration (NOAA) has been directed by the Department of Commerce (DOC) to identify and designate as national marine sanctuaries areas of the marine environment and implement coordinated plans for the protection and management of those areas. Finally, marine vessels operating in or near an IMO approved TSS (traffic separation scheme) are subject to Rule 10 of the International Regulations for Preventing Collisions at Sea. EPA is working with all three groups to ensure that ships seeking to move further offshore can travel freely and safely.

EPA is proposing two different discount strategies to encourage ships to move off Ventura's coast. The two methods are proposed because it is difficult to quantify the appropriate fee. First, EPA does not know the impact of any fee on shippers. Second, EPA cannot quantify the exact benefits of moving further from Ventura. Finally, EPA cannot compare effects of the discounting on emissions reductions for Los Angeles and Ventura. EPA requests comments on the fee most likely to move shippers offshore of Ventura while still maintaining an incentive to use low emission ships in the area. As described above, EPA will monitor the fee structure and change it to achieve the intended air quality benefits. The first option is a discount of 50 percent from the fee otherwise applicable to any ship (before the hotelling discount is applied) for ships staying 70 miles from shore and outside the Ventura Air Basin (under this option a 10 percent fee is applied to ships in the low emission category). The second option would restrict any discounts to those ships which avoided the Ventura Air Basin. Thus even a ship in the low emission category would pay the highest fee if it entered the Ventura Air Basin (under this option a 0 percent fee would be applied to ships in the low emission category). This option would also offer a 50 percent reduction to ships which avoided the basin. Under both options, any ship in the low fee category which cold ironed and stayed out of the Ventura Air Basin would pay no fee.

EPA is also considering the option of requiring that shipping move outside of the air basin when not berthing or at port. To the extent that no fee structure is fully achieving its goals, such a requirement may be necessary. EPA requests comment on this option.

(5) Other Non-Air Base Military Installation. EPA requests comment on the feasibility and desirability of implementing a similar emission control strategy for military bases in the FIP areas with non-aircraft mobile sources of emissions, such as the Navy's construction base at Port Hueneme (with the exception of military vessels due to national security concerns as described for military aircraft), which is similar to that proposed for military air bases. These bases could be included in the proposed military air base control program described in section III.D.4.e.(2)(c) simply by expanding the definition of covered facilities to include all sources operated by the Department of Defense in the control areas.

5. Impact of the Economic Incentive Programs Rule on Fee Programs in the FIP

a. Introduction

The fee programs contained in today's proposal will be impacted by the rules and procedures established in EPA's Economic Incentives Program (EIP) Rulemaking (NPRM—58 FR 11110, February 23, 1993; NFRM due March 15, 1994). The EIP includes the Agency's guidance on fee programs and the requirements that must be met in order for them to be approvable as a SIP revision. It is EPA's intention that the FIP abide by these guidance provisions. The EIP, as applied to the FIP, requires that emission reductions credited to an economic incentive program be surplus to the reductions required by, and credited to, other implementation plan provisions to avoid double counting of reductions; quantifiable; enforceable at both the State and federal levels; consistent with SIP attainment and RFP demonstrations; and permanent within the timeframe specified by the program. These provisions address primarily the case of an economic incentive program in which emission sources are allowed to generate and trade emission reduction credits to show compliance with emission targets. The proposed FIP does not contain such a credits trading program. In addition, and directly relevant to the fee programs in the proposed FIP, an approvable emissions fee program must contain a provision that accounts for the uncertainties inherent in such programs, an auditing procedure, and reconciliation procedures; and must also contain an implementation schedule and administrative procedures. Each of these requirements is summarized below.

b. Requirements Under the EIP

(1) Surplus. All emission reductions achieved from a fee system must be surplus to those already being achieved under other control strategies in the FIP. The primary concern of the EIP is that the fee system not take credit for or "double count" reductions that are a result of other strategies. It is therefore necessary to define the baseline for the fee program and use this baseline as a basis for projecting program results.

Today's proposal clearly satisfies this requirement. The baseline is clearly described in section III.H.2 and EPA has made certain that there has been no double counting of emissions reductions.

(2) Quantifiable. The fee programs in the FIP must describe how emissions and changes in emissions will be quantified. The program must specify the minimum required credible, workable, and replicable procedures for quantifying emissions, which could include emission factor calculations, direct monitoring of usage, and the calculation procedures that will be used.

While today's proposal does not contain a comprehensive description of how EPA will quantify emissions changes caused by fees, the final FIP will.

(3) Enforceable. A fee program must include adequate enforcement consequences for noncompliance with any source requirements, including the monitoring, record keeping, and reporting requirements of the program.

Since the proposed fee programs will be federal programs, it is not necessary that they be enforceable by the state, but only federally enforceable. At this time, EPA has not developed regulatory

language delineating the monitoring, record keeping, and reporting requirements that will be necessary for the FIP. However, EPA intends on producing this language when it promulgates the fee programs in the final rule and asks for comment on how these requirements should be structured.

(4) Consistent With SIP Attainment and RFP Demonstrations. The EIP states that programs must be consistent with SIP attainment and RFP demonstrations. The fee programs will be consistent with the SIP attainment demonstration since the requirement of the FIP is to show attainment. The fee program will not need to be consistent with the RFP demonstrations as EPA is not required to comply with the RFP demonstrations in the FIPs.

(5) Permanent. The EIP requires that all reductions be permanent within the timeframe specified by the program. The important issue for this requirement is the determination of the timeframe of the program. The fee programs will most likely have a timeframe of 1 year and therefore the desired effects during that period are what is important. Since the fees will have the result of either increased turnover or reduction of usage, and since these will presumably cause permanent reductions within the 1 year period, then the permanence requirement will be satisfied.

(6) Uncertainty Provisions. The EIP requires that projected emissions reductions from a fee program must be adjusted to reflect the uncertainties inherent in these programs through the use of a "program uncertainty factor." EPA must specify a value for this factor, between 0 and 1, which reflects the level of uncertainty inherent in the program. EPA must also include a justification for this value. This factor must then be applied to the predicted level of emission reductions expected from the fee program.

Today's proposal does not contain an estimate of an uncertainty factor, however, EPA fully intends to use one in the final promulgation. EPA is not proposing an uncertainty factor at this time because it feels that it does not have the best information. EPA wants to remain open minded about the range of possible impacts from the fee programs and asks for comment as to what uncertainty factors should be applied. It should be noted, however, that, as shown in section III.H, EPA's control strategies do achieve surplus emission reductions and therefore provide for some room should programs not perform as expected.

(7) Auditing. A fee program must also contain audit procedures designed to evaluate program implementation and track program results. The auditing methods and the timing must be specified in the FIP. These audits are to be performed at time intervals consistent with RFP milestones and other emission inventory requirements, which is generally once every three years. Since OGC has determined that EPA need not satisfy the state's RFP requirements, the time interval requirement under a FIP is unclear. Since the EIP also specifies that states are free to perform audits at shorter intervals as they deem appropriate, EPA believes it is free to develop any auditing time interval it deems reasonable and appropriate.

Today's proposal does not contain specific auditing procedures, however, EPA fully intends to specify specific auditing procedures for each fee program in the final promulgation. EPA invites comments on the auditing procedures that should be used for each of the fee programs.

(8) Reconciliation Procedures. Program audit provisions for fee programs must also be accompanied by reconciliation procedures, designed to compare credited emissions with actual emissions. The reconciliation procedures must specify a range of appropriate actions or revisions to the program requirements (e.g., increase the fee) that will make up for any shortfall between credited and actual emissions revealed by the audit. Such measures must be automatically executing to the extent necessary to make up the shortfall, with state action required only to identify which of the specified actions are necessary to make up the shortfall. Such measures must not require a revision to the SIP to be effectuated once identified by the state, rather the measures must be built into the original EIP design (or incorporated by reference). As with the auditing procedures, the EIP directs states to perform reconciliation procedures at time intervals consistent with RFP milestones and other emission inventory requirements.

The reconciliation procedures in the EIP clearly indicate that EPA can reconcile a fee program by increasing the fee; however this increase must execute automatically. This language indicates that EPA, for example, could propose that if it determines, through the auditing process, that a fee program for a given source category has not yielded within 10 percent of the predicted effect, it will increase the fees by 50 percent to reconcile this shortfall.

While EPA fully intends to include reconciliation procedures for each fee program in the final promulgation, this NPRM does not contain such procedures. EPA invites comment on the the best way to reconcile fee programs should the program audits show that the effect of a program is not what was estimated.

(9) Implementation Schedule. A fee program in the FIP must include an implementation schedule. The schedule must include dates for notifying potentially affected sources, as early as possible, about the impending program, initialization and start-up procedures, submittal requirements from affected sources, and the reconciliation process and any subsequent actions required to make up for any shortfall that occurs.

The implementation schedules for each fee program are contained in the detailed discussions of each program.

(10) Administrative Procedures. As part of a fee program, EPA must establish appropriate administrative procedures. For example, a fee program must ensure the proper administration of the fee collection process. Is should be noted that the EIP contains requirements for the use of collected fees. These rules do not supersede the Miscellaneous Receipts Act and are therefore not applicable to the Federal Government in the FIP.

While EPA fully intends to include administration procedures for each fee program in the final promulgation, this NPRM does not contain such procedures. EPA asks for comment as to how these procedures should be structured.

E. Fuels Programs

1. Reformulated Fuels

a. Federal Reformulated Gasoline. Since the 1970s, gasoline sold in California generally has been subject to two sets of emission related standards: federal standards promulgated by EPA under the Clean Air Act and California standards set by CARB. Both EPA and CARB have established two-phase reformulated gasoline programs which affect much or all of California's gasoline.

Reformulated gasoline, as prescribed by section 211(k) of the Act, is to improve air quality by requiring that gasoline be reformulated to reduce motor vehicle emissions of toxic and tropospheric ozone-forming compounds.

On December 15, 1993, the EPA Administrator signed the final rule requiring the sale of reformulated gasoline in the 9 largest metropolitan areas with the worst ozone nonattainment problems in the U.S., as well as in a larger number of areas which have voluntarily chosen to

participate in the program. The Los Angeles Metropolitan Area (which includes Ventura County) is one of the mandated areas. Sacramento is not among the areas currently slated to receive federal reformulated gasoline, but a bump-up of Sacramento to "Severe" will subject that area to the reformulated gasoline requirement, effective one year after reclassification. Due to California's reformulated gasoline program described below, we do not propose to require the sale of federal reformulated gasoline in Sacramento in this FIP. In Los Angeles, federal Phase I reformulated gasoline will reduce VOC emissions by 13–21 percent beginning in 1995, relative to base California gasoline and depending on the type of I/M program in place. NO_X emissions will remain unchanged (no net increase over baseline NO_X levels). Beginning in the year 2000, a more stringent federal Phase II VOC standard will apply and VOC emissions will be reduced by 16 percent relative to pre-1995 California gasoline, assuming enhanced I/M is in place. In addition, beginning in the year 2000, EPA is requiring that reformulated gasoline reduce in-use NO_X emissions by 6.8 percent, on average, again relative to pre-1995 California fuel.

EPA's 7.8 RVP summertime standard under the federal Phase II volatility control program, which began in 1992, is the same as California's Phase I reformulated gasoline, which also began in 1992. The detergent requirement is also essentially equivalent to a CAA requirement affecting all gasoline which is required to begin in 1995, see section 211(l) of the CAA.

Toxic emissions, overall, are expected to decrease during the high ozone season due to Phase II RVP control. Reductions in non-exhaust VOC emissions will account for most of this decrease.

b. California Reformulated Gasoline (Phase II). The California Phase I reformulated gasoline program began in 1992 and applies to all gasoline sold in the state. It primarily requires that gasoline meet a 7.8 RVP standard and contain detergents which prevent deposits from accumulating in fuel injectors and intake valves.

In November 1991 CARB approved regulations for the Phase II reformulated gasoline program that begins on April 1, 1996. The California Phase II reformulated gasoline regulation established standards for eight gasoline characteristics, briefly summarized below. The 1.8 percent by weight oxygen content refers to wintertime only.

CALIFORNIA PHASE II REFORMULATED GASOLINE SPECIFICATIONS

Specification	Flat limit	Average limit	Absolute cap
RVP, psi	7.0		7.0
Sulfur, ppmw	40	30	80
Aromatics, vol%	25	22	30
Benzene, vol%	1.0	0.8	1.2
Olefins, vol%	6.0	4.0	10.0
Oxygen, wt%	1.8–2.2		(1)
90% distillation temperature, °F	300	290	330
50% distillation temperature, °F	210	200	220

[1] 2.7 maximum 1.8 minimum.

Refineries may choose whether to conform to the flat limits which apply to all batches of gasoline when it is initially sold from the product facility, or to the average limits which apply to the average of all fuel produced by a given refinery. In the case of a refiner choosing averaging, the absolute cap or absolute limit also must be met. California is also allowing the sale of alternative fuel formulations which meet the emission reduction potential of a fuel meeting the average limits. However, even these alternative gasolines must still meet the cap limits described above. Gasoline meeting the average limits will reduce VOC and NO_X emissions by 17–18 and 13–14 percent (relative to pre-1995), respectively, according to EPA's complex model as revised in November 1993. Thus, California Phase II gasoline should provide at least as much VOC and NO_X emission reductions as the federal Phase II standards.

In its recent rule, EPA determined that fuel meeting California's Phase II standards will produce greater emission benefits than federal Phase I reformulated gasoline and it was therefore appropriate to exempt California gasoline from the enforcement procedures for the federal Phase I standards. Thus, there would be no attainment benefit to requiring federal Phase I reformulated gasoline to be sold in Sacramento, although emissions reductions would be achieved during the summer of 1995. At this time it appears from the available data that California's fuel achieves as much reduction as federal Phase II reformulated gasoline and therefore EPA is not proposing any changes to California's gasoline program today. If later EPA determines that further reductions can be achieved through use of either federal Phase II reformulated gasoline or some new formulation, EPA will propose appropriate changes to the fuel program in California as a FIP revision if such reductions are needed.

c. California Reformulated Diesel Fuel. On August 21, 1990, EPA finalized its low-sulfur diesel rulemaking. CARB adopted their clean diesel fuel regulations in November 1988 and on December 26, 1991, enacted their clean diesel fuel program. Both the federal and CARB programs became effective on October 1, 1993. The two programs are similar, and are designed to substantially reduce sulfate particulate and NO_X emissions, and to allow manufacturers to comply with 1994 and newer emission standards for diesel vehicles. Important differences exist between California and the federal program, as outlined below.

The EPA program only applies to diesel fuel for use in on-highway vehicles. Trucks, automobiles, and buses would be affected, for example, but construction and farm equipment would not, unless they chose to use the low-sulfur diesel fuel. The regulation sets a 0.05 percent by weight sulfur limit for all on-road diesels, and requires a minimum cetane index of 40 or maximum 35 percent by volume aromatics percentage. The current maximum sulfur content in on-highway diesel fuel is approximately 500 ppm. Since direct measurement of aromatics is a somewhat complicated procedure, EPA chose to use a minimum cetane index as a surrogate for capping aromatics. Few refiners have had trouble meeting this requirement and those who cannot can sell fuel into the

nonroad market. The price differential between high-sulfur and low-sulfur fuels is expected to be approximately 2¢/gallon once initial distribution blips have resolved themselves.

The California program applies to vehicular diesel fuel. Essentially any vehicle with wheels, including construction and farm equipment, is covered. The regulation establishes a 500 ppm sulfur limit as well as a 10 percent cap on aromatics (20 percent for small refiners). Diesel normally has about 30 percent aromatics. California and EPA believe aromatics contribute to the formation of NO_X and particulate emissions. California includes an equivalency provision which allows refiners to make diesel with more than 10 percent aromatics if engine testing demonstrates equivalent emissions.

Most if not all of the large California refiners are pursuing higher-aromatic equivalent fuels. While a few oil companies have received CARB certification for their equivalent fuels, only Chevron has gone public with its formulation at this time. One of Chevron's alternatives has 19 percent aromatics with 200 ppm sulfur and a cetane number of 59. The company estimates that it can manufacture this fuel at an incremental cost of 6–7 cents per gallon. This is about half the incremental cost to make a strict 10 percent aromatics fuel. California has granted temporary waivers from the requirements provided the refiner pays 6¢/gallon into a trust fund. However, prices in California initially jumped far more than 20 cents per gallon and California is in the process of investigating its rule.

EPA believes that California's rule is likely to achieve NO_X emissions reductions which will not be achieved by the federal program. CARB estimates these reductions will be approximately 4–7 percent of diesel engine NO_X. EPA therefore is not proposing any changes to California's diesel fuel regulations. EPA is working with California to help understand the reasons behind the huge price rise, supply, and injector/pump seal problems and will take note of any change to California's rule. The South Coast and Ventura have been using the low-sulfur fuel since 1985 without any problems.

Even if California were to relax its rule, EPA's diesel fuel standards still apply. However, since the FIP takes credit for the California rule which delivers more NO_X credits than the federal rule, EPA may have to propose additional FIP reductions if the California rule were to be relaxed.

F. Severe Area Requirements for Sacramento

1. Introduction

As discussed in section III.B.3., EPA is proposing attainment demonstrations for 1999 and 2005 for the Sacramento FIP. If EPA promulgates a 2005 attainment demonstration, the Sacramento area will be reclassified as a severe ozone nonattainment area and become responsible for meeting all applicable deadlines and requirements for SIP purposes, which include the requirements outlined in section III.B.3.e. As part of the alternative proposal for 2005, EPA will address the additional severe area requirements with the following.

2. Employee Commute Options Program

a. Introduction and Statutory Requirements. In the alternative that EPA bumps up Sacramento to "Severe" and establishes a 2005 attainment date, EPA proposes that an Employee Commute Options (ECO) program be included in the FIP package. Because more people are driving than ever before and they are driving longer distances, the ECO provision was included in the Clean Air Act Amendments of 1990 at section 182(d)(1)(B) (42 U.S.C. 7511a(d)(1)(B)). Currently, increasing numbers of drivers and vehicle miles traveled (VMT) offset a large portion of the emissions reductions achieved through producing and selling vehicles that operate more cleanly. Without limits on increasing vehicle travel, the emissions caused by more vehicles being driven more miles under more congested conditions will outweigh the emissions reduced per vehicle from cleaner fuels and improved emission control technologies. Ultimately, this will result in an overall increase in motor vehicle emissions.

Section 182(d)(1)(B) of the CAA requires State or nonattainment areas with ozone pollution levels defined as "Severe" or "Extreme" under the CAA to develop and implement an ECO program designed to reduce work-related vehicle trips and vehicle miles travelled during peak commuting periods. Specifically, section 182(d)(1)(B) requires employers with 100 or more employees to participate in a trip reduction program. These employers must submit compliance plans to the state or governing agency two years after an ECO regulation is submitted to EPA for inclusion in the SIP. These employer compliance plans must convincingly demonstrate an increase in the average passenger occupancy (APO) of their employees who commute to work during the peak travel period by no less than 25 percent above the average vehicle occupancy (AVO) of the nonattainment area during the peak travel period. These compliance plans must also convincingly demonstrate that employers will meet the 25 percent increase APO target no later than four years after the ECO regulation is submitted to EPA.

b. ECO program requirements and Sacramento ECO regulation implementation approach. The proposed ECO regulation meets the basic ECO program requirements:

(1) calculate an AVO for the nonattainment area or for each zone if the area is divided into zones;
(2) specify target APO(s) which are no less than 25 percent above the AVO(s);
(3) include enforcement procedures to ensure that employers develop and implement compliance plans; and
(4) provide an ECO program that has a process for ensuring that compliance plans are a "convincing" compliance demonstration.

The proposed ECO regulation uses data collected from the 1991 Caltrans (California Department of Transportation) State Travel Survey to produce the baseline AVO for the nonattainment area and the target APO for the regulation. This survey estimated Sacramento regional AVO to be 1.11 in 1991. It is EPA's opinion that no substantial changes in travel patterns have taken place since that time such that there is reason to believe this number has changed since 1991. Consequently, a 25 percent increase in AVO produces a regional APO target of 1.38; the performance target included within the ECO regulation.

The Caltrans Statewide Travel Study attempted to estimate the number of persons telecommuting by asking the question, "do you work at home?". This survey question does not distinguish between those who work at home because they are self-employed and their business is located in their home and those who work away from home but participate in an employer-sponsored telecommuting program. EPA believes that a large percentage of those who work at home would be self-employed. Consequently, any APO target based on the Caltrans study and including all of these home workers as telecommuters would be inflated by some degree and result in a regional target APO of 1.46. EPA has chosen the 1.38 APO target because it is comparatively a more reliable baseline AVO estimate.

The third ECO program requirement concerns sufficient enforcement

procedures. Through the provisions of the ECO regulation, EPA must be able to invoke penalties that are severe enough to provide an adequate incentive for employers to comply and no less than the expected cost of compliance. Section 113 of the Act provides the statutory authority for federal enforcement and the ability to assess penalties for violations under this ECO regulation. EPA may assess civil or criminal penalties up to $25,000 per day per violation; however, Section 113 requires EPA to consider the size of the business, the economic impact of the penalty on the business, the violator's compliance history and good faith efforts to comply, the duration of the violation, payment of penalties for previous similar violations, the economic benefit of noncompliance, and the seriousness of the violation in assessing a penalty fee.

Finally, Section 182(d)(1)(B) requires that employer compliance plans "convincingly demonstrate" prospective compliance with the target APO. EPA's *ECO Guidance* defines four ECO regulation design options for eliciting compliance plans that make this convincing demonstration. An ECO regulation may:

(1) provide for effective plan-by-plan review of employer-selected measures to ensure the high quality of compliance plans and that unconvincing compliance plans will be rejected;
(2) contain a convincing minimum set of measures that all employers must implement to reach the target APO;
(3) provide that failure by the employer to meet the target APO will result in implementation of a regulation-specified, multi-measure contingency plan designed to meet the target APO; or
(4) include financial penalties and/or compliance incentives for employers who fail to meet the target APO that are large enough to provide a significant prospective incentive for the employer to design and implement an effective compliance plan.

An option can be used by itself or in combination with others. The proposed ECO regulation uses a combination of the first and the fourth program design options.

In sum, the proposed ECO regulation meets the basic ECO program requirements. Consequently, the proposed ECO regulation may be adopted by a state or locality to meet the requirements of Section 182(d)(1)(B). A general discussion of its requirements is included below in section (c). The detailed proposed ECO regulation is included in this Federal Implementation Plan NPRM at 40 CFR 52.2999.

c. Employer and compliance plan requirements. The proposed ECO regulation requires the following seven actions of employers:

(1) register with EPA as an employer subject to the regulation;
(2) designate an Employee Transportation Coordinator (ETC) at each work location;
(3) conduct an annual APO survey of its employees at each work location to determine employees' current commute patterns and report the results of the APO survey to the EPA;
(4) develop and submit to the EPA before March 1, 1997, 2 years from program inception, and in subsequent years as required by the regulation, trip reduction plans that describe activities to be implemented at the location under an ECO program;
(5) implement the ECO program described in the approved trip reduction plan;
(6) no later than March 1, 1999, 4 years from program inception, increase the average passenger occupancy (APO) at each location by not less than 25 percent over the average vehicle occupancy (AVO) for Sacramento ECO program area;
(7) maintain the target APO upon achieving it.

An employer failing to accomplish any or all of these actions would be in violation of the proposed ECO regulation and would be subject to penalties under section 113 of the Clean Air Act.

The required components of an employer's compliance plan are as follows:

(1) the name of the employer, address of the work location, and name, title, and signature of the Employee Transportation Coordinator (ETC) at the work location;
(2) the results of the most recent APO survey and a description of the procedure used to conduct the APO survey;
(3) a description of the physical and transportation service characteristics of the work location, and demographic, work, and travel-related characteristics of the employee population;
(4) a description of ECO strategies currently implemented that provide commute alternative incentives to employees at the work location and additional ECO strategies the employer will implement at the work location;
(5) activities planned by the employer to implement the ECO program and a time schedule for implementation of the program; and
(6) a description of the process by which the employer will periodically monitor and review progress toward the APO target.

Employer plans will be certified by a third party for completeness in order to reduce EPA's implementation burden. EPA will approve or disapprove plans. The Air Pollution Control Districts for the Sacramento nonattainment area will have the right of first refusal to certify plans of employers in their district. Should one or more APCDs decline the opportunity to certify employers, another organization or other organizations will be designated by EPA as plan certifiers.

By March 1, 1999, all employers must submit either a maintenance plan describing either how the employer will maintain the target APO, or an update compliance plan describing what additional measures the employer will take to reach the APO target within one year. An employer's update compliance plan must discuss good faith efforts to achieve the target APO, provide an explanation of why the ECO strategies included in the last plan did not produce the target APO, and discuss how the update compliance plans will cause the employer to achieve the target within one year if the target has not been met by then as required.

As part of the FIP, EPA is including a parking cash out regulation. Under this regulation, employers would offer employees the option of taking the cash value of employer paid parking as a financial incentive to reduce solo commuting. Where applicable, employers would be able to include a parking cash out incentive as part of their ECO program trip reduction plans.

d. ECO rule development issues. Because the following components are common to other trip reduction regulations in California or are discussed extensively in EPA's *ECO Guidance*, EPA wishes to discuss these issues and the agency's rationale for not incorporating them into the proposed ECO regulation.

First, this proposed ECO regulation does not allow for APO averaging, banking or trading. Including such a component within the ECO regulation would add an administrative and enforcement burden beyond EPA's present resources and is perhaps better administered at the local level. Should the state or local agencies develop an ECO regulation with APO averaging, banking, or trading consistent with EPA's *ECO Guidance*, EPA would accept such a regulation for review and

possible approval and incorporation into the SIP as a replacement for the proposed federal ECO program.

Related to the issue of APO averaging and trading is the issue of consolidated compliance plans. The proposed ECO regulation requires employers to achieve the APO target at each work location. Again, this is due to EPA's administrative and enforcement resource constraints. Therefore, to provide this type of individual employer accountability for achieving the APO target, the proposed ECO regulation does not allow consolidated compliance plans. A single employer with multiple work locations or a confederation of employers with geographically related work locations, such as a business park, are thus not allowed to average their APO survey results together to achieve the target APO. However, the proposed ECO regulation does not preclude employers from forming or participating in transportation management associations or using complementary ridesharing and commuter matching services to reduce trips to their respective work locations and promote ridesharing, so long as they demonstrate compliance at each individual worksite.

Second, this ECO proposed regulation does not divide the Sacramento ECO program area into subregional AVO zones or target areas for the purpose of achieving the target APO. Subregional AVO zones or target areas would allow different geographic subregions to start from different existing AVO baselines for the purpose of calculating the APO target. Thus, different subregions could have different APO targets, but still meet the performance requirement of Section 182(d)(1)(B), a 25 percent increase in APO from the AVO baseline.

AVO zones may be applicable within the Sacramento ECO program area if there are significant subregional differences in commute patterns, land use, transit availability, and baseline AVO. However, EPA has no information to suggest that these differences do exist. To conclusively assess whether or not these differences exist and develop subregional AVO zones would require detailed surveys of home to work commute patterns in the Sacramento ECO program area to supplement 1990 census data and the 1991 Caltrans State Travel Survey. Should California conduct such surveys and determine it appropriate, the State could include AVO zones in its ECO SIP.

As a third and final issue, this regulation does not allow for APO crediting from the use of satellite work stations. Cold start emissions from motor vehicles are a significant proportion of motor vehicle emissions and will become an even larger proportion as future motor vehicles run cleaner. Consequently, EPA believes that satellite work stations are a relatively ineffective strategy for reducing vehicle emissions and vehicle trips unless they can reduce a significantly large vehicle miles traveled component of a work trip or allow an employee to substitute a commute mode of travel other than a motor vehicle. Based on its understanding of Sacramento commuting patterns, EPA concluded that this kind of vehicles miles traveled reduction through use of satellite work stations would not occur in Sacramento and has therefore not included credit for them in the FIP. However, this proposed ECO regulation does provide for telecommuting from home as an acceptable trip reduction strategy in employer compliance plans. EPA believes that telecommuting from home is a very effective trip reduction measure because an entire commute trip is eliminated when an employee works out of his or her home.

In summary, although EPA's *ECO Guidance* addresses the use of averaging, banking, and trading of APO credits as well as using AVO zones, EPA does not believe these elements are appropriate for the proposed ECO program. APO averaging, banking, and trading would add an administrative and enforcement burden beyond EPA's present resources and is perhaps better administered at the local level. In the case of AVO zones, EPA has no information suggesting that significant subregional differences in commute patterns, land use, transit availability, and baseline AVO exist to justify this approach. Finally, while EPA may approve a local or state ECO regulation incorporating crediting of satellite work stations under very restrictive conditions, EPA has chosen not to credit satellite work stations in the proposed ECO regulation for the reasons stated above..

3. RACT for 25 Ton Per Year Sources

a. Applicable requirements. As discussed in the General Preamble for Implementation of Title I of the Clean Air Act Amendments of 1990 (57 FR 13521), for "Severe" areas, reasonable available control technology (RACT) must be applied to any source that emits or has the potential to emit 25 tons per year of VOC or NO_X. If the Sacramento area is bumped-up from "Serious" (major source = 50 tons per year) to "Severe", in order to address this requirement, RACT regulations must be developed for sources which are caught by the more stringent major source definition. EPA believes that between current State and local regulatory requirements and today's proposed FIP regulations (Section III.C.), there should be few, if any, uncontrolled stationary sources which emit more than 25 tons per year. However, EPA plans to continue working with the State and local agencies to identify all stationary sources which have the potential to emit greater than 25 tons per year or more of VOC and NO_X and apply RACT regulations as needed.

4. New Source Review

a. Background. Today's proposed rule is based on the New Source Review rules in the affected air pollution control districts (APCDs). It includes necessary revisions to those rules that will satisfy severe area requirements, including a major source definition of 25 tons/year and a 1.3:1 offset ratio requirement. The rule also incorporates EPA's permitting requirements (primarily those at 40 CFR 51.165), and changes necessitated by the 1990 CAAA. EPA is expecting to shortly publish proposed changes to the regulations at 40 CFR 51.165 in order to codify and interpret changes to nonattainment permitting requirements pursuant to the CAAA. As appropriate, EPA will rely on that proposal as guidance in taking final action on today's rule.

If EPA's final action includes a severe-area classification for the Sacramento FIP areas, this rule will apply in each of the affected APCDs. EPA's main goal in following the structure and, where possible, the actual language of the existing rules is to provide a rule that is easy for the local APCDs to adopt and implement and familiar to industrial sources subject to NSR, and thus provide the least disruption when incorporated in the local programs. However, should the local APCDs fail to adopt the necessary requirements, EPA will implement the severe area NSR requirements through today's rule.

EPA is specifically soliciting comment on the issue of the source size affected by the rule. As the rule is structured in this proposal, it requires permits of all sources currently required to obtain permits at the APCDs. EPA has several reasons for including this requirement. First, EPA wants to make this rule as similar to the current District rules as possible so that the Districts can be reasonably certain that adopting this rule will lead to rapid SIP approval such that EPA will move into an oversight rather than permit issuance mode. The current District rules use an accumulation structure that sums all emissions increases, and triggers substantive requirements based on that

accumulation. EPA considered making the rule only apply to sources with a potential to emit greater than 25 tpy. However, because the Districts' emissions inventory is based on actual emissions rather than potential emissions, EPA would be unable to know clearly to which sources the rule applies. Second, EPA is concerned that excising those portions of the rules related to minor sources will lead to increased confusion by sources as to jurisdiction and applicable requirements. Third, EPA believes that not including minor sources will result in a rule capturing fewer emissions than the current District rules, a result contrary to the intent of the FIP. On the other hand, EPA is concerned about the effective use of its resources, and about the burden placed on companies constructing very small sources having to obtain air pollution permits from two agencies. Even so, because EPA has the ability to delegate today's rule to the Districts, the effects of dual permitting should be short lived. EPA is therefore soliciting comment on whether to include minor sources or not, and, if a commenter suggests excluding minor sources, EPA solicits comment on the most effective way to exclude minor sources while maintaining the structure of the rule.

b. Overview of Rule Requirements. There are three sections of the rule that together establish the NSR requirements for the FIP areas. The first, 40 CFR 52.3000, describes which sources are required to obtain a pre-construction permit, and sets out most of the procedural requirements involved in permitting. The second section, 40 CFR 52.3001, contains the substantive requirements related to New Source Review, including control technology determinations and offset requirements. The third section, 40 CFR 52.3002, describes the procedure EPA will use to determine the amount of creditable reductions available and authorize them for use as offsets.

In general, the rule is designed to meet each of the severe area NSR requirements mandated by the Act, meet each applicable requirement for State and local NSR rules as set forth in 40 CFR 51.165, as well as be consistent with EPA's policies for permitting.

The rule requires that any source[98] owner proposing to construct an emitting piece of equipment obtain a permit prior to construction of that equipment. A permit applicant must provide EPA all information necessary to process the permit. Once all such information is received by EPA, the application is administratively complete and EPA will begin the process of analysis and permit preparation, and will then issue or deny the permit. Except for certain small sources, EPA will present a draft permit for public notice and provide an opportunity for comment.

The substantive requirements that may apply to construction or modification of certain larger emission units include: Best Available Control Technology (BACT), offsets, statewide compliance, and alternative siting analysis, and are discussed below.

(1) Lowest Achievable Emission Rate (LAER). LAER is required for any emission unit construction or modification where the potential emissions of that unit exceed ten pounds per day. This requirement is consistent with the Clean Air Act and is based on the requirements of the Districts' rules. The applicable Clean Air Act control technology requirement is Lowest Achievable Emissions Rate (LAER) (CAA section 173(a)(2)). The District rules use the term Best Available Control Technology, but define it to meet the LAER requirement. Therefore, as used in today's rule, the term "BACT" satisfies CAA section 173(a)(2).

(2) Offsets. Today's rule implements the offset requirement mandated by the Act for severe areas by adding a 1.3:1 offset ratio to the base District rule. The rule triggers the offset requirement once the potential to emit of the source exceeds 7,500 pounds per quarter (approximately 15 tons per year). Once the source exceeds the offset trigger, all subsequent emissions increases are required to be offset at this ratio.

(3) Statewide Compliance. The owner or operator of all major new sources and modifications is required to demonstrate that all major sources under his or her ownership or control within the state are in compliance or on a schedule for compliance with all Clean Air Act requirements. This requirement has been in effect since the 1977 Clean Air Act amendments, and is already part of all of the District rules.

(4) Alternative Siting Analysis. The requirement for an alternative siting analysis is found in section 173(a)(5) of the Clean Air Act. An applicant for a major new source or modification is required to perform an analysis of alternative sites, sizes, production processes and environmental control techniques and demonstrate that the benefits of the source significantly outweigh the environmental and social costs of construction of the source at that location. Today's rule implements the alternative siting analysis requirement at 40 CFR 52.3001 (c)(7).

c. Existing NSR Rules. The five Districts affected by today's Rule are all within the same air basin and Metropolitan Statistical Area. While each District adopts NSR rules independently, all but one of the Districts' rules are similar in structure and substance. Feather River Air Quality Management District's rules have similar definitions and substantially similar requirements as the other Disticts, but differ in minor structural and other respects. Today's rule is similar to the existing rules in Sacramento Metropolitan Air Quality Management District, Placer Air Pollution Control District, Yolo-Solano Air Pollution Control District and El Dorado Air Pollution Control District.[99] However, today's rule is numbered differently and is written to address only ozone precursors.

None of the District NSR rules in the State Implementation Plan currently meet all the requirements of the 1990 CAAA. On January 15, 1993, EPA found that Feather River AQMD, El Dorado APCD, Placer APCD, and Yolo-Solano APCD failed to submit NSR rules meeting certain requirements mandated by the CAAA. However, Feather River AQMD, Placer APCD, and Yolo-Solano APCD have since submitted rules for inclusion into the State Implementation Plan. EPA expects submittals from El Dorado APCD and Sacramento Metropolitan AQMD in the next year. Because all of these rules were written to only meet the requirements for serious nonattainment areas, they do not meet the requirements for severe nonattainment areas.

[98] Source is generally defined as all emitting equipment at one location. This document uses the same definition as 40 CFR 51.165.

[99] The rules related to New Source Review in each of the Districts are as follows: Sacramento Metroplitan AQMD Rules 201, 202, and 204; Placer APCD Rules 501, 502, and 504; El Dorado APCD Rules 501, 523, and 524 (board adoption expected April 1994); Yolo-Solano APCD Rules 501, 502, and 504; Feather River APCD Rules 4.0, 10.1 and 10.2.

d. Changes From Original APCD Rules. (1) Changes to Address Severe Area Requirements. In order to satisfy the provisions required by the Clean Air Act for severe areas, EPA has included several requirements in today's rule which differ from those of the current Districts' rules. The changes include the addition of a more stringent major source threshold and a more stringent offset ratio. These requirements are in accordance with Section 182(e) of the CAA. The minimum size threshold for a major source is 25 tons per year and the lowest acceptable offset ratio is 1.3 to 1.

(2) Changes to Address Federal Approvability. Significant changes in today's rule include deletion or revision of certain sections which exist in the Districts' current rules, as well as the inclusion of new sections to address federal requirements.

Federal new source review at 40 CFR 51.165 applies to certain source categories which were exempt from District new source review requirements. Therefore, such exemptions are excluded. Some of the District rules allow trading between different precursors of a secondary pollutant. As EPA does not currently allow trading between either of the ozone precursor criteria pollutants addressed in this rule, this rule does not, as proposed, allow such trading. In addition, 40 CFR 52.3000 contains wording which emphasizes the federal enforceability of an Authority to Construct and its validity for the life of the source. In order to match EPA's enforcement authority over past violations, and to be consistent with requirements in EPA's Operating Permits Program (40 CFR 70.6(a)(3)), today's rule requires retention of records for five years.

This rule contains certain other provisions which are not in the current District rules. A subsection is included in this rule to address the minimum offset ratio for emission reductions achieved from mobile sources. Furthermore, the ERC Authorization includes provisions to certify that ERCs are surplus at time of use, that prior shutdown credits are federally approvable, and that ERCs from non-permitted sources are surplus, permanent, enforceable, and quantifiable.

(3) Changes to Address Federal Implementation. Some significant changes in the APCD rule are necessary for federal implementation. Today's rule excludes all references to requirements contained in state law. All district fee requirements are removed and are replaced with a provision allowing EPA to collect fees. Upon delegation of authority to implement and enforce any portion of this NSR rule, EPA will cease to collect the fees associated with that portion of this rule, and the delegated agency will calculate and collect fees in accordance with the fee rules of that agency.

Language was added to section 52.3001 to provide the opportunity to request a public hearing as provided by 40 CFR 124.12. Language was also added to section 52.3000 to allow for petition to the Environmental Appeals Board for review and reconsideration within 30 days of any final decision issued pursuant to this NSR rule, including decisions made by a delegated agency pursuant to this NSR rule. A petition for review can also be filed with the U.S. Court of Appeals as provided in section 307(b) of the Act.

Because this rule is explicitly intended for preconstruction review for ozone precursors, it does not reference other criteria pollutants nor District operating permits programs.

The ERC Authorization section of this Rule allows sources to meet the offset requirements of this Rule through use of the existing District banking system. Functions of the District Banks and District Priority Reserve Banks are not affected by today's Rule.

e. Dual Permit Application and Review. Today's proposed NSR Rule does not replace the Districts' existing permitting programs. New or modified sources of ozone precursors must continue to meet the applicable District NSR requirements. This may result in sources of such pollutants having to apply for permits from both the EPA and the District in which the source is located.[100] As a practical matter, however, because EPA has maintained the structure and requirements of the existing District Rules, by meeting the requirements of this "bumped up" rule, the source will have also met the District NSR requirements. Additional preparation in the form of permit applications, modeling, or research on the part of the applicant would be minimal, if required at all. EPA has no statutory authority to repeal or supplant the existing State or local laws, nor would this be desirable since the existing District permitting programs regulate the emissions of pollutants not covered by this rule.

One difficulty EPA has encountered in proposing this "dual system" is how to operate federal emission reduction credit "banks" that meet federal requirements and still preserve the integrity of existing District banks. As required by the Act and set forth in section 40 CFR 52.3001 of this rule, new sources or modifications that emit ozone precursors above an established threshold must obtain offsets. Under current District programs, emission reduction credits can be certified and obtained from District banks to meet offset requirements. However, to be creditable for use as offsets under this rule, EPA must ensure that the credits in the District banks meet federal approvability criteria as set forth in the Emission Trading Policy Statement (ETPS, 51 FR 43815) and in the General Preamble to Title I at (57 FR 13553).

The ERC authorization process described in today's rule would allow emissions reductions to be certified directly by EPA and would also allow sources to use ERCs which have previously been certified by a District rule and authorized to meet federal NSR requirements. EPA requests comment on today's proposal and alternative methods that would preserve the integrity of the District banks under the proposed "dual" permitting system.

f. Operating Permits. The permits issued by EPA under today's NSR rule will not expire upon issuance of a District operating permit. The Districts are encouraged to include the requirements contained in permits issued by EPA, pursuant to this rule, in their operating permits since sources must continue to comply with the requirements of these EPA issued construction permits. Districts must include conditions contained in permits issued pursuant to this rule in any operating permit issued under a program adopted pursuant to 40 CFR part 70 or Title V of the Act, as discussed in section III.J of this preamble.

g. Federal Implementation and Delegation to Local Agencies. As discussed below in section III.J of this preamble, if EPA reclassifies the ozone nonattainment areas of the Sacramento Valley Air Basin as "severe", the applicable portions of the California SIP must be revised to meet the CAA requirements for a severe ozone nonattainment area and submitted to EPA on or before the date of final promulgation of this FIP. Until such time as EPA approves the revisions for the NSR portions of the applicable SIP, the NSR requirements of this FIP shall apply. When the revisions are approved into the SIP, EPA will withdraw this NSR portion of the FIP.

[100] Sources must follow this "dual" permitting scheme in any area that does not have authority to implement federally mandated permitting programs.

EPA will encourage delegation of the final version of this NSR rule to the local Districts prior to SIP approvability, thus eliminating the need for sources to apply for permits from both the EPA and the local permitting agency. To do so, Districts must revise their existing NSR rule to meet the requirements of this federal rule, or adopt EPA's final NSR rule, through their existing notice and comment rulemaking procedures. The revised rule must then be submitted to EPA, which will evaluate the NSR rule for consistency with the requirements of the NSR portion of the Federal Implementation Plan. EPA will then delegate to the District, by letter, the authority to implement and enforce those portions of the FIP that are consistent with District requirements. When the revisions are ultimately approved in the SIP, EPA will withdraw the NSR portion of the FIP.

Revision of the District regulations is necessary to allow the local agencies to use their own requirements, such as fee provisions and enforcement procedures, to implement the requirements of this NSR rule. While both SIP revisions and delegation will require revision of the District regulations, delegation is a much more expedient process than EPA approval of revisions as part of the SIP.

5. TCMs to offset VMT increases. If bumped up to a severe nonattainment classification, Sacramento would also need to consider the requirements of Section 182(d)(1)(A). This section requires States containing severe ozone nonattainment areas to submit a SIP that identifies and adopts specific, enforceable transportation control measures, as necessary, to offset growth in vehicle emissions due to growth in vehicle miles traveled. Beyond demonstrating that these measures offset growth in emissions, they must be sufficient to allow total regional emission levels to comply with the reasonable further progress and attainment requirements of the Act.

As described in the General Preamble to Title I of the CAAA, 57 FR 13498 (April 16, 1992), the TCM offset SIPs required from areas already designated severe or extreme must: (1) Identify and adopt specific and enforceable transportation control strategies and TCMs to offset any growth in emissions from growth in VMT or number of vehicle trips; (2) identify and adopt specific and enforceable transportation control strategies and TCMs that attain reductions in motor vehicle emissions (in combination with other emission reduction requirements) as necessary to comply with RFP milestones; and (3) identify and adopt specific and enforceable transportation control strategies and TCMs that attain reductions in motor vehicle emissions (in combination with other emission reduction requirements) as necessary to demonstrate attainment of the NAAQS.

As discussed in the General Preamble, EPA has interpreted the provision to offset any growth in VOC from VMT increases to "require that sufficient measures be adopted so that projected vehicle VOC emissions will never be higher during the ozone season in one year than during the ozone season in the year before." Further, the attainment year is the last year for which this test applies. The calculation of VOC emissions from on road mobile sources may "include the effects of Federal measures such as new motor vehicle standards, Phase II RVP controls, and reformulated gasoline, as well as Clean Air Act-mandated SIP requirements such as enhanced I/M, the fleet clean-fuel vehicle program, and the employer trip reduction program."

For Sacramento, as can be seen in the Technical Support Document, on-road mobile source emissions through 2005 are never projected to be greater in one year than the year before once the FIP control strategies are implemented. Therefore, there is no need for TCMs in Sacramento to offset emissions increases from growth in VMT.

As for requirements (2) and (3) pertaining to TCMs for RFP and attainment demonstration, the FIP has addressed TCMs for Sacramento in the discussion of Employee Commute Options (III.F.2) and the discussion pertaining to fees on light duty vehicles (III.D.2.f).

6. Reformulated fuel. a. *Provision satisfied in FIP/SIP actions above.* Reclassification of the Sacramento area to "Severe" would mandate sale of reformulated gasoline in the area, effective one year after reclassification. There may be no emission reduction benefits from applying the federal reformulated fuel requirements to Sacramento, however, since the California reformulated fuel program already applies throughout the State. If the federal reformulated fuel program achieves greater reductions than the California program, EPA will impose the federal requirement in Sacramento. If the California program is more stringent, EPA would consider modifications to its enforcement program to avoid duplication with California's program.

G. Section 182(e)(5) New Technology Measures for the South Coast

1. Introduction.

After application of the FIP's stationary, area, and mobile source rule requirements, the ozone attainment requirements for the South Coast demand further reductions from the same source categories in order to achieve cumulative reductions from 1990 baseyear emissions of approximately 90 percent VOC and 70 percent NO_X.

Currently, there is no technological basis to prepare full regulations to achieve this additional level of control. Instead, the additional reductions will need to come from either new technologies or further improvements to existing technologies, such as those discussed in section III.B.5.d.iii. The federal control technology projects described in that section are current examples of federal initiatives supporting the development and commercialization of low-emitting products and technologies, pollution prevention approaches, and new control techniques. In each future year, additional federal projects will be undertaken which should help to provide the technical, commercial, and regulatory basis for the emission reductions needed for attainment in the South Coast.

In these circumstances, EPA believes it is appropriate to make federal commitments to promulgate in the future regulations based on the development of new technologies or control techniques, as authorized in section 182(e)(5) of the Act. Section III.B.5.c.4. of this NPRM discusses extensively this CAA section and provides the prerequisite demonstration that the new technology measures are not needed to meet the incremental reduction requirements for the period 1990–2000.

2. Commitment to adopt measures and schedule of emission reductions.

EPA's policy for implementation of section 182(e)(5) demands a commitment from the responsible agencies to achieve specified reductions by particular dates. The Act also explicitly requires a commitment to adopt contingency measures no later than 3 years before the scheduled reductions from the new technology provisions (section 182(e)(5)(B)). The contingency measures must be adequate, in combination with other controls, to achieve the periodic emission reduction requirements and attainment. EPA's commitments to both the new technology measures and the contingency measures appears at proposed 40 CFR 52.2951.

a. Stationary and Area Sources. (1) Sources Subject to Cap Rules. EPA proposes to make section 182(e)(5) commitments to prepare rules for each of the control categories covered by the cap rules described above in section

III.C.5. The commitments are identical for each stationary and area source category, and establish rulemaking and implementation schedules to achieve two additional increments of reduction beyond the sources' baseline emissions.

For VOC the schedule is as follows. At the beginning of 2005, the declining cap rule will have required sources to reduce baseline emissions by between 20 and 45 percent. The first new technology rule will be proposed by January 1, 2004, and promulgated by January 1, 2005, and will require a 60 percent reduction from baseline emissions by January 1, 2007. The second new technology rule will be proposed by January 1, 2006, and promulgated by January 1, 2007, and will require a 90 percent reduction from baseline emissions by January 1, 2009.

The schedule for NO_X is similar. At the beginning of 2005, the SCAQMD regulations, including the NO_X RECLAIM rules, will have achieved substantial reductions in baseline emissions. The first new technology rule will be proposed by January 1, 2004, and promulgated by January 1, 2005, and will require a 50 percent reduction from baseline emissions by January 1, 2007. The second new technology rule will be proposed by January 1, 2006, and promulgated by January 1, 2007, and will require a 70 percent reduction from baseline emissions by January 1, 2009.

(2) Consumer Products, Architectural Coatings, and Pesticides. For the consumer products (including aerosol paints), architectural coatings, and pesticides categories, including those sources subject to the proposed provisions of 40 CFR 52.2957, 40 CFR 2958, 40 CFR 52.2959, and 40 CFR 52.2960, EPA proposes to make section 182(e)(5) commitments to prepare new technology rules to reduce VOC emissions by a further increment of 80 percent, beyond the control level achieved under the proposed FIP statewide rules cited above.

The schedule for rule promulgation and compliance is as follows. The first new technology rule will be proposed by January 1, 2004, and promulgated by January 1, 2005, and will require a 40 percent reduction from baseline (year 2003) emissions by January 1, 2007. The second new technology rule will be proposed by January 1, 2006, and promulgated by January 1, 2007, and will require an 80 percent reduction from baseline emissions by January 1, 2009.

(3) Remaining Stationary and Area Sources. For remaining stationary and area emission sources emitting less than 4 tons per year and not already regulated under sections III.G.2.a.(1) or III G.2.a.(2), EPA proposes to make section 182(e)(5) commitments to prepare new technology rules to reduce VOC emissions by 80 percent from baseline emission levels.

Emission sources regulated under this section represent a large number of small sources which emit less than 4 tons per year and/or may be exempt from regulation. These sources account for an estimated 300 tons per day of the remaining VOC emissions after application of currently proposed FIP regulations. These sources include but are not limited to gasoline service stations, livestock waste operations, commercial food production and preparation, printing shops, miscellaneous coating and solvent cleaning operations, miscellaneous chemical/product manufacturing, bakeries, waste disposal sites (e.g., landfills), publicly owned treatment works, waste burning operations, miscellaneous fuel combustion sources, and miscellaneous fugitive emission sources.

The schedule for rule promulgation and compliance is as follows. The first new technology rule will be proposed by January 1, 2004, and promulgated by January 1, 2005, and will require a 40 percent reduction from baseline (year 2003) emissions by January 1, 2007. The second new technology rule will be proposed by January 1, 2006, and promulgated by January 1, 2007, and will require an 80 percent reduction from baseline emissions by January 1, 2009.

b. Mobile Sources. EPA believes that the utilization of technological advances for mobile sources, such as those discussed above in section III.B.5.d.iii., will ultimately allow the South Coast FIP area to attain the ozone NAAQS by the CAA deadline. Were EPA required to achieve the standards with mobile source measures that relied only on the current level of technology, EPA would be forced to propose measures which it believes would bring about severe economic hardship to the South Coast.

As indicated in the attainment demonstration discussion (section III.H.), ozone attainment in the South Coast requires approximately a 90 percent reduction in VOC and a 70 percent reduction in NO_X emissions from the 1990 baseline. Mobile source emissions will need to be reduced by this percentage to yield attainment. The proposed mobile source strategies presented in section III.D. will achieve reductions of 66 percent for VOC and 51 percent for NO_X from the 1990 baseline. EPA proposes to commit to achieving the remaining balance of 24 percent VOC and 19 percent NO_X reductions from future technologies, such as the ones discussed in section III.B.5.d.iii.

EPA proposes to make section 182(e)(5) commitments to accomplish these mobile source reductions according to the following schedule. New technology rules will be proposed by January 1, 2001, and promulgated by July 1, 2002. The rules will provide for the additional 24 percent VOC and 19 percent NO_X reductions by the year 2010. Since sufficient lead time to introduce any new technology will be needed, EPA proposes that the rules will begin implementation by January 1, 2006. This implementation date will allow for four years of fleet turnover to produce the needed reductions.

3. Commitment to adopt contingency measures.

In this NPRM, EPA also proposes to commit to issue by January 1, 1999, contingency measures sufficient to achieve the cumulative percent reduction in VOC and NO_X emissions assigned to each new technology measure. As the Act requires, these contingency measures would go into effect and achieve substitute emission reductions, if the new technology measures are not developed or fail to achieve the specified reductions.

H. Attainment Demonstrations

1. Introduction.

An attainment demonstration is a key part of a State or Federal Implementation Plan: using air quality modeling, it shows that the proposed emission control measures are sufficient for the NAAQS to be attained by the applicable deadline.[101] For ozone nonattainment areas classified "Serious", "Severe" or "Extreme", section 182(c)(2)(A) requires an attainment demonstration based on photochemical grid modeling, for which the Urban Airshed Model (UAM) is the EPA-approved model. (See Appendix W of 40 CFR part 51.) Under section 187(a)(7), SIPs for CO areas having design values above 12.7 ppm must also have an attainment demonstration, which EPA has generally interpreted to

[101] For ozone and CO nonattainment areas, the Act provides that SIPs (and FIPs) demonstrate attainment as expeditiously as practicable but not later than dates that are specified for each classification. For example, under section 181(a), "Serious" ozone nonattainment areas must demonstrate attainment as expeditiously as practicable but not later than November 15, 1999. In section III.B., EPA reviews the potential for demonstrating attainment in each of the FIP areas before the deadlines set in section 181(a) for ozone nonattainment areas and in section 186(a) for CO nonattainment areas. The attainment demonstration analyses presented below in this section do not repeat the discussion of alternative attainment dates.

mean a UAM demonstration. As discussed previously in this NPRM, FIPs demonstrating attainment of the ozone NAAQS are required for Sacramento, South Coast, and Ventura, and a FIP carbon monoxide attainment demonstration is required for South Coast.

It is a goal of EPA for the FIPs to match as closely as possible the ozone SIPs that California is developing for the November 1994 submittal. EPA and the State are coordinating FIP and SIP modeling to avoid duplication of effort and divergent FIP and SIP modeling conclusions. Projected reduction targets had to be determined well in advance of this NPRM in order to choose control strategies and develop regulations to implement them. Because the State and EPA are continuing to refine the modeling, the proposed FIP attainment demonstrations are based on preliminary modeling results for the three areas. Rather than using UAM to directly simulate the air quality benefit of the control measures, today's proposal shows attainment by reducing total emissions to meet UAM-generated reduction targets. The targets were derived from a series of UAM simulations of generic "across-the-board" emission reductions that attain the NAAQS. This method has shortcomings discussed below, but is the best procedure available at this time, and gives results that are comparable to a full simulation. If subsequent analysis by the State and EPA shows that different target levels and control strategies are more technically appropriate, EPA intends to incorporate these in the final FIP notice or in subsequent FIP revisions.

An additional issue for attainment demonstrations, not otherwise addressed in the FIP proposal, is the phenomenon of pollutant transport between air basins. If one area is causing nonattainment in another area downwind under some meteorological conditions, then additional controls may need to be applied in one or both areas. Ideally, a single large modeling domain incorporating both upwind and downwind areas should be used to assess pollutant transport between them. It is anticipated that the methods California will employ to address transport in the November 1994 ozone SIPs might be used in the final FIP. This could eventually result in revisions to the FIP, which may impose greater control requirements in the FIP areas than appear in today's proposal if there is, for example, transport from Los Angeles to San Diego and Ventura. The transport analysis could also result in additional FIP controls for areas not covered by the proposed FIPs, such as the San Francisco Bay Area or the San Joaquin Valley, which are upwind of Sacramento.

2. Baseline inventories.

(a) *Adjustments to State's emissions inventories.* California provided 1990 base-year annual and peak season emissions inventories for ozone precursors (ROG, NO_X, and CO) by air basin and county with the emissions inventory SIP submittal of November 13, 1992. EPA relied heavily on the November 1992 inventory in this NPRM. Revised inventories for the base-year were provided by CARB on November 15, 1993, and these have been partially incorporated in this NPRM. In some cases, however, EPA did not have sufficient time to fully evaluate and/or incorporate the November 1993 data into the FIP modeling. It should be noted that CARB uses ROG almost interchangeably with ROC (reactive organic compounds), but both include ethane, which EPA exempts from the definition of VOC under the assumption that ethane reacts too slowly for significant ozone formation in the period of concern (up to several days). CARB compensates for the difference between ROG and VOC by providing EPA a listing of the fractional ethane emitted from each Source Classification Code (SCC). For purposes of this NPRM, EPA also drew on inventories prepared by local air pollution control agencies as discussed below.

(b) Basis for projected emission inventories. Base-year (generally 1990) emission inventory estimates are projected to change in future years. EPA projects emissions for each emission category to the targeted attainment year (e.g., 2010 for South Coast) based on category specific emission factors. These factors include, for example, housing starts, employment, population, gasoline sales, and sales tax revenues.

(c) Stationary Sources.

For stationary source categories whose facilities range in size, a cutpoint differentiates point and area sources. EPA guidance on emission inventories sets this cutpoint at 10 tpy for VOC sources, and 100 tpy for NO_X and CO.[102] Point source emissions are calculated by adding estimates of individual source facilities in a category. Area source emissions are generally determined by subtracting point sources from a total estimate derived from an emission factor assumed for the entire category. Certain source categories are estimated by the State while others are estimated by the local air pollution control agency.

(1) Sacramento. For purposes of this NPRM, EPA relies largely on stationary source emission data provided in CARB's November 1992 inventory submittal. This inventory includes VOC and NO_X estimates for Sacramento, Sutter, Solano, Yolo, Placer and El Dorado counties for 1990, 1999 and 2005. This inventory is also similar to the inventory used in the 15 percent plan submitted by the Sacramento APCD in November 1993. EPA has, however, made several adjustments to CARB's inventory which are discussed in the technical support document.

The following table summarizes the estimated stationary source emissions used in this NPRM before applying FIP measures:

SACRAMENTO STATIONARY SOURCE BASELINE INVENTORIES

[Tons per summer day in 1999 and 2005]

	1999 VOC	1999 NO_X	2005 VOC	2005 NO_X
Fuel combustion	1.3	10.4	1.4	11.4
Waste burning	4.4	0.1	4.8	0.2
Architectural coating	15.2		17.4	
Consumer products	14.3		16.3	
Other solvent use:.				
Dry cleaning	2.1		2.4	
Degreasing	4.5		5.0	
Other surface coating	17.8		19.6	

[102] See *Guidance for Initiating Ozone/CO SIP emission Inventories Pursuant to the 1990 Clean Air Act Amendments* (OAQPS, February 13, 1991), page 22. These cutpoints are different from the definition of major stationary source used for the New Source Review of RACT regulations.

SACRAMENTO STATIONARY SOURCE BASELINE INVENTORIES—Continued

[Tons per summer day in 1999 and 2005]

	1999 VOC	1999 NO_X	2005 VOC	2005 NO_X
Asphalt paving	2.4	.....	2.6	.....
Printing	2.3	.....	2.5	.....
Industrial solvent use	0.9	.....	1.0	.....
Other	0.2	.....	0.2	.....
Petro process, storage, transfer:				
Petro marketing	4.2	1.1	4.3	1.1
Petro refining	0.2	0.1	0.2	0.1
Oil & gas extraction	5.1	0.0	5.1	0.0
Other	0.2	0.0	0.2	0.1
Industrial processes:				
Commercial bakeries	1.3	0.0	1.4	0.0
Other	4.6	0.3	5.1	0.4
Pesticide application	13.1	.....	14.2	.....
Livestock waste	7.2	.....	7.9	.....
Misc processes	3.1	0.0	4.3	.....
Total	104.2	12.1	115.7	13.4

(2) Ventura. EPA and the Ventura County Air Pollution Control District are jointly funding a coordinated SIP and FIP modeling effort in order to maximize consistency between these parallel efforts. Thus, for purposes of this NPRM, EPA is using Ventura County's 1991 Air Quality Management Plan (1991 AQMP)[103] as the starting point for estimating and projecting emissions from stationary sources in Ventura rather than CARB inventories. The 1991 AQMP inventory also provides the starting point for the 15 percent plan submitted by Ventura to EPA in November 1993. While the 15 percent plan incorporates a number of modifications to the growth factors, emission processing mapping, and other inputs to the 1991 AQMP inventory, EPA was not able to evaluate and incorporate these in time for this NPRM. In addition, the 15 percent plan only projects emissions through 1996, and projections are needed through 2005 for the FIP. EPA expects, however, that the inventory used for the final FIP attainment demonstration will incorporate many of the modifications included in the 15 percent plan. It should be noted that CARB's inventory forms the basis of many of the specific source category emissions estimates in Ventura's AQMP and 15 percent inventories.

The following table presents the 2005 stationary source emission estimates before applying FIP measures. These estimates are described further in the technical support document:

VENTURA STATIONARY SOURCE BASELINE EMISSIONS

[Tons per summer day in 2005]

	VOC	NO_X
Fuel combustion:		
Oil & gas production	0.2	1.6
Other manufacturing & industrial	1.0	3.6
Electric utilities	.5	3.3
Other services and commerce	.2	3.4
Residential	0	.8
Solvent use:		
Dry cleaning	.7	.....
Degreasing	4.2	.....
Architectural coating	6.8	.....
Other surface coating	10.3	.....
Asphalt paving	.5	.....
Printing	.7	.....
Domestic	7.5	.....
Industrial	1.6	.....
Petroleum process, storage and transfer:		
Oil and gas extraction	8.1	.....
Petroleum refining	.1	.....
Petroleum marketing	1.2	.....
Industrial processes	0.7	0
Pesticide application	13.5	.....
Solid waste landfill	.6	.....
Other stationary sources	.8	.1
Total	59.2	12.8

(3) South Coast. The FIP's 1990 base-year stationary source VOC emission estimates rely on the 1990 inventory described in South Coast AQMD's 15 percent Rate-of-Progress Plan that was submitted to EPA in November 1993. The FIP's 1990 base-year stationary source NO_X inventory is based on estimates described in SCAQMD's 1991 Air Quality Management Plan (1991 AQMP).[104] EPA is also using the 1991 AQMP for projecting VOC and NO_X emissions from stationary sources to the South Coast target attainment year of 2010. While CARB's inventory estimates are used for many specific source categories in the 1991 AQMP, EPA relies on the overall SCAQMD rather than the CARB inventory in order to maximize consistency between the SIP and FIP. The SCAQMD is in the process of updating its revised 2010 inventory for inclusion in the 1994 AQMP, which is due for submittal to EPA in November 1994. Upon release of the revised 2010 inventory estimates, EPA will incorporate applicable changes in its 2010 FIP inventory projections.

The following table represents a summary of the major categories and emissions in the 2010 stationary source inventory which are described further in the technical support document. Credit for adopted SIP and proposed FIP measures have not been included in this table.

SOUTH COAST STATIONARY SOURCE BASELINE EMISSIONS[a]

[Tons per summer day in 2010]

	VOC[b]	NO_X
Fuel combustion		
Oil and gas production	2.7	19.0
Petroleum refining	2.7	9.2
Other manufacturing and industrial	4.2	58.0
Electric utilities	1.5	14.5
Other services and commerce	4.6	48.0
Residential	3.7	25.4
Other	3.8	15.0

[103] Ventura County Air Quality Management Plan, Ventura County Air Pollution Control District, October 1991.

[104] 1991 Air Quality Management Plan, South Coast Air Basin, July 1991.

SOUTH COAST STATIONARY SOURCE BASELINE EMISSIONS[a]—Continued

[Tons per summer day in 2010]

	VOC[b]	NO_X
Solvent use:		
Dry cleaning	22.0	-
Degreasing	40.7	-
Architectural coating	58.4	-
Other surface coating	188.4	.2
Asphalt paving	9.6 -	
Printing	12.5	0.1
Consumer Products	131.6	-
Industrial	24.6	-
Other	14.8	—
Petroleum process, storage and transfer:		
Oil and gas extraction	17.4	1.4
Petroleum refining	21.1	6.1
Petroleum marketing	53.8	.3
Other	4.0	.2
Industrial processes:		
Chemical	15.6	2.1
Food and agricultural	19.8	.6
Mineral processes	.6	6.1
Other	16.5	2.5
Miscellaneous processes:		
Pesticide application	15.6	-
Farming operations	62.4	-
Waste disposal	2.2	.2
Waste burning	1.3	2.0
Other	3.8	.8
Totals	757	212

[a] SCAQMD's draft revised 2010 inventory makes significant revisions for architectural coatings (45 tpd increase); other surface coating (65 tpd increase); consumer product (27 tpd decrease); and farming operations (23 tpd decrease). These draft revisions will not be incorporated into the FIP inventory until SCAQMD finalizes its 2010 inventory revisions.

[b] VOC estimates are based on reactive organic compound estimates from SCAQMD.

d. *Mobile sources.*—(1) Highway vehicle emission factors. The on-highway emission factors for California vehicles are based on CAL15a, which is the March 1993 release of MOBILE5a with modified model year emission control groupings, basic emission rates, and registration age mix based on EMFAC7D.

The EMFAC model could not be used for the FIP for several reasons. Most importantly, an enhanced I/M program is a key part of the FIP proposal, and EMFAC does not allow the examination of I/M programs besides the one currently implemented in California. Similarly, there is no mechanism within EMFAC to address the enhanced in-use compliance program being proposed in the FIP.

There is now an in-house EPA version of MOBILE5a for California based on EMFAC7F, EMFAC7D's replacement, referred to simply as CAL15. More detailed descriptions of CAL15a and CAL15 are provided in the docket. EPA currently plans to use CAL15 in subsequent analyses for the FIP. EPA invites comments on the merits of the various models. Based on these comments and any new data that may become available, EPA may make inventory and control effectiveness adjustments in the final FIP. Such technical adjustments could require or allow changes in the control measures.

Vehicles certified to 49–State standards are assumed to comprise 10 percent of the light duty VMT and 20 percent of the heavy duty VMT in the FIP areas. The emission factors for these vehicles were based on MOBILE5a runs using the same inputs as for the CAL15a runs, except the LEV program was excluded, since it would not apply to 49-State vehicles.

It should be noted that the baseline emission calculations include control programs that have already been adopted. This includes the California LEV program, California Phase 2 Reformulated Gasoline, and California Clean Diesel Fuel.

(2) VMT Estimates. VMT estimates for Sacramento were derived mostly from an August 1993 draft of the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP). That draft included only 1990 and 2015 estimates, so intermediate years of 1999 and 2005 were estimated by linear interpolation. Also, SACOG does not currently include Solano County, which is partially within the FIP area. VMT for Solano County were calculated from the 1992 CalTrans MVSTAFF report using a CARB estimate of the portion of Solano County VMT in the FIP area. The final SACOG MTP includes specific VMT estimates for 2000 and 2005 which are somewhat higher than the interpolated values used by EPA. EPA plans to use the final MTP values in analyses for the final FIP rulemaking.

Ventura VMT estimates come directly from the August 1993 JHK & Associates report done for the Ventura County Air Pollution Control District. South Coast VMT are based on an August 1993 draft Southern California Area Governments (SCAG) analysis.

While EPA believes these are the most appropriate VMT estimates and projections for the FIP, comments are invited on the merits of other VMT estimates.

(3) Nonroad vehicles and engines. A full range of nonroad engines and vehicles are addressed in this NPRM, from small hand-held gasoline lawn and garden equipment to heavy duty diesel engines used in farm and construction work. The inventory for some of these categories is taken directly from CARB estimates, but for the categories listed below EPA either adjusted the CARB inventory with different growth rates or used a totally different basis for the inventory. In the first three categories listed (HD engines greater than 50 hp, lawn and garden equipment, and recreational boats) the base-year estimate comes from CARB. However, to be consistent with the national rulemakings for these categories, the growth rates are modified by EPA based on the most recent available population growth estimates for each area. Whereas CARB grew these inventories at roughly a straight line 2 percent of the base-year's inventory per year, EPA uses a straight line 3.4 percent per year for Sacramento, 3.0 percent per year for Ventura, and 1.8 percent per year for the South Coast.

(i) Heavy duty engines greater than 50 hp. EPA started with the 1990 CARB inventories for diesel and gasoline farm and construction equipment (Mobile Equipment). As discussed in the technical support document, the CARB inventory was then adjusted by a factor of 0.975 to account for engines less than 50 hp which are estimated to represent 2.5 percent of the emission inventory. The population growth assumption described above was then used to grow the heavy duty engine inventory.

(ii) Spark ignition engines less than 25 hp (lawn and garden). EPA started with the 1990 CARB inventory for residential and commercial utility (lawn and garden) equipment. The population growth assumption described above was then used to grow the inventory.

(iii) Recreational marine engines. EPA started with the 1990 CARB inventory for recreational gasoline and diesel boats. This was modified for Sacramento using new data obtained from California on boat registrations and navigable water area. This resulted in a greater 1990 inventory than CARB had been using. The EPA population growth assumptions described above were then used to grow the inventory from 1990. For Ventura and South Coast, the ratio of CARB's Ventura and South Coast tons to CARB's Sacramento tons was multiplied by the corrected Sacramento inventory to obtain consistent inventories for all three areas.

(iv) Locomotives. Inventories developed by Booz-Allen Hamilton for CARB show locomotive No_x contributions per summer day in 1990 of approximately: Nine tons in the Sacramento area, one ton in Ventura, and over thirty tons in the South Coast. These contributions constituted approximately 5 percent, 1 percent, and 2 percent of the total No_x emissions for Sacramento, Ventura and South Coast respectively. These inventories are

summarized in the following table. EPA refers readers to the Booz-Allen reports entitled: Locomotive Emissions Study and Report on Locomotive Emission Inventory: Locomotive Emissions by County, presented as a supplement to the Locomotive Emission Study.

1990 NO_X INVENTORIES (BOOZ-ALLEN)

FIP area	NO_X tons per day	Percent of total inventory
Sacramento	9.0	5
Ventura	1.2	1
South Coast	30.5	2

Systems Applications International (SAI), under contract to EPA, recently completed a draft report entitled 1990 Emissions from Diesel Locomotives in Three California Federal Implementation Plan Areas. There are large differences between the emission estimates developed by Booz-Allen and SAI. As a result, EPA requests comment on the appropriate inventory and methodology for calculating inventories to use. Emission inventories calculated by SAI are summarized in the table below.

1990 NO_X INVENTORIES (SAI)

FIP area	NO_X tons per day	Percent of total inventory
Sacramento	7.8	4
Ventura	.7	0.5
South Coast	14.1	1

Due to the large differences between the SAI and Booz-Allen estimates, EPA requests comment on the appropriate inventory and methodology for calculating inventories to use.

To calculate emission reductions (in tons), due to a regulatory program, it is necessary to first project an unregulated baseline into the future. EPA used two sources to estimate baseline locomotive emissions without FIP controls: Information from the Booz-Allen studies and information from the Association of American Railroads, (AAR). Booz-Allen developed emission inventory estimates based on locomotive application for the years 2000 and 2010. These estimates are illustrated in the following table.

BOOZ-ALLEN ESTIMATION OF YEAR 2000 AND 2010 BASELINE INVENTORIES

Area	2000 NO_X (tons/day)	2010 NO_X (tons/day)
Sacramento	8.4	7.8
Ventura	1.1	1.1
South Coast	28.5	26.7

The validity of Booz-Allen's estimates depends upon the accuracy of its baseline emission inventory work and the soundness of its growth projections. EPA has concerns regarding Booz-Allen's estimates of growth because they are based directly on 1987 data. Several developments in the rail industry since 1987, however, could significantly affect growth projections, particularly in the South Coast.

EPA therefore requests comment on two alternative methods for calculating growth based on national industry-wide averages. The first calculates growth based on historic trends in tons of freight originated and national locomotive fuel usage. The second estimate uses ton-miles and national locomotive fuel usage. Data used to construct these analyses came from Locomotive Facts, 1993 Edition, published by the Association of American Railroads. These estimates are summarized in the tables below. A complete description of the EPA methodology used to arrive at the figures used in this section is included in the EPA support document entitled: Baseline Locomotive Emissions for the Three California FIP areas.

EPA ESTIMATION OF BASELINE UNREGULATED FIP AREA NO_X EMISSIONS BASED ON HISTORICAL TONS ORIGINATED INDUSTRY DATA (TONS/DAY)

	1990 baseline	2000 projection	2005 projection	2010 projection
Sacramento	9.0	9.4	9.6	9.8
Ventura	1.2	1.3	1.3	1.3
South Coast	30.5	31.9	32.6	33.3

EPA ESTIMATION OF BASELINE UNREGULATED FIP AREA NO_X EMISSIONS BASED ON HISTORICAL TON-MILES INDUSTRY DATA (TONS/DAY)

	1990 baseline	2000 projection	2005 projection	2010 projection
Sacramento	9.0	10.2	10.9	11.6
Ventura	1.2	1.4	1.5	1.6
South Coast	30.5	34.7	37.0	39.6

(v) Aircraft and Airports.

For purposes of this NPRM, EPA relies on CARB's inventory for estimates of aircraft emissions. Emissions from mobile sources at airports also include ground access vehicles and airport ground service equipment. Ground access vehicle emissions are included in the overall FIP area numbers for on-highway vehicles described above in section (d)(1). Ground service equipment emissions are included in the overall FIP numbers for nonroad equipment described above in section (d)(3)(i).

The work done specifically on airport control strategies for the FIP proposal uses more recent inventories based on research done by EEA with input from the airports and the local governments

in 1993, and in the final rule the EPA may use an updated version of this EEA inventory. Comments are requested on the most appropriate inventory to use for aircraft and airport related emissions.

(4) Mobile baseline inventory summary. The following tables summarize the baseline mobile source emissions in each of the three FIP areas.

SACRAMENTO MOBILE SOURCE VOC EMISSIONS

[Tons per summer day]

	1990
Highway vehicles	121.4
Off-Road vehicles/boats	11.6
Locomotives	.3
Ships	.0
Aircraft	1.5
Mobile equipment	5.7
Lawn/garden equipment	7.3
Total mobile	148

SACRAMENTO MOBILE SOURCE NO_X Emissions

[Tons per summer day]

	1990
Highway vehicles	126.3
Off-Road vehicles/boats	1.5
Locomotives	8.7
Ships	.0
Aircraft	1.7
Mobile equipment	36.8
Lawn/garden equipment	.1
Total mobile	175

VENTURA MOBILE SOURCE VOC EMISSION

[Tons per summer day]

	1990
Highway vehicles	43.9
Off-Road vehicles/boats	3.0
Locomotives	.04
Ships	.35
Aircraft	.58
Mobile equipment	1.4
Lawn/garden equipment	1.0
Total mobile	50.3

VENTURA MOBILE SOURCE NO_X EMISSIONS

[Tons per summer day]

	1990
Highway vehicles	41.9
Off-Road vehicles/boats	2.0
Locomotives	1.2
Ships	8.4
Aircraft	.7
Mobile equipment	8.5

VENTURA MOBILE SOURCE NO_X EMISSIONS—Continued

[Tons per summer day]

	1990
Lawn/garden equipment	.05
Total mobile	62.8

SOUTH COAST MOBILE SOURCE VOC EMISSIONS

[Tons per summer day]

	1990
Highway vehicles	880
Off-Road vehicles/boats	39
Locomotives	1.5
Ships	1.4
Aircraft	15
Mobile equipment	55
Lawn/garden equipment	24
Total mobile	1,016

SOUTH COAST MOBILE SOURCE NO_X EMISSIONS

[Tons per summer day]

	1990
Highway vehicles	668
Off-Road vehicles/boats	11
Locomotives	30
Ships	32
Aircraft	17
Mobile equipment	259
Lawn/garden equipment	.9
Total mobile	1,017

3. Air quality data and modeling analyses. The following sections describe the modeling analyses performed for each of the FIP areas. Included are brief descriptions of the pollution episodes modeled, the model application, and the base case simulations that resulted.

Specific EPA requirements for modeling procedures, data, and input parameters appear in Guideline for Regulatory Application of the Urban Airshed Model (EPA, 7/91) and Guideline for Regulatory Application of the Urban Airshed Model for Areawide Carbon Monoxide (EPA, 6/92). The UAM model uses an inventory of pollutant emissions, together with air quality and meteorological data, as input to a system of algorithms incorporating chemistry and dispersion, in order to simulate an observed pollution episode. Once a "base case" is developed that meets the minimum Guideline performance criteria, projected future emissions are used as input to simulate air quality in the attainment deadline year. Attainment is demonstrated when the modeled air quality with emission controls in effect is below the NAAQS throughout the geographical modeling domain.

For carbon monoxide, a local or "hot-spot" component is added to the UAM areawide component. UAM can simulate the accumulation of pollutants over several hours, from sources over a large area. By contrast, the CAL3QHC model is used to reflect the localized effect of idling motor vehicles at key congested intersections, which is not otherwise accounted for in UAM's typical one-mile resolution. For the attainment demonstration, the sum of the areawide and hot-spot component must be less than the NAAQS.

A modeling attainment demonstration is subject to several uncertainties. The meteorological and air quality inputs have their own associated uncertainties, both in measurement and in representativeness. In addition, not all variables can be measured for all hours, so default and interpolated values must be used. Processes such as chemical reaction and advection necessarily appear in the model in simplified form. The selected episodes may not represent all conditions conducive to high pollutant levels. Finally, the projection of the emissions is uncertain. In spite of these sources of uncertainty, photochemical grid modeling is the best tool that is available for determining the emission reductions that are needed for NAAQS attainment. However, refinements in model inputs that will occur over the next year are likely to change the combination and stringency of controls deemed necessary for attainment.

According to the EPA Guideline, control measures are to be used to adjust the emission inventory, which is then used as input to UAM. This captures the effect of the changes in spatial and temporal distribution of emissions. However, as of this writing the final modeling base cases are not ready for simulating the controls with UAM itself, since model inputs are undergoing revision to improve performance. Instead, for this FIP proposal, percent emission reduction targets were established using simulations of geographically and temporally uniform ("across-the-board") reductions. A series of these simulations are performed with various combinations of VOC and NO_X reductions. By interpolation, percent reductions of emissions of both pollutants that result in ozone concentrations less than the NAAQS are determined. Similarly, for carbon monoxide various across-the-board reductions of CO are simulated,

and then interpolated to find a target reduction that meets the CO NAAQS.

Though derived from simulation of the rectangular modeling domain, the targets are applied to the emission totals for just the nonattainment area, resulting in a maximum allowable level of emissions for the area. Attainment is demonstrated when the emissions from all sources after control measures are applied is less than this maximum. This method does not reflect the spatial and temporal variability in the effect of control measures, and so give a rougher estimate of controls needed than full UAM modeling would. Because of the limitations of this methodology, further analysis by the State and EPA may result in some changes in the control measures required between today's proposal and the final notice.

(a) *Sacramento ozone.* The Sacramento area was classified as a "Serious" ozone nonattainment area based on a design value of .16 ppm recorded at the Folsom station. This was based on 1987–1989 data; the 1990–1992 value was also .16 ppm. Exceedances of the ozone NAAQS occur in the Sacramento area about 15 times per year.

In order to simulate air quality for the SIP and other planning needs, CARB and the Sacramento local agencies started planning the Sacramento Area Ozone Study (SAOS) early in 1989, with intensive data collection performed during the summer of 1990. This involved an extended network of air quality and meteorological instruments, including on airplanes, to measure ozone and its precursors and also many meteorological inputs needed for UAM. The Sacramento Modeling Advisory Committee (SMAC) was established for technical oversight of the modeling effort, and includes regulatory, industry, and environmental group participants. CARB and its contractor, Systems Applications International, Inc., prepared a modeling protocol which was accepted by EPA as meeting EPA Guideline modeling requirements.

The episodes selected for modeling included days on which ozone maxima occurred in the Interstate 80 and Interstate 50 corridors, downwind of Sacramento. While the observed ozone peaks were less than the design value of .16, they are high enough to meet EPA guidelines for episode selection, especially considering the excellent database available for analysis. They had features typical of urban ozone episodes, including temperatures exceeding 100 °F, low winds, and a temperature inversion that tended to trap pollutants near the ground. Model performance statistics for a July 11–13, 1990 episode, while not outstanding, were within the performance goals set in EPA's Guideline. This episode's performance was judged adequate for determining emission reduction targets. A second episode, in August 1990, was strongly affected by upper air transport of pollutants into the area.

For the FIP proposal, only the July episode is being used. At the time the FIP proposal had to be designed, there were unresolved questions about model performance for the August episode. In addition, this latter episode was dominated by transport of pollutants from outside the Sacramento area. Through an analysis of wind trajectories, a contractor to EPA determined that at various times transport could occur from the San Francisco Bay Area in the west, and also from the San Joaquin Valley in the south. Conclusions on what additional controls, if any, are needed in these upwind areas will not be available for some time. In order to proceed with FIP development while the complex transport questions are resolved, EPA elected to proceed using the locally-generated ozone episode. The State's additional work on the August episode and/or work on the SARMAP modeling project may indicate what, if any, additional controls are needed in Sacramento or its upwind areas, in time for the final FIP. Since it is possible that transport analyses using SARMAP for the Sacramento area will not be ready even by the time of the final FIP, EPA invites comment on how transport should be addressed.

Using socioeconomic and VMT data from SACOG and other local planning agencies, an EPA contractor projected emissions to the year 1999. A series of "across-the-board" UAM simulations were then performed to determine an emission reduction target. This work showed that any of the combinations in the following table would result in attainment. Note that these are stated in terms of reductions from base-year 1990 levels, so that control measures would also have to make up for growth between 1990 and the attainment year, whether 1999 or 2005.

COMBINATIONS OF EMISSION REDUCTIONS FOR SACRAMENTO ATTAINMENT

VOC	71%	67%	61%	51%	40%
NO_X	10%	15%	20%	25%	30%

For the FIP proposal, anthropogenic emission reductions of 40 percent VOC and 30 percent NO_X were chosen as least disruptive of current residential, commercial, and industrial practices. Stated differently, for ozone attainment, 1999 or 2005 Sacramento area VOC emissions must be no greater than 60 percent of 1990 levels, and Nox emissions must be no greater than 70 percent of 1990 levels.

An additional simulation of interest involved the elimination of motor vehicle emissions. This translated to an ozone peak reduction about 5 percent greater than would be expected from an across-the-board reduction by the same amount of emissions. Thus the FIP may be somewhat conservative in assuring attainment, since it relies heavily on motor vehicle emission controls. This gives further assurance that the attainment demonstration method used will in fact result in attainment.

(b) Ventura ozone. Ventura County has been classified as a "Severe" ozone nonattainment area. The design value for the years 1987–1989 is based on the 0.17 ppm maximum hourly value recorded at Simi Valley during that period.

The FIP attainment demonstration modeling is based on air pollution episodes for which intensive field data were available through the 1984–1985 South Central Coast Cooperative Air Monitoring Project (SCCCAMP) field study. The SCCCAMP Exploratory Field Study consisted of intensive monitoring of meteorological and air quality variables over a geographical domain encompassing Ventura County as well as the southern half of Santa Barbara County. The study produced higher quality data than available through routine monitoring activities in the area, and thus provides a much more reliable basis for Urban Airshed Modeling (UAM) than more recent episode data. Two SCCCAMP episodes, September 5–7, 1984, and September 16–17, 1984, were selected from the period of the study. Both of these episodes have ozone concentration maxima near the area's current ozone design value. As a result, the age of this data should not detract from the validity of the modeling.

Previous analysis of the episodes was used to establish "across-the-board" reduction targets of 40 percent VOC and 40 percent NO_X from a 1987 emissions baseline in order to attain the ozone standard. This translates to emission targets of 57 tpd VOC and 46 tpd NO_X, which are used as the basis of the attainment demonstration provided in paragraph III.H.5. of this NPRM.

EPA plans, however, to significantly improve the attainment demonstration included in the final FIP notice. These improvements are discussed in the technical support document, and include reevaluation of the base-year emission estimates, modeling and attainment targets by the VCAPCD and its contractor, Alpine Geophysics, partially funded by grants from EPA. When performance of the model is considered to meet Guideline criteria, the model will be used to project air quality in the year 2005, including the effect of various SIP and FIP control strategies. The results of this analysis will be used to reevaluate the amount of VOC and NO_X reductions needed from each source category to demonstrate attainment.

In addition, previous analysis has indicated that pollutant transport occurred from the South Coast Air Basin to Ventura during the September 5–7 episode. EPA is supporting, through grant funds to the SCAQMD, a study of the impact of the transport from the South Coast Air Basin to Ventura County.

(c) South Coast ozone. The South Coast Air Basin was classified as an "Extreme" ozone area, based on the design value of 0.33 ppm recorded at the Glendora monitoring site.

The attainment demonstration for South Coast is based on the air quality modeling performed by the SCAQMD in 1991, potentially enhanced by the addition of several additional ozone episodes. The SCAQMD's 1991 modeling covered three episodes (June 1985, August 1987 and June 1987). Based on that effort, "across-the-board" reductions of VOC and NO_X of 90 percent and 70 percent respectively were determined to be sufficient to attain the ozone standard.

More recently, several modifications have been made to the original modeling effort, including raising the height of the top of the modeling grid, expanding the domain to the east to encompass the entire non-attainment area, and lowering the level of pollutants entering the domain through the top boundary of the model. These changes will be incorporated into the 1994 SIP modeling efforts and the FIP attainment demonstration.

In addition, the possibility of modeling three new episodes is being explored (July 13–15, 1987, September 7–9, 1987, and October 7–9, 1992). The September 7–9, 1987 episode represents meteorological conditions conducive to high ozone in Orange County. The October 7–9, 1992 episode is a weekend episode. The performance of the additional episodes is being evaluated and improvements are being made. However, the performance may not be adequate in time for the final FIP attainment demonstration. In case the additional episodes do not meet Guideline performance criteria, the final FIP attainment demonstration will be based on the original three episodes.

The 1991 modeling effort, updated to include the model improvements as well as additional episodes, if warranted, will provide the base case for the final FIP attainment demonstration.

(d) South Coast CO. The South Coast Air Basin was classified as a "Serious" area for CO, based on a design value of 23.4 ppm measured in 1988 at the Lynwood site. More recent data (1991–1992) indicate a lower design value of 16.4 ppm.

In preparing the 1992 CO SIP attainment demonstration, the SCAQMD selected a December 5–7, 1989 episode for modeling because this episode included the first and second highest 8-hour average CO concentrations for the years 1989–1990: 21.75 ppm and 18.3 ppm. High 8-hour CO concentrations often occur during periods of high emissions, low wind speeds, and poor vertical dispersion (e.g. a temperature inversion).

The CO modeling for the FIP proposal is based on the April 29, 1993 correction to the November 1992 CO SIP. The hot-spot modeling, which predicts high CO concentrations at intersections, was performed using the CAL3QHC model at four intersections. For the 2000 attainment year, the traffic volume used was the same as that used for 1989, based on the assumption that the traffic at the most heavily travelled intersections had reached a maximum and could not be increased.

The results of the base case episode areawide and hot-spot modeling are shown in the table below.

EIGHT HOUR AVERAGE CARBON MONOXIDE CONCENTRATIONS (IN PPM) AT VARIOUS INTERSECTIONS FOR THE YEAR 1989

Intersection	Max area-wide	Max hot-spot	Combined result
Long Beach and Imperial Highway	18.5	6.2	24.7
Wilshire and Veteran Avenue, Westwood	10.6	8.2	18.8
Sunset and Highland, Hollywood	13.4	8.3	21.7
La Cienega Boulevard and Century Boulevard	17.5	9.9	26.4

The emission inventory was projected to the year 2000 by the CARB using VMT projections provided by SCAG. The air quality for the year 2000 was predicted, using the UAM with the projected emission inventory and meteorological conditions from the selected episode. The projected air quality, displayed in the table below, shows that the NAAQS of 9 ppm would be attained at all sites based on the application of three control measures and considering the combined impact of the areawide and hot-spot modeling results.

Projected Eight Hour Carbon Monoxide Concentrations (in ppm) at Various Intersections for the year 2000 with the implementation of the CARB's LEV program, oxygenated fuels program and enhanced I/M program.

Intersection	Max area-wide	Max hot-spot	Combined result
Long Beach and Imperial Highway	7.6	1.0	8.6
Wilshire and Veteran Avenue, Westwood	4.4	1.4	5.8
Sunset and Highland, Hollywood	5.7	1.5	8.2
La Cienega Boulevard and Century Boulevard	7.0	1.5	8.5

Based on modeling performed for the SCAQMD SIP for CO, an analysis of the "across-the-board" reductions of the overall CO emissions necessary to attain the NAAQS was performed, and compared to the emission reductions resulting from measures in the proposed FIP. A reduction of 45 percent of the overall CO emissions was determined to attain the CO standard. Baseline and projected CO emissions are shown in the table below.

BASELINE AND PROJECTED FUTURE CARBON MONOXIDE EMISSIONS IN THE SOUTH COAST BASIN (TONS/DAY)

Emissions scenario	On-road mobile	Other mobile	Area	Total
1990 Base Case	6629	417	38	7084
2000 with enhanced I+M/LEV	3842	470	37	4349
2000 with enhanced I+M/LEV and oxygenated fuels	3413	470	37	3920

The year 2000 case emissions with Enhanced I/M, LEV and Oxygenated Fuels program are 3920 tons/days, a 45 percent reduction from the 1990 base case.

This analysis, based on "across-the-board" assumptions, indicates that the proposed measures will attain the standard by the year 2000. As for Sacramento and Ventura, the final FIP may be adjusted as appropriate to reflect further analysis by the State and EPA, if that analysis shows that different target levels and control strategies are technically more appropriate to show attainment.

4. State and local control measures. For all three FIP areas, most existing State and local control measures are included in the emission projections used to compare to the target emission levels. However, since EPA uses the CALI5a motor vehicle emissions model and its own non-road mobile source inventory, the associated emission reductions may not match those assumed by California in its own projected inventories.

5. Attainment demonstrations. Emission reductions projected from proposed FIP measures are discussed in sections 3.C through 3.G of this NPRM. To show attainment, the projected ton/day benefits of the FIP control measures are subtracted from the baseline inventories for the appropriate attainment year in each FIP area. The results are then compared to the attainment target in each area as discussed in section 3.H.3 of this NPRM. This calculation is provided in detail in the technical support document.

I. Transportation Conformity

Section 176(c) of the Clean Air Act requires transportation plans, transportation programs, and transportation projects which are funded with title 23 U.S.C. or Federal Transit Act funds or approved by the Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) of the U.S. Department of Transportation (U.S. DOT) to conform with the applicable implementation plan for a nonattainment area. After promulgation, the FIPs will be part of the applicable ozone and CO implementation plans for the Sacramento, Ventura, and South Coast nonattainment areas, and will therefore add certain criteria which must be satisfied before the MPOs for these areas or FHWA/FTA can find that a transportation plan, program, or project conforms. However, these additional criteria are limited, as explained below.

The proposed FIP will not alter the Criteria and Procedures for Determining Transportation Conformity which EPA promulgated on November 24, 1993 (58 FR 62188). The FIP itself will not impose any restriction on the selection and implementation of transportation projects which can be found to conform under the terms of the promulgated transportation conformity criteria and procedures. Furthermore, the FIP does not direct the expenditure of funds designated under title 23 U.S.C. or the Federal Transit Act to any specific projects or type of project.

The State of California is responsible for submitting to EPA a conformity SIP revision by November 24, 1994, as required by 40 CFR 51.396. The conformity SIP revision is a requirement added in the 1990 Clean Air Act Amendments, is not mentioned in any of the settlement agreements, and therefore is not an obligation for EPA under the court orders.

Because it establishes strategies for Sacramento and Ventura to attain by 2005, the FIP will establish motor vehicle emissions budgets for VOC and NO_X for those FIP areas for the year 2005. In addition, the CO attainment demonstration will establish a CO budget for the year 2000 for the South Coast. These budgets play no role for the purposes of conformity until the FIP is promulgated. (This is in contrast to state-submitted budgets, which do play a role upon submission to EPA.) Conformity determinations made after the FIP is promulgated must use the FIP's budgets for the years indicated and any subsequent analysis years, until the SIP process establishes different budgets for subsequent years (e.g., state-submitted plan with budgets is approved). At a minimum, the conformity of the transportation plan must be redetermined using the FIP's budget within 18 months of the FIP's promulgation (see 40 CFR 51.400(b)(3)(iii)). The conformity of transportation improvement programs must be redetermined within six months following the adoption of a transportation plan (see 40 CFR 51.400(c)(3)).

There is some ambiguity in Clean Air Act section 176(c) and EPA's conformity rule regarding whether the proposed FIP, when final, will create VOC and NO_X budgets for the South Coast, and if so, for which years. While the FIP analysis contains emissions projections for 2000, 2005, and 2010, EPA believes that its application of Clean Air Act section 182(e)(5) to the FIP means that the South Coast FIP will not specifically allocate 2010 emission reductions between transportation and other sources. Furthermore, there are no specific emission reduction requirements that the FIP must satisfy in 2000 and 2005. Therefore, the South Coast FIP will establish no emissions budget binding on the MPOs or U.S. DOT.

The FIP will not alter the fact that the motor vehicle emissions budgets for 1996, which are contained in the 15 percent SIPs submitted by California for these three nonattainment areas (required by Clean Air Act section 182(b)(1)(A)), must be used for the purposes of conformity according to the requirements of 40 CFR 51.448. If EPA disapproves such a SIP or finds it incomplete, the 1996 emissions budget shall be used for the purposes of conformity for 12 months following the final disapproval or incompleteness finding, if EPA explicitly states that the SIP submittal would have been considered approvable or complete with

respect to requirements for emission reductions if all committed measures had been submitted in enforceable form (see 40 CFR 51.448(a)(3) and (c)(1)(iii)). However, if there are other reasons for the disapproval or incompleteness finding, time clocks will be started after which new plans and TIPs may not be found to conform and existing plans and TIPs will lapse.

Budgets contained in any future state-submitted attainment and post-1996 RFP plans must also be observed. Such state-submitted budgets may not replace budgets established by the final FIP until the state-submitted budgets have been approved by EPA.

Demonstrations of conformity to the FIP may use the same motor vehicle emissions model which EPA uses to demonstrate attainment in the final FIP, unless EPA announces a revision to the model. (In that case, a grace period for use of the latest motor vehicle emissions model applies, as described in 40 CFR 51.414.) The final FIP will be based on a VMT growth estimate which is the MPO's own growth projection at the time of FIP promulgation. Difficulty demonstrating consistency with the FIP's budget would therefore most likely be due to VMT growth which is higher than the MPO expected.

The FIP does not propose any TCMs that are eligible for funding under title 23 U.S.C. or the Federal Transit Act. The Employee Commute Options program proposed for Sacramento might be eligible for such funding if it were adopted by local authorities, but EPA itself is not an eligible recipient.

Therefore, determinations of conformity to the FIP will not have to demonstrate timely implementation of TCMs in the FIP.

J. FIP Implementation by State and Local Agencies

Congress has determined that the primary responsibility for air pollution control rests with state and local governments. CAA section 101(a)(3). Moreover, as discussed elsewhere in this NPRM, EPA lacks many of the authorities, instruments, and established local and regional organizations and trained staff to administer, on a daily basis, comprehensive air pollution control initiatives such as these FIPs, which affects hundreds of thousands of individual sources and activities. Massive federal intrusion would inevitably result if EPA were to shoulder the chief burden of enforcing the California FIP.

Accordingly, EPA has attempted to design the FIP rules to ensure that, wherever possible, State and local implementation is encouraged and facilitated by the FIP's regulatory approach. Thus, for example, the FIP generally employs local California rule organization and terminology in the proposed stationary and area source rules, including the new source review permitting rules (40 CFR 52.284 through 52.289, and 52.304).

1. State and local obligation to incorporate FIP requirements in operating permits. In Title V of the 1990 CAA Amendments, Congress established an important new state responsibility. Title V and EPA's implementing regulations require state and local air pollution control agencies to adopt and submit for EPA approval a regulatory program for issuing operating permits to major stationary sources, sources covered by emissions standards for hazardous air pollutants pursuant to section 112 of the Act, sources covered by any new source performance standards set under section 111 of the Act, and affected sources under the acid rain program. The operating permits must contain necessary limits and conditions to assure compliance with all applicable requirements of the Act, including all provisions of the applicable SIP and the FIP. Title V includes specific requirements for EPA oversight and for sanctions against states for failure to adopt, administer, or enforce the operating permit program.

Title V establishes the following timeframes for state and EPA action:

1. Program submittal by November 15, 1993;

2. EPA approval or disapproval within one year of program submittal, with the possibility of interim approval for up to two years;

3. EPA application of sanctions for failure to submit approvable programs, and establishment of a federal program by November 15, 1995, if a state or local program has not been approved;

4. Source operating permit application within one year after EPA approval (or interim approval) of a state or local program, or after EPA establishment of a federal program;

5. Issuance of all permits within three years after EPA approval of a state or local program or promulgation of a federal program; and

6. Operating permit application within one year of commencement of operation for new sources subject to New Source Review.

On July 21, 1992, EPA promulgated 40 CFR part 70, specifying the minimum elements of state operating permit programs (57 FR 32250). EPA's promulgation makes clear the Agency's interpretation that approvable operating permit programs must provide that the applicable permit include FIP emission limitations and other FIP requirements (57 FR 32258).

As noted, operating permits are required for all "major" stationary sources, as well as air toxics sources subject to requirements under section 112 of the Act (unless exempted), and sources subject to any new source performance standard under section 111.[105] In ozone nonattainment areas, section 182 defines major source according to the area's classification and the source's potential to emit VOC or NO_X: 50 tons per year in "Serious" areas, 25 tons per year in "Severe" areas, and 10 tons per year in "Extreme" areas.[106]

Consequently, each air pollution control agency in the FIP areas must, by virtue of Title V, incorporate and enforce all applicable FIP requirements in operating permits for every source with a potential to emit at or above the level prescribed in section 182 for the area's classification. Title V and EPA's operating permit regulations do not, however, mandate adoption of an operating permit program for nonmajor source categories (for example, in "Severe" areas, sources with a potential to emit less than 25 tons per year of VOC and NO_X). Nevertheless, some nonmajor sources are subject to operating permit requirements because they are major sources of air toxics,[107] and for these sources all applicable FIP requirements must be included in the permit and enforced by the air pollution control agency.

2. Full transfer of authority through delegation. EPA hopes that the State and local air pollution control agencies will quickly adopt SIP rules that are identical or comparable to the FIP rules, and which could be approved before the FIP regulation is scheduled for initial

[105] Part 70 provides that certain nonmajor sources, including those subject to standards under section 111 and 112, may be exempted from the obligation to obtain a part 70 permit until EPA completes a rulemaking to determine how the program should be structured for nonmajor sources. Section 70.3(b)(1).

[106] For this purpose, Title I treats VOC and NO_X sources somewhat differently. In areas qualifying for an exemption under section 182(f), NO_X sources with the potential to emit less than 100 tons per year would not be considered major sources. None of the three FIP areas covered in this Notice, however, qualify for the exemption, and thus the major sources cutoff is the same in these areas for NO_X as for VOC.

[107] Certain nonmajor sources subject to section 111 or 112 standards may also be subject in the future to air toxics and operating permit requirements. New section 112 standards may apply to area sources (nonmajor) as well as major sources; EPA will determine whether operating permits are required for these sources when the standards are promulgated.

implementation. If a State or local agency adopts an essentially indistinguishable rule, EPA intends to delegate full implementation responsibilities to the agency immediately following State or local adoption, without opportunity for public comment, unless the delegation is under the authority of section 112, and not covered by a good cause exception. See EPA's enabling guidance for section 112(1). EPA will publish a notice of this delegation in the **Federal Register** and will otherwise try to ensure that affected sources are aware of that a State or local agency has assumed program implementation responsibilities. Subsequently, EPA will take normal SIP approval action on the State or local substitute rule, simultaneously rescinding the FIP rule in the jurisdiction's control area.

As noted in the discussion above regarding the California consumer product rules, EPA is issuing federal rules for these categories because the State has so far chosen not to submit the rules for SIP action. Since EPA's FIP rules are essentially identical, EPA intends to delegate to CARB the authority to implement the program if CARB has not yet submitted its own rules for SIP approval, and if California adopts adequate authority to implement the FIP. In the event that CARB fails to implement its own rules or amends the State's rules so that they become less stringent than the otherwise applicable federal rule, EPA will continue to directly enforce the provisions of the FIP consumer product rules.

In the future, EPA intends to promulgate in 40 CFR part 71 provisions for delegation of certain federal operating permit program responsibilities to State and local agencies with adequate authority to administer the program but lacking EPA approval of the State or local program. EPA could use this procedure to grant State and local agencies the authority to issue operating permits prior to full EPA approval of the agencies' permit program.

3. Full transfer of authority through SIP approval. A State or local agency may adopt a rule that is comparable to the FIP rule in emissions capture, but is significantly different in approach. In that event, immediate transfer of implementation and enforcement authority through delegation is inappropriate without opportunity for public review and comment. Instead, EPA will try to "parallel process" SIP approval and FIP rescission as the means to expedite State or local assumption of authority.[108] This will minimize the time during which affected sources are subject to overlapping and conflicting obligations, and during which EPA and the State or local agencies must undertake redundant permitting, compliance plan review, and enforcement.

4. Partial transfer of authority through delegation. To the extent that State law allows agencies to perform certain implementation responsibilities for FIP rules even without State and local rule adoption, EPA will encourage these agencies to agree to undertake, on EPA's behalf, administrative and substantive roles of FIP implementation consistent with the agencies' authorities and capabilities. These roles could include: procedural and engineering review of permit applications and compliance plans, preparation of draft permit and plan approval or disapproval actions, administration and oversight of compliance reporting and recordkeeping requirements, conduct of source inspections, and preparation of draft notices of violation. Under these circumstances, EPA would retain the responsibility for actual federal permit issuance, where the FIP requires permits, and for enforcement actions against sources violating FIP provisions. EPA would also maintain direct authority to terminate, modify, or revoke permits, as well as responsibility for disapproving compliance plans.

Partial transfer of FIP implementation authorities would be effected through delegation by MOU between the EPA Region IX and the air pollution control officer or executive officer of the responsible agency. EPA will announce the terms of the partial delegation in a **Federal Register** notice, and will inform affected sources, with or without additional notice and opportunity for comment.

IV. Administrative Requirements

A. Executive Order 12866

Under Executive Order 12866, (58 FR 51735 (October 4, 1993), the Agency must determine whether the regulatory actions are "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory actions" as ones that are likely to result in rules that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of the Executive Order 12866, it has been determined that the proposed Federal Implementation Plans are "significant regulatory actions". As such, these actions were submitted to OMB along with regulatory impact assessments of the proposed actions and salient alternatives.

The estimated annualized control cost to meet the Ozone NAAQS is $150 million in the Sacramento Metro Area as well as in Ventura County with 2005 as the attainment date for both areas. The estimated annualized control cost to meet the Ozone NAAQS in the South Coast Air Basin is $3 to $4 billion with 2010 as the attainment date. The incremental cost to achieve the Carbon Monoxide NAAQS in the South Coast Air Basin is zero. The enhanced inspection and maintenance provisions to achieve the Ozone NAAQS will together with other acceptable state measures also accomplish the Carbon Monoxide NAAQS objective. The estimated cost for the enhanced inspection and maintenance provision was reflected in the cost to achieve the Ozone NAAQS for the South Coast. The attainment date for the Carbon Monoxide NAAQS is 2000.

However, the environmental and economic gains from the Federal Implementation Plans are real and potentially large in terms of the human population affected as well as the amount of crop and forest acreage affected. Furthermore, because of the jointness of certain control measures, benefits will not be limited to reductions in ozone and carbon monoxide concentrations. Benefits will also accrue in the form of reductions in nitrogen dioxide, particulate matter and air toxics concentrations.

Scientific and data limitations preclude a quantitative and comprehensive assessment of benefits. Without such an assessment, the Agency cannot determine whether these FIPs are allocatively efficient.

[108] In parallel process SIP approval, EPA, with the consent of the State, proposes approval of draft rules which may not yet have been fully adopted and submitted by the State. Final SIP approval could not occur until after all procedural SIP requirements (including State adoption and SIP submittal) have been completed.

Due to the short deadlines in the court ordered schedule for this rulemaking, OMB did not have time to carry out its normal review under Executive Order 12866.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 and 1992 EPA guidelines require the identification of potentially adverse impacts of Federal regulations on small entities. Small entities include small businesses, organizations, and governmental jurisdictions. These proposed rules may adversely affect such entities. Consequently, a Regulatory Flexibility Analysis is required and has been prepared.

The potential impact of the proposed rules will vary among affected entities both large and small. In some cases, cost savings may accrue to affected entities. In other instances, cost increases may be relatively modest. In other instances, control costs may exceed 10 percent of anticipated sales. However, due to uncertainties regarding source identification, the Agency cannot distinguish between small emission sources owned by small entities and those owned by larger firms. Furthermore, uncertainties in the cost and process economics data preclude specific findings on where averting and mitigating measures are warranted.

C. Paperwork Reduction Act

The Paperwork Reduction Act requires that a Federal agency prepare an Information Collection Request to obtain OMB clearance for any activity that will involve collecting information from ten or more non-Federal respondents. The proposed Federal Implementation Plans necessitate preparation of an Information Collection Request. The information requirements associated with the proposed rules include reporting, monitoring, and recordkeeping and will affect the private sector as well as local, state, and Federal authorities.

The information collection requirements have been estimated and summarized in the Information Collection Request and forwarded to OMB for review and approval under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* Until OMB approves the Information Collection Request, the reporting, monitoring, and/or recordkeeping aspects of these rules are not effective. OMB is currently reviewing the Information Collection Request and supporting documentation. Given the potential for changes in elements of the package prior to promulgation, OMB will not approve the Information Collection Request until that time.

D. Federalism Implications

A federalism assessment has not been conducted under Executive Order 12612. However, federalism effects have been considered through the development of the proposed rules and will continue to be addressed in the period between proposal and promulgation. In particular, the Agency has worked closely with the local and state authorities to reflect their concerns in the fashioning of these rules.

Appendix I. Enhanced In-Use Compliance Program

A. Light-Duty Vehicles and Trucks

1. Introduction

As described in Section III.D.2.a and b of this preamble, VOC and NO_X emissions from light-duty vehicles (LDVs) and trucks (LDTs) represented significant fractions of the total VOC and NO_X emission inventories in the three FIP areas in 1990. Light-duty vehicles have remained a major source of emissions even though emission standards for light-duty vehicle exhaust hydrocarbon emissions have dropped more than 90 percent since 1970. The continuing high emissions derive from increases in VMT, the long life of vehicles in the temperate California climate and the failure of many current in-use vehicles to meet the standards to which they are certified when new.

California has adopted very stringent light-duty vehicle emission certification standards known as the LEV program. This program will assure that new vehicles sold in California will have very low emissions. This will be accomplished through use of advanced emission controls and a new onboard diagnostic (OBD) requirement which is intended by CARB to identify for the driver and the repair technician whenever an emission control system has degraded sufficiently to increase emissions 50 percent above the certification standards.

EPA expects the California Low Emission Vehicle (LEV) program will substantially reduce emissions of cars and light-duty trucks, compared to the federal standards. However, despite the use of advanced technologies and the OBD requirements, CARB projects LEVs will exceed their certification standards in-use, although, for the reasons noted in Section III.D.1.a(2), by a much smaller margin than has occurred in the past. Emissions above the certification standards, referred to as excess emissions, will occur because some models may experience more in-use deterioration than expected, or because individual vehicles experience component failure or improper maintenance which is not immediately corrected by the various existing in-use compliance programs, including enhanced I/M. Because the magnitude of the emission reductions needed for attainment is so great, the adoption of further measures to reduce these remaining excess in-use emissions will help reach attainment of the ozone standard.

EPA is therefore seeking comments on the need for and benefits of adopting an enhanced in-use compliance program which would provide extra emission reductions above and beyond the substantial reduction provided by the California LEV program, and cause in-use emissions to approach the certification standards.

EPA believes that much of the responsibility to ensure low in-use emissions must rest with vehicle manufacturers, since owners, although they have a significant part to play cannot ensure performance that is not available from the hardware. Traditionally, the incentive for manufacturers to build emissions durability into their vehicles has been limited. Owners do not have the ability, nor often the interest, to ensure their emissions control equipment is performing properly.

This section presents EPA's proposed enhanced in-use compliance program for LDVs, LDTs and certain medium-duty vehicles (MDVs). MDVs, as defined by CARB, have a gross vehicle weight rating (GVWR) between 6000 and 14,000 pounds. For those MDVs above 8500 pounds GVWR, CARB gives manufacturers the option of certifying as a specific and complete vehicle, or as a heavy-duty engine which can be placed in any heavy-duty vehicle. Since MDVs certified as complete vehicles are much more analogous to LDVs and LDTs than heavy-duty engines, chassis-certified MDVs are being included here in the enhanced in-use compliance program for light-duty vehicles and trucks. The enhanced in-use compliance programs for heavy-duty engines and nonroad engines are similar in purpose and are presented in Sections B. and C. of this appendix below.

The light-duty enhanced in-use compliance program attempts to encourage manufacturers to build additional durability into their emission control equipment by increasing the manufacturers responsibility for repairing problem vehicles identified by the inspection and maintenance (I/M) and recall programs. The I/M program is revised by shifting responsibility for

repair to manufacturers if a significant percentage of vehicles are not performing close to certification levels in use. The potential responsibility shift should encourage manufacturers to build additional durability and improved repairability into their vehicles. The lower allowable I/M emission levels will ensure that vehicles are repaired if not performing satisfactorily. Also, the recall program is extended for the full useful life and all vehicles are tested and included provided they have not been obviously tampered or abused. Additionally, MDV emissions standards are reduced as significantly as light-duty standards have already been reduced.

2. New Vehicle Program

New vehicle certification, and particularly the associated emission standards, play an important role in defining the types of emission control hardware placed on vehicles. These standards also essentially define the best level of emission control that can be expected from in-use vehicles. The majority of current in-use emissions come not from vehicles meeting their emission standards, but from vehicles which exceed their standards. EPA believes that the CARB LEV program with enhanced I/M will substantially reduce the occurrence of vehicles which exceed their standards by a substantial margin. However, emission predictions indicate that on average vehicles will not meet their emission standards in use. Therefore, the focus of EPA's proposed enhanced in-use compliance program is on two programs, recall and I/M, which can provide additional incentives to vehicle manufacturers to build the lowest emitting vehicles possible. However, no changes to CARB's motor vehicle control program are necessary to implement these two approaches to an enhanced in-use compliance program for new LDVs, LDTs and MDVs.

EPA is proposing that the enhanced in-use compliance program be applied to all new vehicles that are defined under California regulations as passenger cars, light-duty trucks, or medium-duty vehicles, beginning in model year 1999. This would include all on-highway vehicles up to 14,000 pounds GVWR, with the exception of those MDVs which are certified as engines under both CARB's program and EPA's enhanced in-use compliance program described in Section B. Any of these vehicles offered for sale or first registered in California would need to comply with the enhanced in-use standards described below.

The application of this program on a statewide basis is considered necessary because vehicle traffic flow into and out of the areas covered by the FIPs is large. Any program constrained to only the FIP areas would be extremely difficult to implement and enforce. EPA is concerned that the benefits of the enhanced in-use compliance program may be diminished if a large number of vehicles first registered in other states are brought into California. These vehicles may be less expensive because they would not have to meet enhanced in-use or California low emission vehicle standards. EPA proposes, therefore, very strict restrictions on importation of 49-state vehicles (Section d.2.h. of the Preamble).

Because new vehicle programs such as this one are relatively slow in achieving their full emission reduction benefit due to the time required for fleet turnover, EPA solicits comments on the feasibility of implementing this program earlier, such as via a partial phase-in in model year 1998. The emissions reduction achieved by earlier implementation could reduce the need for increased stringency in other source categories.

As described below, the proposed enhanced in-use compliance program concerns only non-methane hydrocarbon (NMHC) and NO_X emissions, and does not cover CO emissions. California is projected to be in attainment with the NAAQS for CO by 2000 as required by the Clean Air Act, before the enhanced in-use compliance program would have had a chance to achieve any significant CO emissions reductions. In addition, the FIP addresses only ozone non-attainment and thus focuses only on ozone precursors, NMHC and NO_X.

EPA's proposed requirements for the enhanced in-use compliance program are presented in Sections A.(2)(a) and A.(2)(b), respectively. Descriptions of new recall and I/M requirements under the enhanced in-use compliance program follow in Sections A.(3) and A.(4).

a. *New light-duty vehicles and light-duty trucks.* California's LEV program greatly reduces the emissions permitted from new LDVs and LDTs. CARB's 100,000 mile NMOG and NO_X LEV standards for LDVs and small LDTs are 0.09 and 0.3 gram per mile (g/mi), respectively. Higher numerical standards apply to Transitional LEVs (TLEVs) and lower numerical standards apply to Ultra LEVs (ULEVs). By model year 2000, CARB's fleet average NMOG standards require the average vehicle to be slightly below the emission standards applicable to LEVs. Assuming a reactivity adjustment factor of 0.98 for NMOG (that for California Phase II reformulated gasoline), CARB's LEV standards are 70 and 50 percent below the Federal Tier I NMHC and NO_X standards, respectively. By model year 2003, CARB's fleet average NMOG standard for LDVs and small LDTs is even more stringent, 0.062 g/mi.

Under the enhanced in-use compliance program, EPA proposes that LDVs and LDTs comply with the in-use composite NMHC and NO_X standards contained in Table AI.A–1. EPA is proposing a single composite NMHC recall standard (for each vehicle class) that will apply throughout the useful life of the vehicle. The proposed NO_X standards for post-1998 model year LDVs and LDTs are the same as CARB's standards for LEVs. To afford a smoother transition to this program, EPA proposes that up to 25 percent of a manufacturer's 1999 model year LDV and LDT sales fleet may comply with "transitional" enhanced in-use standards also contained in Table AI.A–1. The transitional enhanced in-use NO_X standards are the same as CARB's NO_X standards for TLEVs. EPA is proposing this transition, because CARB's fleet average NMOG standard for the 1999 model year will still allow a significant number of TLEVs to be sold. However, after 1999, the fleet average NMOG standard becomes sufficiently stringent to prohibit any significant number of TLEVs from being sold. Given that the great majority of vehicles will be meeting the NO_X standards applicable, it is not clear why any vehicles should be able to be sold which only meet the significantly less stringent TLEV standards (usually a factor of two higher than the LEV standards).

PROPOSED CERTIFICATION AND IN-USE STANDARDS FOR POST-1998 MODEL YEAR LDVS AND LDTS

Vehicle class	Category	Composite* NMHC, (g/mi)	NO_X (g/mi)	
			Half life	Full life
LDVs and LDTs (0–3750 lbs LVW)	Enhanced In-use	0.20	0.20	0.30

PROPOSED CERTIFICATION AND IN-USE STANDARDS FOR POST-1998 MODEL YEAR LDVS AND LDTS—Continued

Vehicle class	Category	Composite[a] NMHC. (g/mi)	NO_X (g/mi)	
			Half life	Full life
LDTs (3751–5750 lbs LVW)	Transitional	0.29	0.40	0.60
	Enhanced In-use	0.26	0.40	0.50
	Transitional	0.33	0.70	0.90

[a] Exhaust NMHC emissions plus evaporative hydrocarbon emissions; evaporative emissions include running loss, diurnal, hot soak emissions expressed on a gram/mile basis.

For NMHC, EPA is proposing a composite (exhaust plus evaporative) NMHC standard, as opposed to separate standards for exhaust NMHC emissions and the many types of evaporative-related NMHC emissions. This composite standard will allow greater flexibility, as well as reduced costs, while ensuring that the necessary in-use performance is attained.

In order to determine compliance with a composite NMHC standard, it was necessary to develop a method for combining exhaust emissions and the three different components of evaporative emissions (i.e., diurnal and hot soak emissions (measured on a gram/test basis) and running loss emissions (measured on a gram/mile basis)). Resting loss emissions are another form of evaporative emissions. However, there is no current standard or separate test for resting losses because they are measured during the various parts of the evaporative emissions test procedure, particularly during the diurnal emission test, and are accounted for in those results.

In support of its efforts to model in-use emissions (e.g., MOBILE5a), EPA has developed a methodology for combining exhaust and evaporative emissions into a composite emission factor. It essentially consists of converting those components not measured on a gram per mile basis to grams per mile and then summing the individual components. The key conversion factors are the number of trips per day (for hot soaks) and the number of miles driven per day (for hot soaks and diurnals). Estimates of these factors over the useful life of LDVs and LDTs were taken from MOBILE5a. Their use in converting individual NMHC emission levels into a single composite level or standard is shown in the equation below.[109]

$$\underset{(g/mi)}{\text{Composite Emissions}} = \underset{(g/mi)}{\text{Exhaust}} + \frac{\left[\underset{(g/test)}{\text{Diurnal}} + \underset{(g/test)}{\text{Hot soak}} \times \left(4.2\,\frac{\text{trips}}{\text{day}}\right)\right]}{28.28\,\frac{\text{miles}}{\text{day}}} + \underset{(g/mi)}{\text{Running Loss}}$$

EPA has not included refueling emissions in this equation given the uncertainty with respect to the use of onboard vehicle controls in California. EPA requests comments on their exclusion and on the option of including refueling emissions in the composite standard should California vehicles be subject to the onboard refueling requirement.

Refueling emissions would be relatively simple to include, as refueling emissions in terms of grams per gallon could simply be divided by fuel economy to obtain NMHC emissions per mile. The fuel economy used could either be measured over the FTP when exhaust NMHC and NO_X were measured (an urban only fuel economy) or taken from the certified urban/rural composite fuel economy value for that engine family. Including refueling emissions in this manner would give some credit for high efficiency vehicles, but would still represent additional testing and resultant cost. Given the high level of refueling emissions control expected with onboard controls, EPA believes that including refueling emissions in the composite standard would not justify the cost of the additional testing.

EPA believes that the composite NMHC standards contained in Table AI.A–1 are feasible, particularly given the flexibility afforded in trading off exhaust and evaporative emissions. For example, a vehicle meeting the current CARB LEV standards for exhaust NMOG emissions and CARB's evaporative emission standards applicable to all LDVs and LDTs would comply with the proposed enhanced in-use standards. The CARB LDV/LDT standards are 0.05 gram/mile for running losses and a total of 2.0 grams/test for diurnal and hot soak emissions combined. A vehicle meeting the running loss standard would contribute 0.05 g/mi or less to the equation presented above. The contribution of a vehicle meeting the 2.0 grams/test emission standard would depend on the breakdown between diurnal and hot soak emissions. The newly revised CARB and EPA evaporative emissions test procedures contain a one hour hot soak test and a multi-day diurnal test. This requires very stringent control of resting loss emissions, which occur during both tests. As the 2 gram standard requires the almost total elimination of NMHC emissions through the evaporative emission control canister, EPA expects that the bulk of in-use emissions will be resting losses. Given that hot soak emissions only include a single hour of resting losses, albeit at somewhat elevated temperatures, EPA expects that hot soak emissions will be very low relative to diurnal emissions and that the bulk of the 2 grams will be diurnal emissions. Specifically, assuming that vehicles meeting the 2.0 grams/test evaporative emission in-use emitted 1.9 grams/test diurnal and 0.1 gram/test hot soak, the overall contribution in the above equation would be 0.082 g/mi. With running losses of 0.05 g/mi, this represents a total non-exhaust NMHC emission of 0.132 g/mi.

CARB's 50,000 and 100,000 mile LDV NMOG standards for LEVs are 0.075 and 0.09 g/mi, respectively. While CARB's NMOG measurements include the direct

[109] "Average Trips/Day and Miles/Day in MOBILE5 for Light Duty Autos," EPA memorandum from Lois Platte to the Record, January 4, 1994.

measurement of aldehydes, which are undermeasured by 1–2 percent in the measurement of NMHC by the flame ionization detector (FID), this is balanced by the 0.98 reactivity adjustment factor allowed for CARB Phase II reformulated gasoline. Thus, numerically, for gasoline vehicles at least, NMOG and NMHC emissions will be roughly equivalent. A LDV certified to CARB's LEV standards which just met its exhaust and non-exhaust emission standards in use would exceed the proposed enhanced in-use composite NMHC standards by 0.007 g/mi at 50,000 miles and 0.022 g/mi at 100,000 miles. EPA believes that it is extremely unlikely that a vehicle would just meet all 4 of these NMHC emission standards simultaneously during certification with all of its emission controls performing as designed. Manufacturers utilize significant safety margins in certification to avoid the costs of modifying their design and retesting. Therefore, EPA does not expect that emission levels in certification will have to be reduced to meet the enhanced in-use standards relative to those otherwise occurring. The feasibility of meeting these standards in use is discussed in the next section addressing recall standards and testing.

As noted earlier in describing the enhanced in-use NO_X standards, EPA is proposing to allow up to 25 percent of a manufacturer's 1999 model year sales to meet transitional enhanced in-use standards. Comparing EPA's proposed transitional enhanced in-use standards to CARB's individual emission standards for non-exhaust NMHC and CARB's exhaust NMOG emission standards for TLEVs results in essentially the same comparison as that shown above for LEVs. EPA requests comments on the proposed enhanced in-use standards for LDVs and LDTs and on the methodology used to combine exhaust and non-exhaust NMHC emissions.

Manufacturers will have to demonstrate in their application for certification to EPA that each of their vehicle engine families will comply with the enhanced in-use standards described above, as well as the I/M standards described in Section A.(4) below. As discussed in Section A.(4), the enhanced in-use I/M standards are numerically less stringent than those described above. Also, the I/M 240 test does not include cold start emissions, which form the bulk of FTP NMHC emissions. Thus, EPA expects that the demonstration of compliance with the enhanced in-use standards will focus on those standards described above. For the great majority of post-1998 model year California vehicles, this demonstration will consist of the submission of information already required by CARB along with the calculation of composite NMHC emissions using the equation presented above and a showing that composite NMHC and NO_X emissions comply with the enhanced in-use standards contained in the table "Proposed Certification and In-Use Standards for Post-1998 Model Year LDVs and LDTs." The application would also include such other information as necessary to show that the vehicle engine family will meet these standards under typical in-use conditions (i.e., absent obvious tampering or abuse) over its full useful life, which would be enforced through the enhanced in-use compliance recall program.

As mentioned above, these standards apply to vehicles certified to operate on any fuel: Gasoline, diesel fuel or otherwise. This should not be a problem for hydrocarbon fuels such as natural gas or propane, as NMHC is an appropriate measure of their organic emissions vis-a-vis ozone production. However, organic emissions from alcohol fueled vehicles are highly oxygenated and not included in NMHC. EPA proposes that alcohol fueled vehicles have the same numerical standards for organics as shown in Table AI.A–1, but in terms of organic material hydrocarbon equivalent (OMHCE) emissions. OMHCE consists of the mass of both non-oxygenated and oxygenated HCs, with the mass of oxygen excluded (40 CFR 86.090–2). Such standards would apply to the same categories of vehicles to which the current EPA OMHCE standards apply (40 CFR 86.090–8 through –11 and any versions of these sections which apply to later model year vehicles). EPA requests comments on the use of OMHCE standards and the categories of those vehicles (i.e., fuel types) to which they should apply.

EPA also proposes to accept, for the purpose of certifying enhanced in-use compliance vehicles, the use of evaporative emissions and running losses measured using CARB's test procedure. For recall testing, however (see Section A.(3) below), due to lower cost, EPA proposes to use its own test procedures with the substitution of CARB's fuel specifications and ambient temperatures.

In their certification application for the 1999 model year, manufacturers will also have to identify which engine families are only meeting the somewhat less stringent transitional enhanced in-use standards. Manufacturers will also have to monitor the sales of these models to ensure they represent no more than 25 percent of total sales. As mentioned earlier, manufacturers would also have to certify that their vehicles would meet the enhanced in-use I/M standards proposed in Section A.(4) below. However, as that standard is 0.20 g/mi exhaust HC over a test which excludes cold start emissions, EPA expects this to be very easy to do relative to the certification and recall FTP standards. Natural gas fueled vehicles will have the greatest difficulty meeting this I/M 240 standard relative to compliance with the enhanced in-use FTP standards, because of these vehicles' relatively high emissions of methane relative to NMHC. The enhanced in-use standards over the full FTP exclude methane, (i.e., are in terms of NMHC) and CARB's NMOG standards greatly diminish methane's importance. However, the I/M 240 test includes methane (i.e., measures total HC). Overall, though, natural gas vehicles have very low levels of NMHC emissions and, given the warmed up nature of the I/M 240 test, are still expected to be able to meet this standard with little difficulty. EPA requests comments on how these vehicles should be addressed in conventional and enhanced in-use compliance I/M.

EPA also proposes that all enhanced in-use compliance vehicles provide easy access for I/M pressure and purge testing. Otherwise, the types of tests performed, the fuels used and other certification application details can continue to be performed in accordance with CARB rules.

b. New medium-duty vehicles. CARB's MDV standards for 1995 and later model years apply to vehicles between 6,000 and 14,000 pounds GVWR, not otherwise qualifying as LDTs. However, CARB allows, at the manufacturer's discretion, MDVs over 8500 pounds GVWR to be certified as engines according to their requirements for heavy-duty engines. EPA proposes that all 1999 and later model vehicles certified under CARB's LEV program as MDVs be subject to the enhanced in-use standards for MDVs. Engines certified under CARB's requirements as heavy-duty engines would be subject to EPA's enhanced in-use compliance program for heavy-duty engines described in Section B. below.

The table below ("Proposed Certification and In-Use Standards for MDVs under the Enhanced In-Use Compliance Program") contains the composite NMHC and NO_X emission standards being proposed for MDVs under the enhanced in-use compliance

program. EPA is proposing a single composite hydrocarbon recall standard (for each subclass of MDVs) that will apply throughout the useful life of a MDV. Compliance with the composite NMHC standard would be performed in the same manner as that for LDVs and LDTs, using the equation presented above in Appendix I.A.2.a. These standards are designed to provide generally the same stringency of control as the enhanced in-use standards for the heavier LDTs presented in the previous section.

EPA believes that the technology being applied to heavier LDTs to meet the enhanced in-use standards can be applied to MDVs as well. EPA requests comments on the applicability of standards equivalent to the enhanced in-use standards for LDTs to MDVs.

PROPOSED CERTIFICATION AND IN-USE STANDARDS FOR MDVS UNDER THE ENHANCED IN-USE COMPLIANCE PROGRAM

Test weight (lbs) [a]	Category	Composite [b] NMHC (g/mi)	NO_X (g/mi)	
			Half life	Full life
0–3750	Enhanced In-Use	0.28	0.2	0.3
	Transitional	0.35	0.4	0.6
3751–5750	Enhanced In-Use	0.31	0.4	0.5
	Transitional	0.40	0.7	1.0
5751–8500	Enhanced In-Use	0.34	0.6	0.8
	Transitional	0.45	1.1	1.5
8501–10000	Enhanced In-Use	0.37	0.7	0.9
	Transitional	0.50	1.3	1.8
10001–14000	Enhanced In-Use	0.43	1.0	1.4
	Transitional	0.60	2.0	2.8

[a] Test weight is the average of curb weight and GVWR.
[b] Exhaust NMHC emissions plus evaporative hydrocarbon emissions; evaporative emissions include running loss, diurnal, and hot soak emissions expressed on a gram/mile basis.

As mentioned earlier, EPA is proposing to allow up to 25 percent of a manufacturer's 1999 model year MDV sales fleet to comply with "transitional" standards that are less stringent than the enhanced in-use standards. The table above also contains the proposed standards for such "transitional" vehicles. The proposed composite standards for the transitional MDVs are roughly equivalent in stringency for MDVs as they are for LDTs. As with the enhanced in-use compliance LDTs, EPA is proposing a single composite hydrocarbon standard (for each subclass of MDVs) that will apply throughout the useful life of a transitional MDV.

California's definition of MDVs includes trucks which EPA includes in its definition of LDTs (i.e., those up to 8500 pounds GVWR), as well as trucks EPA considers heavy-duty trucks (i.e., those between 8501 and 14,000 pounds GVWR). In its past rulemakings establishing HC, CO and NO_X standards for LDTs, EPA found no technological concerns that would limit the application of engine or catalyst technology to only those trucks below 6000 pounds GVWR (50 FR 10651). EPA did find sufficient reason to limit catalyst technology to only those heavy-duty trucks below 14,000 pounds GVWR, but this distinction coincides with CARB's split between MDVs and heavy-duty vehicles. The primary means of meeting CARB's LEV standards will likely be an additional catalyst which begins operation very quickly to reduce cold-start emissions (e.g., an electrically heated catalyst). EPA is unaware of any evidence which would limit the use of this technology to only those vehicles up to 6000 pounds GVWR, particularly given the fact that trucks up to 14,000 pounds GVWR already are catalyst equipped. EPA requests comments on all of the proposed MDV standards, including the assumptions made regarding the levels of evaporative emissions from MDVs.

As will be the case for LDVs and LDTs, manufacturers would continue to certify to CARB's certification MDV standards. However, here, with regard to MDVs, the demonstration of compliance with the enhanced in-use standards would be more significant, given CARB's standards for post-1998 MDVs. Manufacturers would be still be required to submit information already required by CARB along with the calculation of composite NMHC emissions using the equation presented above and a showing that composite NMHC and NO_X emissions comply with the enhanced in-use standards contained in the above table. The application would also include such additional information as may be necessary to show that the vehicle engine family will meet these standards under typical in-use conditions for its full useful life, which would be enforced through the enhanced in-use recall program. Manufacturers would also have to demonstrate compliance with the enhanced in-use I/M standards. However, again, this will be much easier than that with respect to the full-life certification and recall standards.

For the 1999 model year only, manufacturers will have to designate those engine families certifying to the less stringent transitional enhanced in-use standards and monitor sales to ensure sales of these engine families stays at or below 25 percent of total sales. These standards would be applicable to all MDVs regardless of fuel type. As for LDVs and LDTs, all post-1998 model year MDVs will be required to provide easy access for I/M pressure and purge checks. Comments are requested on all these requirements and on the extent to which these requirements complement CARB's existing LEV program for MDVs.

For flexibility, EPA is also proposing optional engine-based standards for diesel-powered and incomplete vehicle engines used in MDVs with GVWR between 8,501 and 14,000 pounds. (Under CARB's motor vehicle control program, such MDV engines have the option to certify to engine-based standards.) Manufacturers of such MDV engines may elect to comply with the chassis-based program discussed in this section or they may elect to certify to the engine-based standards described in Section B. of this appendix. The reader is directed to that section for more information on the proposed engine-based standards and other MDV/engine requirements under this program.

c. Authority. As explained above in Section III.A.2.a of the preamble, in promulgating a FIP under section 110(c), EPA may take any actions that the state could take. As section 209 of the CAA provides that California is not

preempted from adopting and implementing a motor vehicle emissions control program provided its program satisfies the criteria of section 209(b), EPA believes that it, acting on behalf of California in the context of a FIP, may adopt a motor vehicle program or supplement California's own motor vehicle program provided that EPA's actions would satisfy the criteria of section 209(b) for a waiver of federal preemption. That section provides that EPA is to grant California a waiver of preemption if the State determines that its standards "will be, in the aggregate, at least as protective of public health and welfare as applicable federal standards."

Section 209(b) further provides that no waiver is to be granted if EPA finds that (A) the determination of the State that the standards are, in the aggregate, at least as protective of public health and welfare as the otherwise applicable federal standards is arbitrary and capricious, (B) State standards are not needed to meet compelling and extraordinary conditions, or (C) the State standards and accompanying enforcement procedures are not consistent with section 202(a). EPA has interpreted the consistency criterion as meaning that California motor vehicle standards and accompanying enforcement procedures must satisfy the leadtime requirements of section 202(a)—that they be technologically feasible within the leadtime provided, taking into account the cost of compliance—and not impose inconsistent certification test procedure requirements such that the same vehicle could not be used to comply with both state and federal certification requirements (see e.g., 43 FR 32182 (July 25, 1978), 40 FR 30131 (July 18, 1975), 43 FR 1839 (January 12, 1978)).

EPA believes that the enhanced in-use compliance program for light and medium-duty vehicles that would be applicable to vehicles and engines in California under the proposed FIP would satisfy the section 209 waiver criteria. Thus, California could undertake the enhanced in-use compliance program described in this appendix, and, therefore, EPA has authority under section 110(c) to undertake the proposed programs.

With respect to the protectiveness of the standards, all of the proposed standards are at least as protective as the otherwise applicable federal standards (e.g., the Tier 1 NO_X and NMHC standards in the case of light-duty vehicles and the generally applicable NO_X and NMHC standards in the case of the vehicles and engines covered by the medium-duty and heavy-duty aspects of the enhanced in-use compliance program). Indeed, these standards are at least as stringent as the comparable standards that California has already adopted and for which waivers have already been granted.

With respect to the need to meet compelling and extraordinary conditions, EPA has repeatedly found that California's air quality problems satisfy the need criterion of section 209(b) (see, e.g., 49 FR 18887 and 18890 (May 3, 1984), 58 FR 4144 (January 13, 1993)). Moreover, the magnitude of the reductions in emissions needed to reach attainment in the FIP areas, including mobile source emissions (discussed above in Section III.H.2 of the preamble), provides ample evidence of the need for more stringent motor vehicle emission standards in California.

Finally, with respect to the criterion of consistency with section 202(a), EPA believes that its proposed enhanced in-use compliance program is consistent with both the technological feasibility and certification elements of that criterion. For the reasons explained below, EPA believes that the enhanced in-use compliance program is technologically feasible within the leadtime provided, taking into account the cost of compliance. Moreover, no aspect of the enhanced in-use compliance program establishes any new certification test procedures that are inconsistent with either existing federal or California test procedure requirements. Consequently, EPA believes that its proposed enhanced in-use compliance programs satisfy this prong of section 209 as well.

3. Enhanced In-use Compliance Recall Program

Historically, EPA has enforced emissions standards through an in-use testing program commonly referred to as the "recall" program (39 FR 44375, Dec. 23, 1974), as provided by section 207(c) of the CAA. This section requires manufacturers to take remedial actions if EPA finds that a "substantial" number of vehicles, although properly maintained and used, fail to conform to an applicable emissions standard during their useful life.

EPA is proposing a recall program under the enhanced in-use compliance program that is different in several aspects compared to the program established pursuant to CAA section 207(c) for 49 state vehicles and engines. The differences and the rationale for them are described fully in the paragraphs below. The recall provisions described in this section apply to 1999 and later model year light-duty vehicles, light-duty trucks, and medium-duty vehicles certified to the chassis-based standards described in the previous section. These recall provisions also apply to on-highway HDEs and nonroad engines, except as noted in the recall provisions contained in section B for HDEs and section C for nonroad engines below.

EPA has based the enhanced in-use compliance recall program on its current recall program, where possible. Thus, aspects of the program not specifically discussed here will be the same as in the current program (see 40 CFR part 85 subpart S). For example, all test procedures utilized will be current Federal procedures, with the exception of ambient temperatures used in the evaporative emission and running loss testing and the fuel used in all testing. EPA will utilize CARB's ambient temperatures and CARB Phase II reformulated gasoline in recall testing.

If CARB decides to enforce the enhanced in-use compliance recall program and assume responsibility for the recall program, CARB will likely use its own detailed recall methodologies, for which it has received waivers under section 209 of the CAA, with appropriate changes to ensure compliance with the changes described below. EPA requests comments on the use of current recall practices where not modified below, as well as the possible performance of recall testing by CARB using their procedures.

The proposed enhanced in-use compliance recall program is discussed in detail in the following sections: (a) Recall standards (b) consideration of maintenance, tampering, and abuse, (c) test vehicle selection, (d) testing throughout the vehicles' useful life, (e) vehicle family selection, (f) criteria for requiring recall, (g) mandatory owner participation in recall repairs, (h) geographic extent of recall, (i) technical feasibility, and (j) alternatives.

a. Recall standards. The key premise of the enhanced in-use compliance recall program is that vehicles meet their certified emission levels throughout their entire useful life. The standards which will apply under the enhanced in-use compliance recall program for LDVs, LDTs and MDVs will be those in the tables presented above in Section A.(2). Calculation of composite NMHC emissions will be according to the equation also presented in Appendix I.A.2.a. above.

b. Consideration of maintenance, tampering, and abuse. For 49 state vehicles, CAA section 207(c) limits manufacturers' responsibility to those vehicles that have been "properly maintained and used." Manufacturers

are able to exclude vehicles that do not receive such care or cannot be proven to have received such care from the recall testing pool or, if they believe that such vehicles have been included, challenge the validity of any findings made. Due to this limitation, EPA generally only tests vehicles that have been maintained and used in strict accordance to the owner's maintenance manual. It is particularly difficult to find older vehicles with sufficient documentation or to prove "proper care." The current program, therefore, provides little incentive to the manufacturer to design and build vehicles with durable emissions performance under normal or typical maintenance and use.

As mentioned in the introduction in Section 2.d of the preamble, the primary goal of the enhanced in-use compliance program is to ensure that vehicles remain in compliance with emissions standards in use over their full life under normal operating conditions. If motor vehicles are to cease to be a major source of ozone-related emissions and noncompliance with the NAAQS for ozone, manufacturers must make greater efforts to ensure continued in-use emissions performance. Therefore, EPA proposes not to exclude vehicles from recall testing unless they have been subject to obvious abuse or tampering. Obvious abuse or tampering includes: (1) Less than one half the recommended level of oil in the engine, (2) the deliberate removal of the catalyst or evaporative canister, (3) the turbocharging of a naturally aspirated engine, and (4) damage to the engine or emission controls resulting from a vehicular accident. EPA is proposing to exclude such vehicles from recall testing because such actions can severely affect vehicle emissions and the manufacturer has no reasonable way of controlling or limiting the impact of these items on emissions. EPA requests comments on other specific items that would meet these criteria.

In addition, EPA will not perform a vehicle "tune-up" or perform other emission related repairs or maintenance before testing. EPA believes that pre-recall maintenance would defeat the purpose of the enhanced in-use compliance recall program, which is to further encourage durable designs. Even hoses whose proper connection is critical to acceptable emission performance can be designed to be unlikely to disconnect during normal maintenance and use.

As with current recall testing, EPA will inspect vehicles prior to testing to determine if obvious abuse or tampering has occurred. As is current EPA practice, the vehicle manufacturer can be present at time of vehicle procurement and testing to help ensure that vehicles are appropriately screened for obvious abuse and tampering problems.

It is also important to point out, as will be discussed in more detail in the next section, that only vehicles which are subject to the new enhanced I/M program are candidates for enhanced in-use recall testing. Participation in this I/M program should encourage owners to perform reasonable maintenance and deter emission related tampering.

Again, EPA requests comments on the types of abuse or tampering which would allow for the exclusion of vehicles from the recall sample. Commenters should provide supporting rationale and data to the extent practicable so that EPA may ascertain the severity, likelihood, and possible mitigating actions.

c. Test vehicle selection. EPA proposes to select vehicles for enhanced in-use compliance recall testing from the portion of the vehicle family population that is subject to the enhanced I/M testing program described above. This would essentially limit testing to only vehicles that are registered in one of the three FIP areas, unless the State of California opts to adopt enhanced I/M procedures in other areas of the state. EPA is proposing to limit the sampling in this way because recall testing resources are limited and the vehicles registered in the three FIP areas are the most relevant with regard to air quality in these areas. Furthermore, problems that cause noncompliance within this subpopulation of vehicles are very likely to exist in the population as a whole. The reverse may not be true because I/M will be insuring reasonable maintenance and catching and correcting emissions problems. EPA believes it would be inappropriate to require a recall campaign due to a problem found outside of a FIP area that enhanced I/M would have possibly already corrected.

EPA requests comments on the above sampling methods. EPA also requests comments on other alternatives, including limiting the sampling to vehicles subject to basic I/M as well as enhanced I/M or sampling from the entire state's vehicle population.

d. Testing throughout the vehicle's useful life. EPA proposes to conduct recall testing throughout the useful life of the vehicles specified in the applicable regulations. EPA would also require any necessary remedial actions to be performed on all vehicles in the vehicle family still within their useful life. EPA believes that conducting recall in this manner is consistent with the intent of the enhanced in-use compliance program, which is to hold the manufacturers responsible for in-use emissions compliance over the full useful life period.

EPA recognizes that vehicles are often used for periods longer than the useful life period specified in the applicable regulations. In California, over 40 percent of onroad light-duty vehicles have over 100,000 miles on their odometers. EPA is concerned about the emissions of vehicles after the end of the vehicle's useful life because, although such vehicles will still be subject to I/M testing, manufacturers will be no longer responsible for ensuring that the vehicles remain in compliance with the in-use recall standards. Comments are requested on whether other in-use compliance programs such an enhanced OBD, which remain effective beyond the vehicle's statutory useful life, are feasible and may result in equal or greater emission reductions than the proposed enhanced in-use recall program.

For heavy-duty engines (discussed in section B. below), which are rebuilt several times and are used significantly longer than the useful life specified by the manufacturer on a regular basis, EPA is proposing rebuild regulations (see section B.) for engines beyond their originally certified useful life. EPA requests comments on adopting comparable rebuild provisions for light-duty and medium-duty vehicles that are certified to chassis-based standards in order to ensure that these vehicles continue to meet in-use recall standards throughout their operating lives.

e. Vehicle family selection. As with the 49 state recall program, EPA may select vehicle families for enhanced in-use compliance recall testing at its discretion. For the 49 state recall program, EPA examines a variety of items when choosing a vehicle family for recall testing including testing data from certification and production line audits, production volumes, and defect reports. EPA is likely to also examine these items for the enhanced in-use compliance recall program. Additionally, EPA is planning to examine enhanced I/M testing results for patterns of failure within exhaust engine families.

EPA also plans to track the various technologies being used to meet enhanced in-use standards. If EPA believes that a technology may be more susceptible to in-use emissions performance deterioration, EPA may choose to proceed with recall testing of vehicle families using that particular

technology. Special concerns may arise related to the use of a particular fuel or, more likely, related to the complexity of a technology and therefore its additional areas for failure.

f. Criteria for requiring recall. EPA proposes to, at its discretion, require a manufacturer to recall vehicles and take remedial action if the average emissions of the test vehicles for any regulated pollutant exceed the applicable emissions standard. EPA proposes to retain the discretion not to order a recall if it determines that a recall action is not warranted. Manufacturers would be able to present data and reasoning to EPA for the Agency to consider in making a final decision on whether or not to proceed with a recall. However, EPA is concerned that the recall program may not be viewed as a strong enforcement tool if its authority is too discretionary. EPA wishes to make clear its intent to hold manufacturers responsible for in-use failures of essentially all vehicles except those that have been subject to obvious abuse or tampering.

EPA also recognizes that outlier vehicles in the recall sample could cause an inappropriate recall. The impact of an outlier on the results of a recall test could be substantial because the recall test sample could be relatively small (about 10 vehicles). EPA would allow manufacturers to provide additional test data showing that a vehicle is unrepresentative (i.e., an outlier), and this data may then be considered by EPA in making a final determination.

EPA is also concerned that vehicles representing a small percentage of the engine family population (e.g., 5 percent or less) could exhibit such relatively high emissions as to cause the average emissions of the entire engine family to greatly exceed the enhanced in-use standards. For example, if five vehicles per one hundred failed to their pre-control levels of 7 or 8 g/mi NMHC and the remaining vehicles had zero emissions, the engine family would still exceed its standard by 100 percent. EPA is concerned about the emissions impact of this engine family, but is also concerned about the cost, inefficiency and vehicle owner inconvenience of a traditional recall where 95 out of 100 vehicles would be returned to the dealer but require no repair. While the enhanced I/M program will reduce the likelihood of occurrence, such situations may still be common. Comments are requested on alternatives to conventional recall in such cases. Comments on innovative onboard diagnostic capabilities or other screening techniques are also requested. One such approach is discussed in section (j).

EPA requests comments on the recall criteria and authority described above for the enhanced in-use compliance recall program. EPA encourages any recommendations for adopting different criteria be supported by data and detailed rationale.

g. Mandatory owner participation in recall repairs. Because of the potential large negative impact that vehicles exceeding the standards have on air quality, EPA believes that owners should be required to bring their recalled vehicles in for repairs. While EPA's 49 state recall program does not require owners of recalled vehicles to go to a dealership for needed repairs, California does require recall repairs to be performed (see section 2129 of title 13 of the California Code of Regulations) and the requirement is enforced by denying vehicle reregistration until the repairs have been made. (Driving unregistered vehicles is, of course, unlawful and prohibited.) California currently begins to deny reregistrations six months after the manufacturer begins its remedial action plan. EPA proposes that vehicles subject to the enhanced in-use compliance program also be subject to the same mandatory repair requirements as other California vehicles.

h. Geographic extent of recall. EPA is proposing that the enhanced in-use compliance program apply to all vehicles sold in California for both enforceability and environmental reasons. EPA therefore proposes that any required recalls also apply to all vehicles of the affected engine family which have been sold throughout the state. This will also include vehicles from all model years that are part of the same engine family. Engine families consist of vehicles with the same basic emissions design and performance and problems with a single model year's vehicles should also exist on other model years' vehicles. EPA requests comments on the extension of recalls to all vehicles statewide versus only those vehicles registered in the three FIP areas.

i. Technical feasibility. As discussed in Section A.(2) above, EPA does not expect manufacturers to have to reduce the low-mileage emissions of properly operating vehicles in order to comply with the proposed recall provisions. The degree that vehicle design changes are necessary to better ensure improved in-use emission performance under this program will depend on the technologies and cost tradeoffs manufacturers will make in response to CARB's existing LEV and OBD programs and the enhanced I/M program. If a manufacturer has sufficient confidence that its vehicles will comply with the enhanced in-use standards, there will obviously be no technological or cost implications.

However, if a manufacturer lacks such confidence, then vehicle designs could be improved. In general, the durability of every aspect of a vehicles' current and future emission control system can always be improved. The primary issues are cost and the level of reliability. EPA expects each manufacturer to review the durability of each of its emission control system components and assess whether it is adequate given the additional financial disincentives of the emissions in-use compliance program which would occur should it fail. The decision would then be made to further improve design durability or accept the current durability as adequate.

If a manufacturer decided that it needed to increase the probability that its vehicles would comply with the enhanced in-use standards under typical conditions of maintenance and use, EPA believes that numerous methods exist with which this can be done. For example, vehicular emission control can be divided into two basic components, efficient combustion and catalytic conversion. Efficient combustion relies primarily on fuel management and sufficient ignition spark, including its timing. Efficient catalytic conversion depends most heavily on fuel management and sufficient active catalytic material. Fuel management in turn depends heavily on the onboard computer and the feedback control mechanism (i.e., the oxygen sensor) and the fuel injector.

EPA believes that CARB's existing fuel detergent program will help address manufacturers' concerns related to fuel injector, intake valve and combustion chamber deposits and the possible associated degradation of emission control performance. EPA also believes that fuel injection technology has reached a sufficient stage of development such that maintenance free operation is possible (i.e., EPA is not aware of any required maintenance for fuel injectors on LDVs, LDTs, or MDVs). Catastrophic failure of an individual injector can always occur, but this should be immediately identified by the OBD system. Likewise, recent electronic ignition systems are also maintenance free, with the exception of the spark plugs and possibly the ignition wires. If improvements were desired in these areas, gold and platinum tipped spark plugs could be considered. These plugs are already in limited use and offer the advantage of improved durability.

Manufacturers have already utilized, to a varying degree, high voltage ignition to lessen the importance of wire separation, as the higher ignition voltage will cross a sizable gap in the wire as well as across the spark plug tip. Onboard computers have clearly generated a track record of proper operation over the life of the vehicle.

NO_X emission control as well as efficient combustion also depends on the proper operation of exhaust gas recirculation (EGR) valves. The primary in-use problem with EGR valves is plugging or sticking due to combustion products, particularly unburned fuel which can solidify with prolonged heating. A manufacturer could decide to redesign its valves by smoothing its channels, eliminating sharp bends, better lubricating valve axles, etc., as well as changing the valve location to control temperature and deposit formation.

The two remaining emission controls, the oxygen sensor and catalysts (both under body and quick light-off) are widely recognized as key components in maintaining proper in-use emissions performance. A manufacturer could decide to improve the durability of the active surface of the oxygen sensor or change its placement in the exhaust to limit deposits and thermal degradation. Likewise, more durable catalyst washcoats exist relative to those commonly used and the overall loading of catalytic material can also be increased.

Regarding evaporative emissions, its more basic operation should make a manufacturer's durability assessment much easier. The key components besides the onboard computer are the purge valve, the vapor lines and the charcoal canister. The design of a durable purge valve should be much easier to assess and improve if necessary, relative to an EGR valve, given the clean nature of the vapor flowing through the valve. Non-metal vapor lines can be replaced with metal lines if necessary to provide increased confidence of leak-free operation. With adequate purge, charcoal canister should not fall below their in-use design capacity with time or usage.

While uncertainty exists as to exactly how manufacturers will choose to comply with this program, the main issue appears to be one of further improvements in durability versus cost tradeoffs. The program appears to be technologically feasible. As for the costs, estimates of which are contained in the draft RIA supporting this FIP, EPA believes them to be reasonable.

j. Alternatives. The objective of the proposed enhanced in-use compliance recall program is to identify and correct systemic design defects or lack of durability within an engine family. However, as discussed in section A.(f)., the proposed enhanced in-use standards could be exceeded if just a few percent of the vehicles within an engine family had high emissions, even though the rest emitted at well below the standard. In this situation, recalling the entire engine family to correct random defects which result in a few high emitters is inefficient, inconvenient and costly. Hopefully, the enhanced I/M program will identify and correct these high emitters. However, in some situations such as a defect in the cold start emission control system, the I/M program will not identify the problem. On-board diagnostics could identify the problem, but it does not guarantee that the owner will seek repair of the defect in a timely manner. This may be especially a concern for older vehicles where the relative cost of repairs compared to the value of the car is high.

An alternative to the proposed enhanced in-use recall program involves the use of remote sensing to quickly identify individual vehicles with excess emissions. Remote sensing of emissions is now required by federal law in all non-attainment areas subject to enhanced I/M, including the three FIP areas. A potentially more effective approach could utilize recent advances in electronics which allow communication between the vehicle's on-board diagnostic system and a roadside transmitter. This type of communication with moving vehicles has been developed to substitute for toll booths on highways and bridges, and for collecting use-fees for heavy trucks. CARB will soon be demonstrating the application of this technology to on-board diagnostics. Under this concept, when prompted, a small transmitter on the vehicle would communicate the VIN and if the on-board computer has sensed any emission control system defects. The owners of vehicles with defects would be notified by mail to repair the vehicle and report to a smog inspection station for verification. This is the same remedy that will soon be required of owners whose vehicles fail a remote or roadside emission test in an area with enhanced I/M.

The advantages of such a system include assuring that vehicles with high emissions are repaired quickly, rather than up to two years later at the next I/M test. This would help lower average in-use emissions closer to the certification standard. In addition, this approach would remain effective throughout the vehicle's life, an important advantage over the proposed enhanced in-use compliance program, since over 40 percent of California's light-duty on-road vehicles have exceeded their 100,000 mile useful life.

Like the I/M 240 test, the objective of CARB's OBD program is to identify nearly all problems causing excess emissions. Thus, this same remote detection system could also lower the cost of periodic inspections since the inspection could be performed by driving by an unmanned sensor at any time. The cost of such an inspection would be minimal, and could quickly offset the cost of equipping new vehicles with an on-board transmitter.

The major disadvantage of this approach is that the remote sensing technology has not been fully demonstrated. Thus, EPA cannot yet propose the details of a regulation which would implement such a requirement as part of the FIP. However, EPA is seeking comments on whether this approach has sufficient merit to be considered as an alternative or complement to the proposed enhanced in-use compliance program.

4. I/M-Based Recall Program

The I/M aspect of the enhanced in-use compliance program (also referred to as the I/M-based recall program) proposed today applies only if a significant portion of vehicles do not meet the enhanced in-use I/M standards. The enhanced I/M test equipment, test procedures, and other physical elements of the program will remain unchanged from that described in Section III.D.2.c. of this preamble or from any equivalent program adopted by California. All 1999 and later model year California LDVs, LDTs and MDVs covered by the enhanced in-use standards described in Section A.(2) above will be included in this program, regardless of fuel type. (See section III.D.2.c. of this preamble for a description of I/M for non-California vehicles.)

Overall, the enhanced in-use I/M program does three things. First, it implements a more stringent set of I/M emission levels (hereafter referred to as the enhanced in-use I/M standards). Second, it creates a maximum fraction of any particular exhaust emission engine family which can fail the more stringent enhanced in-use I/M standards without consequence for the manufacturer (hereafter referred to as the liability threshold). Third, once the failure rate of the enhanced in-use I/M standards exceeds the liability threshold, it initiates a selective recall and makes the vehicle manufacturer liable for the repairs resulting from subsequent I/M failures. As described above, the purpose of this program is to

encourage manufacturers to place a high design priority on in-use vehicle performance and ease of repair in order to ensure that vehicles comply with their certification standards in-use.

The sequence of events at a typical enhanced I/M test facility will be as follows. Vehicles brought for testing will be measured against two sets of standards: the conventional enhanced I/M standards described in Section III.D.2.c. of this preamble and the lower enhanced in-use I/M standards described below. Unless a significant portion of vehicles in any engine family have failed the enhanced in-use I/M standards, vehicle owners will only be required to repair their vehicles if they fail the conventional enhanced I/M standards. However, the number of vehicles failing the more stringent enhanced in-use I/M standards will be tallied. If the percentage of a specific engine family failing the enhanced in-use I/M standards exceeds the liability thresholds described below, two events occur. First, future vehicles of this particular engine family failing the more stringent enhanced in-use I/M standards now must be repaired and retested. Second, the manufacturer, and not the vehicle owner, will be responsible for the repairs for vehicles still within their statutory useful life which have not obviously been abused or tampered with in a manner likely to affect emissions (i.e., an I/M-based selective recall). As described below, the enhanced in-use I/M standards are numerically higher than the enhanced in-use FTP emission levels. Thus, as long as vehicles are performing close to the standards to which they are certified, only the conventional enhanced I/M program will apply and there will be no post-manufacturing consequence for the manufacturer of the enhanced in-use I/M program.

The sections below describe the nature of the proposed enhanced in-use I/M program including testing, enhanced in-use I/M standards, threshold for manufacturer liability, tracking of enhanced in-use I/M test results, repair responsibility, geographic coverage, and other administrative aspects of the program.

a. Testing. As discussed in more detail in Section III.D.2.c. of this preamble, three types of I/M tests will be performed on light- and medium-duty vehicles. First, exhaust emissions will be measured using the I/M 240 test. Second, purge and pressure tests will be performed to establish the evaporative system's functionality and integrity. Finally, a visual inspection will be performed to check for missing canisters, catalysts, etc. which would indicate that obvious tampering or abuse has occurred. Vehicles with obvious tampering or abuse which fail the enhanced I/M 240, pressure, or purge tests will require repair at the owner's expense.

EPA proposes to include post-1998 model year diesel- and alternative-fueled (CNG and LPG) vehicles in enhanced I/M testing, as well as gasoline vehicles. Evaporative system checks would be revised where appropriate for alternative-fueled vehicles, since some fuel types (e.g., diesel fuel and pressurized fuels) produce little or no evaporative emissions as long as their fuel tanks are not ruptured. Diesel-fueled vehicles are currently exempt from most I/M programs, because their HC emissions are inherently low and their historical control of NO_X emissions has not depended on technologies that deteriorate significantly over time. Alternative-fueled vehicles have been exempted because of their low numbers. However, as the emission standards applicable to post-1998 model year vehicles will be very stringent regardless of fuel type, EPA is proposing that every vehicle be tested under the enhanced I/M program, regardless of fuel type. EPA requests comment on the testing of diesel- and alternative-fueled vehicles in the proposed enhanced in-use I/M program.

b. Proposed enhanced in-use I/M standards. The table below ("Proposed Enhanced In-Use I/M Standards for LDVs and LDTs") summarizes the enhanced in-use I/M standards proposed in this NPRM for 1999 and later model year LDVs and LDTs. Passage or failure of these standards will be used to determine compliance with the liability thresholds. These standards will also be used to determine the need for repairs and retesting after the liability threshold has been exceeded.

PROPOSED ENHANCED IN-USE I/M STANDARDS FOR LDVS AND LDTS

Vehicle class	Category	Exhaust THC* (g/mi)	NO_X (g/mi)	
			Half life	Full life
LDVs & LDTs (0–3750 lbs LVW)	Enhanced In-Use	0.20	0.30	0.45
	Transitional	0.34	0.60	0.90
LDTs (3751–5750 lbs LVW)	Enhanced In-Use	0.29	0.60	0.75
	Transitional	0.44	1.05	1.35

*An evaporative system pressure/purge check will also be performed during the inspection. If the vehicle passes the pressure/purge check, the evaporative emissions system is assumed to be functioning properly.

As mentioned above, under enhanced I/M, exhaust emissions will be measured over the I/M 240 test procedure, a shortened version of the certification test procedure. Emissions measured over the I/M 240 test procedure and the certification test procedure are somewhat different for a number of reasons. First, different vehicles with the same overall FTP emissions will perform differently over each segment of the FTP. Because only part of the certification driving cycle is used in the I/M 240 test, individual vehicles with the same FTP emissions may produce somewhat different I/M 240 emissions. Also, and most importantly for NMHC emissions, the absence of a cold start in the I/M test will tend to reduce variability and result in a lower g/mi value for the I/M test. Other factors contribute to greater variability between the full FTP and I/M 240 testing. These factors include the type of driving a vehicle encountered immediately previous to the test, the specific fuel in its tank, and numerous other environmental factors which can be controlled in certification and recall testing, but which cannot be controlled in I/M testing, such as temperature and humidity. Therefore, an important objective of the enhanced in-use I/M standards is to provide an incentive for manufacturers to design vehicles which do not have significant emissions increases when operated under such typical in-use conditions as compared to the highly standardized FTP. If vehicles continue to be produced with a high degree of emissions sensitivity, their increased emissions under typical use (versus the FTP) would substantially add to the

emissions burden caused by light- and medium-duty vehicles.

Considering the factors just described and non-vehicle related test variability, the enhanced in-use I/M standards in the table above ("Proposed Enhanced In-Use I/M Standards for LDVs and LDTs") are being proposed. EPA believes these levels represent a reasonable balance between granting a cushion between certification and I/M emissions levels, and in establishing manufacturer liability and the need to provide a greater incentive for the design of emission controls systems which maintain low emissions under variations in typical in-use conditions. (For example, the proposed enhanced in-use THC I/M standard is 0.20 g/mi, 2.2 times higher than CARB's 100,000 mile certification NMHC standard for LDV LEVs of 0.9 g/mi.)

Due to the fact that the I/M 240 test only measures warmed-up exhaust emissions, compliance with these standards should not be any more technologically challenging or costly than compliance with the recall standards already discussed in Section A.(3) above. The only issue could be a vehicle's emissions variability over the IM240 test relative to the full FTP, as mentioned above. There is no inherent technical reason for exhibiting this variabiity, except a lack of concern that vehicles' emission controls operate fully over all types of normal driving and not only over the exact driving sequence embodied in the FTP. In fact, many if not most vehicles already exhibit similar control over both tests.

The enhanced in-use I/M standards for LDTs were derived using the same factors and methodology described above for LDVs. As with LDVs, EPA is also proposing a single THC I/M standard for each subclass of LDTs that will apply throughout the useful life of a LDT. EPA believes that the technology and emissions performance of LDTs will be similar to that of LDVs and therefore the same factors can be used for establishing the enhanced in-use I/M standards for LDTs. EPA requests comments on the reasonableness of this assumption.

Similar factors were used to derive the transitional enhanced in-use I/M standards. As described in Section A.(2) above, these standards will apply to up to 25 percent of each manufacturer's sales of 1999 model year vehicles. EPA requests comments on these levels, as well.

The table below ("Proposed Enhanced In-Use I/M Standards for MDVs") contains the proposed enhanced in-use I/M standards for MDVs. These standards will apply to all California MDVs certified to chassis-based standards. (Those MDV engines certified to the engine-based standards are not subject to the enhanced in-use I/M provisions, as described in Section B. below.) The enhanced in-use I/M standards for MDVs provide essentially the same cushion between themselves and the enhanced in-use standards for MDVs as described above for the enhanced in-use I/M standards for LDVs and LDTs.

PROPOSED ENHANCED IN-USE I/M STANDARDS FOR MDVS

Test Weight (lbs) [a]	Category	Exhaust [b] NMHC (g/mi)	NO_X (g/mi)	
			Half life	Full life
0–3750	Enhanced In-Use	0.24	0.30	0.45
	Transitional	0.40	0.60	0.90
3751–5750	Enhanced In-Use	0.31	0.60	0.75
	Transitional	0.51	1.05	1.50
5751–8500	Enhanced In-Use	0.37	0.90	1.20
	Transitional	0.62	1.65	2.25
8501–10,000	Enhanced In-Use	0.43	1.05	1.35
	Transitional	0.73	1.95	2.70
10,001–14,000	Enhanced In-Use	0.57	1.50	2.10
	Transitional	0.95	3.00	4.20

[a] Test weight is the average of curb weight and GVWR.
[b] An evaporative system pressure/purge check will also be performed during the inspection. If the vehicle passes the pressure/purge check, the evaporative emissions system is assumed to be functioning properly.

Similar to the light-duty enhanced in-use I/M standards, the enhanced in-use compliance I/M standards for MDVs should be more easily met relative to the enhanced in-use MDV FTP emission standards for composite NMHC and NO_X described in Section A.(3) above. As was the case for light-duty vehicles, the lack of a cold start in the IM240 test, generally higher numerical standard levels and the fact that evaporative emissions are not quantitatively included together should more than compensate for any variability resulting from the use of the shorter IM240 cycle. This is particularly true given manufacturers will have the ability to design their vehicles for good emissions performance over the IM240 cycle as well as over the full FTP. EPA requests comments on the level of the proposed enhanced in-use I/M standards for LDVs, LDTs and MDVs, as well as the proposed transitional enhanced in-use I/M standards. EPA also requests comments on the use of a single enhanced in-use I/M NMHC standard and on the option of applying a more stringent standard for the first five years or 50,000 miles.

c. Threshold for manufacturers responsibility. Under enhanced I/M programs for conventional vehicles, owners are responsible for repairs of those vehicles which fail the enhanced I/M tests. EPA is proposing that manufacturers would become liable for repairs of a specific vehicle engine family (i.e., an I/M-based selective recall) if 5.0 percent of the tested vehicles of that engine family failed the enhanced in-use I/M standards during the first half of the family's useful life or if 10.0 percent failed before the end of the family's full useful life. That is, if more than 5.0 percent of tested vehicles of any engine family/model year combination fail the enhanced in-use I/M standards before 50,001 miles or fifth year after the production year (whichever comes first), then the responsibility for repair of any future failures of vehicles belonging to that engine family/model year combination will shift to the manufacturer. This percentage rises to 10.0 percent for vehicles up to 100,000 miles or in their sixth through the tenth years of use.

In staying below these thresholds, the manufacturer must consider the typical level of maintenance provided its vehicles in enhanced I/M areas. It is extremely difficult to identify the lowest

level of maintenance short of abuse. It is also impossible to build vehicles such that none of the vehicles develop problems in-use. However, participation in the enhanced I/M programs will encourage individual vehicle owners to perform increased maintenance to reduce the likelihood of I/M failure and the subsequent burden of repair and re-test. Thus, a lower failure rate may be reasonable to expect from vehicles in enhanced I/M areas. EPA believes that the 5 and 10 percent failure rates proposed above balance the responsibilities of the manufacturer to build a vehicle which performs well under typical in-use conditions and those of the vehicle owner to properly care for the vehicle. EPA requests comment on the appropriateness of the two liability thresholds presented here. EPA also asks for comments on alternative liability thresholds, as well as appropriate justification for those alternatives.

EPA proposes that the liability threshold for the enhanced in-use compliance I/M program apply separately to each affected exhaust emission family in each model year after 1998. Since several exhaust families can fall into a single evaporative family, but generally not vice versa, EPA believes that isolating I/M repair liability within an exhaust family is the most appropriate approach. In addition, EPA is proposing that the liability thresholds apply separately for HC and NO_X emissions. Thus, if the number of HC emission failures exceeded a threshold, but the number of NO_X emission failures did not, manufacturers would only be responsible for repairing those vehicles which failed the enhanced in-use I/M HC standards. A difficult question arises when one of the two pollutant thresholds have been exceeded and a vehicle fails both of the enhanced in-use I/M standards. EPA desires to limit manufacturer liability as much as possible to the repair of the problems related to that pollutant exceeding its threshold. However, it may not be practical to separate what repairs affect each pollutant and determining such a split could lead to frequent disagreement between manufacturer and owner. Thus, EPA proposes that manufacturers be responsible for performing all repairs to those vehicles which failed both the enhanced in-use I/M HC and NO_X standards, but have exceeded only one (i.e, HC or NO_X) threshold. However, EPA requests comments on requiring manufacturers to only be liable for repairing the vehicle in order to meet the I/M standard for the pollutant exceeding its threshold.

d. Tracking of vehicle failures. Compliance with the liability thresholds will be determined on a model year/engine family basis (i.e., I/M test results will be segregated by engine family and model year). EPA proposes to segregate tracking by model year to prevent the I/M test results of more recent model year vehicles within a given engine family from diluting the test results of earlier model year vehicles. EPA requests comments on this approach.

While EPA will receive actual I/M 240 emission results from the performers of enhanced I/M testing, only pass or fail results will be tallied against the 5 and 10 percent thresholds. A vehicle will enter the tracking system when it receives its first enhanced I/M test. As long as it passes that and any subsequent enhanced I/M test, it will be considered a "pass" vehicle. Once it fails any of the three HC related tests (i.e., the enhanced in-use I/M standard for exhaust HC or the pressure or purge tests), it will be considered an HC failure. Once it fails the enhanced in-use I/M NO_X standard, it will be considered a NO_X failure. If a failure occurred while the vehicle is within its first half life (e.g., for a LDV, 5.0 years old and 50,001 miles or less), the failure will be included in the failure tally against both the 5 percent half-life and the 10 percent full-life thresholds. If the failure occurred while the vehicle is within its second half life (e.g., for a LDV, more than 5.0 years old and 50,000 miles but no more than 10.0 years old and 100,000 miles), the failure will only be included in the failure tally against the 10 percent full-life threshold. The failure rate for each model year/engine family combination will consist of the number of vehicles failing the enhanced in-use I/M HC or NO_X standards divided by the number of vehicles which have been tested in an enhanced I/M program. The I/M test results would cease to be counted after individual vehicles exceeded an age of 10 years or 100,000 miles (120,000 miles for MDVs), respectively.

For example, if 2.0 percent of an engine family's vehicles (from a single model year) fail the enhanced in-use I/M standards for a given pollutant over its first two years (i.e., a biennial program) and an additional 2.0 percent (i.e., different vehicles) fail over the next two years, the failure rate after 4 years is 4.0 percent. Comments are requested on the use of only pass/fail information and the calculation procedure.

Once a specific model year/engine family combination exceeded a liability threshold, EPA proposes that the manufacturer become liable for the selective recall and repair of vehicles not only from that model year, but for the repair of all vehicles which are part of that engine family. While this could significantly increase the potential liability faced by manufacturers, it will more equitably protect the consumer by treating all vehicles with essentially the same emission control design (and thus, performance) the same. EPA requests comments on this approach, as well as the option whereby manufacturers were only held liable for the repairs of vehicles from the specific model year which caused the exceedance of the enhanced in-use I/M liability threshold.

If exceedance of the liability threshold appears likely, typical failure modes could be determined and efficient repair methods developed. A manufacturer could even go so far as to take preventative action (e.g., a voluntary recall) to reduce the number of I/M failures (and the triggering of the liability threshold) and avoid the negative publicity or market response that may otherwise result.

EPA also proposes to exclude the I/M test results of vehicles if they have been obviously abused or tampered. (More discussion on what might constitute obvious abuse or tampering is included in Section A.(3) above addressing enhanced in-use compliance recall requirements.) EPA proposes to limit the definition of such abuse or tampering for the purpose of the enhanced in-use I/M program to a missing catalyst or evaporative canister. Tampering can be discouraged by the vehicle's design and performance. While EPA is aware that manufacturers cannot prevent all forms of less obvious tampering problems, the Agency wants to create incentives for manufacturers to design vehicles as tamper-resistant as is reasonable. EPA requests comments on the appropriate inclusion of specific determinations of obvious abuse and tampering which would be practical by I/M test personnel in an enhanced I/M test, while maintaining the integrity and purpose of the enhanced in-use I/M program.

e. Repair responsibility. Under conventional enhanced I/M, individual vehicle owners are responsible for repairs based on failures of either the enhanced I/M 240 cutpoints and the pressure/purge functional tests. Motorists are required to spend a maximum of $450 on repairs within a biennial test cycle related to the emission test failure before being eligible for a waiver of the requirement to comply.

If the enhanced in-use I/M liability threshold is reached, EPA proposes that

manufacturers become subject to a selective recall and be responsible for all subsequent vehicle repairs that are identified by the enhanced I/M emission test at the enhanced in-use I/M standards (described previously) and the purge/pressure tests. Manufacturers would thereafter be responsible for all vehicle repairs within that engine family model year until the end of the vehicle's useful life. A manufacturer's repair responsibility would begin after the liability threshold is reached, with no retroactive liability. EPA is not proposing reimbursement from the manufacturer to individual vehicle owners for repairs that occurred prior to exceeding the enhanced in-use I/M liability threshold.

EPA is also concerned that some repairs to high mileage vehicles could cost more than the vehicle is worth. EPA is therefore proposing to allow a manufacturer to remedy an emissions failure by purchasing (or offering to purchase) the vehicle. The manufacturer could then remove the vehicle from service instead of making the necessary repairs. The actual value could be determined through a National Automobile Dealer's Association (NADA) publication (e.g., "Blue Book value") or via negotiation. The latter is always available, but, as the only option, could become quite involved and result in vastly different prices being paid for similar vehicles. EPA therefore proposes that the manufacturer be allowed to offer the average retail value for the vehicle in question as specified in the NADA "Official Used Car Guide," if the manufacturers elects this option. One option would utilize the national "Blue Book" to avoid the possible effects of this program on "Blue Book" levels in California. Another option would be to use the "Blue Book" applicable in the specific FIP area. EPA is also concerned that the "Blue Book" value may not fully compensate an owner for the time and energy needed to find a new vehicle and other intangibles. EPA requests comment on other methods of determining values that proximate the market value of the vehicle, as well as the value to its owner, but provide reasonable protection for the manufacturer.

Under this proposal, the vehicle owner has the option of rejecting the manufacturer's offer to purchase their vehicle. Instead, the owner could repair the vehicle at his or her own expense or sell the vehicle in an area not subject to enhanced I/M and the enhanced in-use compliance program. The manufacturer's liability to repair the vehicle would end after the offer to purchase the vehicle was either consummated or rejected in writing.

EPA is also concerned whether the manufacturer would exercise its responsibility to repair the vehicle in a way which minimized inconvenience to the owner. EPA therefore proposes that all required repairs be performed in an expeditious manner and requests comments on specific requirements that could be used to ensure this was in fact done. Specifically, EPA proposes, and requests comments on, requiring manufacturers to provide a rental vehicle of equivalent value and function free of charge if the repairs required more than two days in total.

f. Geographic coverage. EPA is proposing that enhanced I/M be used in the designated California FIP areas of Sacramento, Los Angeles, and Ventura. EPA is proposing to limit the geographic scope of the I/M-based recall program to the FIP areas. EPA does not believe it would be appropriate to apply the I/M-based recall program to areas not having full enhanced I/M based on the I/M 240 test.

However, vehicles from outside the three FIP areas do impact air quality in the three FIP areas. Therefore, EPA requests comment on the option of including the vehicles tested in qualifying enhanced I/M 240 test programs in other nonattainment areas in California in the I/M-based recall program. The test results from such vehicles would then also be used to determine compliance with the liability threshold. Under this option, only a state enhanced I/M program which either duplicates the federal program or is approved by the Administrator as equivalent would be allowed to participate.

g. Data collection from test-sites. The Agency proposes that enhanced I/M testing facilities submit the results of all I/M tests, as well as engine family data from the underhood label, on all vehicles tested, to EPA on a monthly basis. This information will be used to calculate failure rates. In addition, personnel at such facilities would be required to retain and maintain results from I/M tests for a period of one year.

h. Manufacturer notification of liability. The Agency will provide manufacturers with cumulative test results on their engine families on a monthly basis. Additionally EPA will notify vehicle manufacturers, by letter, within thirty days after the rate of failure meets or exceeds the liability threshold. Manufacturers' responsibility for repairs begins 30 days after EPA sends notification.

I/M personnel will notify owners of failing vehicles, when vehicles are brought in for emissions testing, with whom responsibility for repair lies. Vehicle owners must be informed when repair responsibility for vehicles has been shifted to the manufacturers. EPA requests comment on requiring manufacturers to inform all vehicle owners, by letter, if the failure rate for the enhanced in-use I/M standards has exceeded the liability threshold. Such a letter would state that vehicle owner repair responsibility has ended and that the manufacturer is thereafter responsible for vehicle emission repairs until the statutory useful life ends as long as the vehicle is participating in a qualifying enhanced I/M program and has not been abused or tampered. One negative aspect of such a requirement is that it may lead vehicle owners to care less carefully for their vehicles, given the knowledge that much maintenance would now be covered by the manufacturer.

5. Fleets

As indicated by the Clean Air Act's fleet program, Congress believed it appropriate to place more stringent controls on centrally fueled fleet vehicles due fleet operators' greater control over and flexibility in the fuel used by their vehicles. Likewise, EPA believes it appropriate to propose similar actions here to obtain necessary additional emission reductions.

Consequently, in addition to meeting the requirements of the enhanced in-use compliance program described above, EPA proposes an enhanced ILEV fleet program. This program would require that a fraction of the post-1998 model year vehicles purchased by fleets in the South Coast area having 10 of more vehicles which currently are, or are capable of, being centrally fueled must also qualify as ILEVs. EPA established a special class of clean fuel vehicles called Inherently Low Emission Vehicles (ILEVs) in regulations concerning exemptions from transportation control measures for clean fuel fleet vehicles (40 CFR 88.311–93). ILEVs are required to have no significant evaporative emissions even if their evaporative control systems malfunction. ILEVs therefore have an inherent emissions advantage over other clean fuel vehicles since under any realistic enforcement program, some vehicles will be operating with dysfunctional emission controls. Generally, ILEVs are alternative fueled vehicles since gasoline is a very volatile liquid; however, high-technology diesel or low volatility gasoline vehicles might also be able to comply. Enhanced ILEVs would produce all the emission benefits of other enhanced in-use compliance

vehicles plus the benefits of no significant evaporative emissions in-use.

EPA proposes that 50 percent of all LDVs, LDTs, and MDVs purchased in 1999 by covered fleet operators for their covered fleet meet this requirement and 70 percent of LDVs, LDTs, and MDVs purchased in each calendar year thereafter.

EPA proposes to exempt from the enhanced ILEV fleet program the same types of vehicles which are exempt from the statutory Clean Fuel Fleet program (section 241(5) of the Clean Air Act). The definitions promulgated by EPA for the Clean Fuel Fleet program in 40 CFR 88.302–94 (i.e., for "covered fleet operator", "centrally fueled", and "capable of being centrally fueled", as well as several others) are proposed to apply to the enhanced ILEV fleet program. In addition, EPA proposes that the procedures laid out in the preamble for that final rule for determining how many vehicles are to be considered capable of being centrally fueled (58 FR 64684) are to be applied by fleet operators in the enhanced ILEV fleet program. EPA requests comment on whether this procedure should be converted to regulatory text and published in the final rule on this FIP.

In addition, EPA is proposing an enhanced ILEV purchase credit program similar to the Clean Fuel Fleet credit program (40 CFR 88.304–94). Each ILEV purchased early or in excess of a covered fleet operator's purchase requirement could generate one purchase credit. EPA would issue a qualifying covered fleet operator a credit document which could be held or sold. The original operator or any other covered fleet operator could redeem such credit documents in lieu of enhanced ILEV purchases.

EPA proposes that violations of the enhanced ILEV fleet program be subject to civil penalties of not more than $25,000. This proposed penalty is identical to that applied by the Clean Air Act (section 205(a)) to violations of the Clean Fuel Fleet program required by Part C of Title II.

Since the enhanced in-use vehicle standards apply to composite NMHC, it is possible that enhanced ILEVs could have higher exhaust NMHC emissions to compensate for their inherently low evaporative emissions. Therefore, EPA requests comments on the likelihood of this occurring and on the option of establishing a numerically lower composite NMHC standard for ILEVs. These more stringent enhanced in-use standards for ILEVs are shown in the table below. EPA is not proposing to change the enhanced in-use NO_X standards for ILEVs from those proposed for all enhanced in-use compliance vehicles in Section A.(2) above.

PROPOSED OPTIONAL CERTIFICATION AND IN-USE COMPOSITE NMHC STANDARDS FOR ENHANCED ILEVS

Vehicle class	Category	Composite[a] NMHC (g/mi)
LDVs & LDTs (0–3750 lbs LVW)	Enhanced	0.10
	Transitional	0.15
LDTs (3751–5750 lbs LVW)	Enhanced	0.13
	Transitional	0.17
Medium-duty vehicles (Test Weight (lbs)[b])		
0–3750	Enhanced	0.14
	Transitional	0.18
3751–5750	Enhanced	0.16
	Transitional	0.20
5751–8500	Enhanced	0.17
	Transitional	0.23
8501–10,000	Enhanced	0.19
	Transitional	0.25
10,001–14,000	Enhanced	0.22
	Transitional	0.30

[a] Exhaust NMHC emissions plus evaporative hydrocarbon emissions determined according to the equation presented earlier in Appendix I.A.2.a.
[b] Test weight is the average of curb weight and GVWR.

EPA is proposing that the enhanced ILEV fleet program be applicable to only vehicles purchased by covered fleet operators in the South Coast due to the fact that even with all the additional emission controls being proposed today, the South Coast is still not projected to in compliance with the ozone NAAQS by 2010. EPA requests comment on extending the enhanced ILEV fleet program to the other two FIP areas. EPA also requests comment on whether the program should be revised to ensure that vehicle turnover does not become artificially low in response to the enhanced ILEV fleet program but rather remains at or near current levels.

B. Enhanced In-Use Compliance Program for Heavy-duty Vehicles

1. Applicability

EPA is proposing that the enhanced heavy-duty vehicle program be applied to all new engines used in on-highway vehicles over 14,000 pounds GVWR, beginning in model year 1999. All such heavy-duty vehicles offered for sale or registered exclusively in California will need to comply with the enhanced vehicle standards described in the sections which follow. (As described in the section on 49-state vehicles, importation of heavy-duty vehicles not complying with the requirement of this program is prohibited after 1999.) Requirements that apply to multi-state registered vehicles are discussed later, in section B(7). The enhanced vehicle program would, as an option, allow manufacturers to certify engines for use in MDVs of GVWR between 8,500 and 14,000 pounds to engine-based standards, similar to the approach taken in California's program. However, such vehicles would need to meet all of the requirements of the enhanced heavy-duty vehicle program described in the sections below.

The application of the enhanced heavy-duty vehicle program on a statewide basis is considered necessary

because of the large volume of heavy-duty vehicle traffic flow into and out of the areas covered by the FIP. Any program requiring usage of enhanced vehicles only in the FIP areas would be extremely difficult to implement and enforce. Also, EPA is concerned about the emissions from HDVs from other states operating in the FIP areas, and about the potential for an increase in this interstate traffic due to higher costs associated with enhanced HDVs. This issue is addressed in section B(6).

As with light-duty vehicles, EPA is interested in the possibility of achieving earlier inventory reductions by phasing in new vehicle emission standards sooner. The inventory reduction achieved by earlier implementation could reduce the rate at which heavy-duty vehicle turnover would have to occur. Therefore, in addition to requesting comment on the program proposed below, EPA requests comment on an earlier phase-in, requiring a portion of the 1998 model year heavy-duty vehicles sold to meet the enhanced vehicle requirements.

2. Authority

As explained above, in promulgating a FIP under section 110(c) of the Act, EPA may take any actions that the state could take and EPA believes that it, acting on behalf of California in the context of a FIP, may adopt a motor vehicle program or supplement California's own motor vehicle program provided that EPA's actions would satisfy the criteria of section 209(b) for a waiver of federal preemption. These criteria are discussed above in the context of the enhanced light-duty vehicle program.

EPA believes that the enhanced heavy-duty vehicle program that would be applicable to vehicles and engines in California under the proposed FIP would satisfy the section 209 waiver criteria. Thus, California could undertake the enhanced vehicle program described below, and, therefore, EPA has authority under section 110(c) to undertake the proposed programs.

With respect to the protectiveness of the standards, all of the proposed standards are at least as protective as the otherwise applicable federal standards (e.g., the generally applicable NO_X and NMHC standards in the case of the vehicles and engines covered by the enhanced heavy-duty vehicle program). Indeed, these standards are at least as stringent as the comparable standards that California has already adopted and for which waivers have already been granted.

With respect to the need to meet compelling and extraordinary conditions, EPA has repeatedly found that California's air quality problems satisfy the need criterion of section 209(b) (see, e.g., 49 FR 18887 and 18890 (May 3, 1984), 58 FR 4144 (January 13, 1993)). Moreover, the magnitude of the reductions in emissions needed to reach attainment in the FIP areas, including mobile source emissions (discussed in Preamble section III.H), provides ample evidence of the need for more stringent motor vehicle emission standards in California.

Finally, with respect to the criterion of consistency with section 202(a), EPA believes that its proposed enhanced vehicle program is consistent with both the technological feasibility and certification elements of that criterion. For the reasons explained below, EPA believes that the various elements of the enhanced vehicle program are technologically feasible within the leadtime provided, taking into account the cost of compliance. Moreover, no aspect of the enhanced vehicle program establishes any new certification test procedures that are inconsistent with either existing federal or California test procedure requirements. Consequently, EPA believes that its proposed enhanced vehicle programs satisfy this prong of section 209 as well.

EPA also notes that its proposed rebuild requirements for heavy-duty vehicles and its use restrictions on heavy-duty vehicles need not satisfy the section 209(b) criteria since those requirements, being in-use regulation of vehicles directed at vehicle owners, and not the original manufacturers, are not preempted by section 209(a). Thus, EPA has the authority to promulgate those requirements just as any other requirements not subject to preemption under section 209.

3. Emissions Standards

a. Oxides of Nitrogen Standard. As mentioned earlier, heavy-duty engines are a major source of NO_X emissions in the FIP areas. Because of this, EPA proposes to establish lower exhaust emission standards for heavy-duty engines in California vehicles beginning with the 1999 model year. The emission standard for NO_X is proposed to be 1.5 g/bhp-hr for all heavy-duty engines used in vehicles of GVWR above 8,500 pounds, except those optionally certified to chassis-based standards as discussed in previous sections.

The Agency is proposing this standard because this level of control is necessary in order to meet the FIP air quality goals and because this level represents a comparable reduction relative to other vehicle classes. As discussed further below, EPA recognizes that this standard presents a significant feasibility challenge for diesel engines. However, other fuel technologies such as natural gas and alcohol fuels have demonstrated the potential to achieve these stringent levels, as well as other engine designs. Given this, the Agency believes that the 1.5 g/bhp-hr standard is appropriate.

At the same time, EPA recognizes that implementing a 1.5 g/bhp-hr standard may present limitations that may be unacceptable for some unique heavy-duty vehicle applications. Therefore, the Agency is considering an additional, economic incentive program that allows the sale of higher emitting engines. The Agency solicits comments on a plan that would allow engines to be sold at a relaxed level of 2.5 g/bhp-hr NO_X, if a new vehicle emissions surcharge is paid. The program would begin with the 1999 model year and would apply to all engines subject to the 1.5 g/bhp-hr standard and their associated vehicles. The surcharge would be assessed also for an engine bought separately to be installed in an existing chassis.

The proposed surcharge, shown in the table below ("New-Vehicle Emission Surcharges for Heavy-Duty Vehicles") for the different classes of heavy-duty vehicles and urban buses, is based on a cost of $10,000 per ton of increased NO_X emissions at a 2.5 g/bhp-hr level compared to the 1.5 g/bhp-hr standard. In computing the surcharge, estimated lifetime emissions were discounted to the year of sale using a seven percent discount rate. Urban buses, as defined under existing EPA regulations, are treated separately for surcharge purposes because of their unique operating characteristics; all other buses are considered heavy-duty vehicles in the table below. Details of the individual values can be found in the docket.[110]

[110] "New Vehicle/Equipment Surcharges for Heavy-Duty Onhighway and Nonroad Engines Under the California FIP," EPA Memorandum to the Docket from Alan Stout, February 1994.

NEW-VEHICLE EMISSION SURCHARGES FOR HEAVY-DUTY VEHICLES

	GVWR (pounds)	Emissions surcharge
Urban buses	all	$16,000
Other heavy-duty vehicles	8,501–19,500	1,000
	19,501–60,000	7,000
	>60,000	20,000

As described in the sections addressing nonroad engines and the fleet averaging program, the surcharges being proposed today are all based on a value of $10,000 per ton of emissions reduced. The Agency intends this level to represent an appropriate level for valuing incremental NO_X control in California as well as to provide a strong incentive for manufacturers to develop, and customers to buy, engines meeting the 1.5 g/bhp-hr standard rather than pay the emissions surcharge. At the same time, it will provide an option for those few applications in which complying engines are unavailable. Comments are requested on the appropriateness of the surcharge levels, as well as on the 2.5 g/bhp-hr standard proposed for engines subject to the surcharge. Interested readers should review the docket for further information regarding the surcharge value ("Technical Support—Surcharge Evaluation" memo from Joann Jackson-Stephens to docket dated March 1994).

The projected impact of these more stringent NO_X standards on engine technology is discussed below. The impacts are presented separately for each major fuel type. The Agency recognizes that this discussion is based on information from technology development programs that are, in some cases, in their very early stages. More complete information may exist and the Agency solicits a full range of comments on this issue. Any information submitted confidentially will be treated appropriately, in accordance with the Code of Federal Regulations requirements.

Diesel-fueled engines. Manufacturers attempting to develop diesel-fueled engines that comply with the 1.5 g/bhp-hr standard must consider a variety of areas. These include: (1) improvements in fuel injection systems, such as very high pressure injection, electronic unit injectors with minimized sac volumes, improved fuel injection nozzles, and significant advances in fuel injection rate shaping, (2) improvements in intake air management, focusing on optimized intake air pressurization systems such as variable geometry turbochargers or wastegate turbochargers and more extensive use of air-to-air intercooling, (3) continued progress in lubricating oil control (to minimize any NO_X/particulate trade-offs), (4) major advances in exhaust gas recirculation using variable flow and variable temperature control mechanisms, and (5) more sophisticated, integrated electronic control of all engine systems.

Advances in oxidation catalysts (e.g., additional progress in catalytic materials and washcoating processes) may also be needed to control particulate emissions from diesel-fueled engines, while permitting further optimization of NO_X emission variables. Also, fuels improvements such as higher cetane levels may need to be considered.

While these changes will enable diesel-fueled engines to meet NO_X emission standards significantly lower than the current 5.0 g/bhp-hr standard, further advances may be necessary to reach 1.5 g/bhp-hr. One technology that is being actively researched to meet this challenge is a catalyst designed to reduce NO_X in the lean operating environment of the diesel engine. The current research into these devices has yielded NO_X reductions of about 10 to 20 percent, and researchers project that 50 percent NO_X reduction efficiencies under transient conditions may be possible. Research in Japan has shown 50 to 70 percent efficiencies under steady state conditions with a 5 percent fuel penalty. The work done to date has been performed on engines that have NO_X emissions higher than about 4.0 g/bhp-hr. It is not known if the efficiencies that have been reported will also apply to engines in the 2.5 g/bhp-hr range. The Agency also has no clear information on the fuel consumption impact, cost or durability of lean NO_X catalysts. This technology holds promise for significantly reducing NO_X from diesels. EPA requests comments on ongoing research activity related to NO_X control for diesels and the focus of such work.

EPA recognizes that numerous issues must be addressed before many of these technologies can be commercialized for diesel-fueled engines; such issues include durability, fuel consumption impacts, cost and availability of improved fuels, if they are needed. The Agency solicits input on these issues as well as the overall feasibility of the 1.5 g/bhp-hr NO_X standard for diesels.

The Agency has received information that certain on-highway heavy-duty diesel engines are using "transient sensing algorithms" that have the effect of retarding the timing during transient engine operating conditions and advancing the timing during certain steady state operating conditions.[111] Since injection timing has a very significant impact on NO_X emission rates, with advanced timing settings being associated with higher NO_X, the continued use of these algorithms could result in engines that appear to be very low NO_X emitters for certification purposes but would not be nearly so low when operated in-use. The Agency would consider such algorithms used to meet the 1.5 g/bhp-hr standard to be defeat devices. They would not be an acceptable strategy. The Agency solicits comments on appropriate means of discouraging use of such design approaches.

Gasoline-fueled engines. Heavy-duty gasoline-fueled engines currently control NO_X emissions to levels between 3 and 3.5 g/bhp-hr (in response to a 5.0 g/bhp-hr standard). The Agency sees no reason why these engines could not meet an exhaust emissions standard of 1.5 g/bhp-hr with the application of three-way catalysts and other technologies that are currently in use with light-duty vehicles and light-duty trucks. Improvements may be needed in the area of high temperature three-way catalyst materials to withstand the broader range of exhaust temperatures that are typical of heavy-duty gasoline-fueled engines. Also, careful application and integration of exhaust gas recirculation, port fuel injection, more sophisticated ignition systems and increased emphasis on optimized air management may also be needed.

Alternative-fueled engines. A methanol-fueled heavy-duty engine is currently certified at 1.7 g/bhp-hr NO_X and the Agency believes that with

[111] "Supplemental Deere & Company Comments on EPA Notice of Proposed Rulemaking: Control of Air Pollution; Emissions of Oxides of Nitrogen and Smoke From New Nonroad Compression-Ignition Engines at or above 50 Horsepower," July 23, 1993.

additional development this engine could achieve a NO_X emission level of 1.5 g/bhp-hr. The engine is a two-stroke engine. It is likely that with better fuel injection systems (for example, higher pressure injection), better air management (such as improvements in the blower by-pass control system), and other such optimization advances, this engine could achieve 1.5 g/bhp-hr or lower. Four-stroke engines using methanol have not yet been developed to the same extent, but it is likely that these engines could also show very low emissions. Methanol-fueled engines used in light-duty vehicle applications have already demonstrated the potential for achieving very low NO_X levels.

Ethanol-fueled engines can also produce low emissions. A limited amount of work has been done to optimize engines to operate at low emissions on ethanol, but there is the potential for much more improvement. The same two-stroke engine mentioned above was certified on denatured ethanol (95 percent ethanol, 5 percent gasoline) at 4.2 g/bhp-hr NO_X. Whereas the injection system was calibrated for the higher energy density of ethanol, it was not optimized for ethanol use and thus there is room for significant improvement in NO_X emissions performance. These improvements could result in achieving very low NO_X levels. However, if gasoline is used as a denaturant (as it commonly is), flame temperature tends to increase and more NO_X is produced. Thus, a different denaturant may have to be investigated. This same engine using a mixture of 80 percent ethanol, 20 percent distilled water (and no denaturant) produced NO_X emissions results of 1.4 g/bhp-hr.[112] There are long-term injector durability concerns with such a fuel that would have to be resolved before the engine could be commercialized. Many of the issues mentioned above in the methanol discussion apply to ethanol use as well.

Natural gas engines using either compressed or liquified gas can also achieve very low emission levels. Even though the emission optimization of natural gas engines has been focused on only recently, they are already being shown to be low-emission power sources. Lean-burn, homogeneous-charge engines operating on natural gas (including engines made by Cummins, Caterpillar and General Motors) are already achieving NO_X emissions less than 2.5 g/bhp-hr. With additional optimization, it is projected that these engines could achieve a level of 1.5 g/bhp-hr. Homogeneous-charge stoichiometric engines with three-way catalysts (including engines made by General Motors and Scania) are achieving emission levels lower than 1.5 g/bhp-hr NO_X. However, as with the alcohol engines discussed above, extensive opportunities remain for further improvement and optimization for both of these engine types. As with heavy-duty gasoline engines, the natural gas engines operate with high exhaust gas temperatures that need to be accommodated to ensure three-way catalyst durability.

EPA requests comment on the feasibility of meeting an NO_X standard of 1.5 g/bhp-hr for all engine applications, as well as on the need for the surcharge-based 2.5 g/bhp-hr standard. EPA also requests comment on the possibility of adopting an NO_X standard of 2.5 g/bhp-hr for all California on-highway heavy-duty engines without a new vehicle emissions surcharge.

The Agency also notes that in the longer term, significant potential exists for low NO_X emissions from different engine designs. Other possibilities include such engines as turbines and stirling engines, or fuel cell based designs. While such approaches may eventually offer attractive means of lowering NO_X emissions, EPA requests comment on the possibility of commercialization of any of these designs by 1999.

b. Hydrocarbon standard. Heavy-duty vehicles contribute hydrocarbon emissions from both exhaust and evaporative sources. To deal with exhaust emissions, EPA is proposing an exhaust HC standard of between 0.2 and 0.6 g/bhp-hr NMHC. The 0.6 g/bhp-hr level represents what is currently being achieved by most diesel engines. Most 1993 model year diesel-fueled engines are certified at levels less than 0.6 g/bhp-hr total HC without aftertreatment. Also, two of the three natural gas engines certified by CARB emit no more than 0.6 g/bhp-hr NMHC. The 0.2 g/bhp-hr NMHC standard represents the current performance of methanol-fueled engines and diesel-fueled engines equipped with catalysts; for the 1994 model year, such engines have been certified at levels less than 0.2 g/bhp-hr total HC. On the other hand, most heavy-duty gasoline engines are certified in the 1 g/bhp-hr range. However, with the application of optimized three-way feedback controlled catalyst systems these engines should be able to reach levels in the proposed range. EPA requests comments on the appropriate level for this standard.

With regard to evaporative emissions, EPA is planning to extend the concept of inherently low-emitting vehicles (ILEVs) to the FIP enhanced heavy-duty vehicle control program. EPA's rulemaking for Clean Fuel Fleets established the ILEV concept of a vehicle that maintains low evaporative emissions without an active control system (58 FR 11888, March 1, 1993). EPA proposes to adopt an "evaporative-free" requirement for all heavy-duty vehicles over 14,000 pounds GVWR to avoid a trade-off of increased evaporative emissions for reduced NO_X emissions as would likely occur with the use of gasoline fueled engines in this vehicle class. Engines in vehicles under 14,000 lbs GVWR certified to the optional engine-based standards also would need to demonstrate evaporative-free performance. This assurance is needed because vehicles equipped with these engines would not be subject to any in-use I/M testing of the evaporative control systems. The in-use effectiveness of evaporative control systems consequently could not be assured as it would be for vehicles subject to enhanced I/M and associated standards.

Qualifying as an evaporative-free vehicle would require a demonstration that the vehicle does not have the potential for significant evaporative emissions when operating in high temperature conditions. The demonstration would have to show a maximum emission level of 5 grams for combined diurnal (adjusted to a nominal 20 gallon fuel tank volume), hot soak, running loss, and resting loss emissions, without an active evaporative control system. Diurnal emissions would be based on the engine and fuel system being exposed to ambient heating from 72° to 96 °F using 9 psi RVP fuel (or the parallel California requirements of 65° to 105 °F using 7 psi RVP fuel). Also, the evaporative-free requirement only supplements existing evaporative emissions testing procedures; vehicles currently subject to evaporative emission testing would still have to comply with all applicable requirements.

For heavy-duty vehicles over 26,000 pounds GVWR, which already operate almost exclusively on diesel fuel, an evaporative-free requirement would prevent a potential market shift to fuels (such as gasoline) that may be able to meet the proposed NO_X standards but have the potential of high evaporative emission levels. Further, the requirement would decrease the HC contribution from this class of engines

[112] This result, as well as data cited in the following paragraph, can be found in "Technical Feasibility of Reducing NO_X and Particulate Emissions From Heavy-Duty Engines—Final Report", Acurex Corporation, April 30, 1993.

as a whole by eliminating any current evaporative emissions. The heavy-duty vehicles between 14,000 and 26,000 pounds GVWR, while relatively small in number, do consist of about two-thirds gasoline vehicles. EPA recognizes that the evaporative-free requirement may discourage the sale of these engines, however bladders and low volatility fuels could be explored as means of demonstrating evaporative-free performance. EPA requests comments on other options that could provide assurances that market shifts could not occur and that in-use evaporative systems for the gasoline vehicles in this class maintain their performance in use.

EPA specifically requests comment on an option that would establish a chassis-based certification option similar to that for heavy-duty vehicles less than 14,000 lbs. GVWR. Under this option, vehicles would be subject to enhanced I/M and other aspects of the enhanced light-duty vehicle program, including the fleets hydrocarbon standard (see the discussion of the fleet program under the enhanced light-duty vehicle portions of this appendix). Commenters supporting this alternative should comment on the appropriate numerical standards for certification, recall, and inspection-and-maintenance testing.

c. Test requirements. Under the proposed enhanced heavy-duty vehicle program, certification and enforcement testing of on-highway heavy-duty engines and vehicles subject to the new NO_X and hydrocarbon standards, including those medium-duty vehicles certified to engine-based standards, would be subject to EPA requirements. Exhaust emission testing would be conducted following standard Federal test procedures, with two exceptions. First, test fuels would be based on California specifications. Second, exhaust hydrocarbon measurements would be quantified as nonmethane hydrocarbons, or other fuel-specific equivalent. Assembly-line testing would be performed under EPA's Selective Enforcement Audit testing program as described in 40 CFR part 86 subpart K.

Manufacturers of engines subject to the inherently low evaporative emissions requirement would submit test results or an engineering evaluation to demonstrate that the certified vehicles have inherently low evaporative emissions. Test procedures are described in EPA Clean Fuel Fleet program regulations (58 FR 11888, March 1, 1993).

For vehicles certified under chassis-based requirements, EPA also proposes to require evaporative emission testing using the Federal test procedure and standards. CARB adopted a new evaporative emission test in August 1990 and is now in the process of making improvements to its test procedure before requesting a waiver from Federal requirements. It is unclear at this point how closely aligned the two test procedures will be. If CARB receives a waiver, EPA will consider the appropriateness of allowing manufacturers to certify vehicles using CARB's evaporative emission test. EPA and CARB specify standards of 4 and 2 grams per test, respectively, for vehicles between 14,000 and 26,000 pounds GVWR. EPA proposes to retain the 2 g/test standard for California vehicles. The numerical emission standards proposed for heavy-duty vehicles apply equally to certification and recall testing.

Other California standards and procedures would be unaffected by the FIP, as described above for light-duty vehicles. Applicable Federal or California regulations would continue to apply in all aspects of control programs for these emission sources, including certification, assembly line testing, and recall.

4. Heavy-Duty Engine Rebuild Program

a. Introduction. Heavy-duty engines are generally operated over mileages far exceeding the useful life specified when the engines are certified. This is due to their high mileage accumulation rates, high replacement costs, and overall durable designs. Additionally, the engine life is often extended by one or more engine rebuilds. Larger diesel engines, for example those used in line-haul trucks and transit bus applications, are manufactured with replaceable cylinder liners to facilitate engine rebuilding. Engines with replaceable cylinder liners can be readily rebuilt numerous times. It is not uncommon for such engines used in line-haul applications to continue operating for many times longer than their statutory useful life. Rebuilds are typically performed by a variety of parties including fleet operators, small independent garages, the original engine manufacturer, and large independent assembly line operations. Additionally, there are many independent rebuilders of engine components.[113]

Testing conducted on rebuilt engines by EPA has indicated that engine rebuilding is generally well done and emissions control does not usually suffer. However, EPA is concerned about whether this will continue to be the case in the future. Given the very stringent enhanced in-use compliance program emissions standards for HDEs being proposed and the new control technology which will be applied, the in-use emissions performance of rebuilt HDEs is unclear. There may be cost incentives to rebuild these engines to a non-OEM configuration which could substantially increase emissions. Given that most of the actual life of some larger engines is beyond the traditional statutory useful life, it is important to ensure that engines continue to meet standards even after rebuilds. Therefore, EPA is proposing to require rebuilt engines to be subject to the standards proposed today for new engines.

These requirements will apply to any 1999 and later model year heavy-duty vehicle subject to the enhanced standards that is registered in California and is equipped with an engine that has been certified to engine-based standards as opposed to chassis-based standards. Vehicles certified to chassis-based standards in these classes would be subject to full life I/M, similar to light-duty enhanced vehicles. Both requirements ensure that enhanced vehicles continue to meet applicable standards.

b. Program description. EPA's primary concern is that HDEs meet applicable standards in use throughout their life cycle, including after engine rebuilding. To do this requires ensuring that, if vehicles are found not to comply at any time, someone is responsible for remedying the nonconformity. EPA proposes to require vehicle owners to be able to demonstrate at all times that their engine is certified to meet the emissions standards it originally met. If the engine is within its original useful life, nothing more would be required. After the end of the engine's original useful life, the owner would be required to obtain a useful life renewal certificate showing that the engine still met its original standards. Such a certificate must be issued by a party that has brought the owner's engine to a configuration that has been previously certified by EPA (certification requirements are discussed below). The certifier would specify a useful life renewal period on the certificate over which the certifier is responsible for emissions performance of the engine. Once the specified period expires, the vehicle owner would be required to acquire another useful life renewal certificate before reregistering their vehicle in California.

The certifier would perform all actions necessary to bring the engine to the certified configuration before issuing a useful life renewal certificate. Necessary actions may range from replacement of selected emission

[113] "Heavy-duty Engine Rebuild Practices", EPA Draft Report.

control and other hardware to major engine overhaul. Anyone able to meet the requirements of the program may certify an engine configuration and issue useful life renewal certificates. EPA would anticipate that candidates for certifiers would most likely be the original engine manufacturers, parts suppliers, and engine rebuilders. Once a useful life renewal certificate is issued to the vehicle owner, the certifier assumes all of the manufacturer's liability for the emissions performance of the engine as described in the proposal for new engines.

The marketplace, rather than EPA, should develop the most cost effective methods of ensuring effective emissions control for each engine. Engine rebuilding may not be necessary in all cases. Some engine manufacturers may elect to provide a longer original useful life. By extending the useful life, the manufacturer would allow owners to use their vehicles for a longer period of time without incurring the additional cost of an engine rebuild. The Agency believes that there will be significant market demand for longer useful life periods, that more closely match actual in-use engine rebuild practices.

The original engine manufacturer or another party may be able to provide a useful life renewal certificate upon the performance of some specified maintenance on the vehicle. Such maintenance would include anything that was needed to bring the engine to a certified configuration and ensure emissions control for the specified useful life renewal period, possibly including the replacement of emissions control devices. There are likely to be other possible options for the vehicle owner that EPA has not considered.

As previously mentioned, the vehicle owner must be in compliance with these requirements at all times. Enhanced engines without valid useful life certificates may not be registered in California. At time of registration, the owner would be required to show either that the engine was still within its original useful life or a useful life renewal period. The certifier would be required to provide a certificate to the vehicle owner (as described above) and label the engine, allowing such a demonstration to be made easily. The label must include information identifying the certificate, and the effective and expiration dates (mileages and/or hours as applicable) of the useful life renewal certificate as applied to the labeled engine. Furthermore, if the vehicle owner is found to be out of compliance through a roadside check or other means, EPA would consider the owner to be in violation of federal tampering provisions (see section 203(a) of the Clean Air Act) and the owner would be fined for every engine out of compliance. EPA requests comments on other ways to enhance its ability to enforce these owner requirements.

EPA recognizes that lighter HDEs are not usually rebuilt because their operating life is comparable to that of the chassis. Also, their lifetime mileage is generally lower than that of larger vehicles. For these reasons, there may not be as much incentive for the marketplace to offer as many options for lighter heavy-duty vehicles. If an engine reaches the end of its statutory useful life and there is no way to renew its useful life, the owner would no longer be able to register the vehicle with that engine in California. Operators of heavy-duty engines would be expected to purchase vehicles equipped with engines with a useful life comparable to their needs or purchase vehicles with engines that are designed to be rebuilt. It should be noted that these requirements only apply to vehicles certified on an engine test; many smaller trucks would be certified on a chassis test.

c. Certification requirements and liability. To help ensure continuous emissions control effectiveness, EPA proposes that anyone offering a useful life renewal certificate must certify the engine configuration that will result from the actions they will perform on the in-use engines. EPA also proposes to require that emissions durability be demonstrated for the useful life renewal period being provided by the certifier.

The resultant engine configuration must be certified in the same manner that a new engine is certified. A full emissions test would be required showing that in-use HDEs, after being restored to the engine configuration being certified, will meet all applicable HDE in-use recall emissions standards to which the engine was originally certified. EPA proposes that the test engine be representative of actual in-use engines and therefore, be an engine at or beyond its statutory useful life. EPA recognizes that this may be burdensome for the certifier in the early years of the program because available engines will generally be at low mileages. However, EPA believes that it is necessary to know how high mileage engines will perform after being brought to the configuration being certified. EPA requests comments on these and any other aspect of the certification testing requirements. EPA is especially interested in comments on effective but less burdensome test engine requirements.

In addition to the normally required engine certification information and data, the certification application would also be required to include: (1) Rationale for test engine selection, (2) a description of all actions necessary to bring an in-use engine to the configuration being certified, including a description of parts being replaced, (3) a description of any emissions related components not being replaced and rationale as to why their replacement is unnecessary, (4) a copy of all installation instructions and warranty, and (5) a copy of the engine label and useful life renewal certificate to be provided to the engine owner. EPA requests comments on these certification procedures and the items that are being required to be provided for certification.

d. Recall testing. EPA is proposing to apply the enhanced recall program for the light-duty enhanced vehicles, described in detail in section A.(5) of this appendix, and heavy-duty vehicles as described in more detail below. At the time an engine is restored to a certified configuration, the certifier, for purposes of this program, becomes the engine manufacturer for purposes of determining responsibility for the in-use emissions performance of the engine. The certifier may elect to have outside agents conduct installations. However, EPA proposes to hold the certifier solely liable for any failure of an engine to meet the enhanced HDE in-use standards during the useful life renewal period. EPA would have the authority to enforce in-use standards over the useful life renewal period by performing recall testing on engines within their useful life renewal period in the same manner that EPA would for engines still within the original useful life. EPA requests comments on the above approach for assessing liability for the emissions performance of rebuilt engines.

As mentioned above, EPA proposes to conduct recall testing throughout the operating life of engines. EPA believes that this is the most appropriate way to ensure that engines are meeting the enhanced HDE in-use standards. For recall testing after the end of the original useful life, EPA will group engines by the certified configuration. Any subsequent recall orders will hold the certifier of that engine configuration responsible for failure to comply with applicable emissions standards. Remedial actions would be solely the responsibility of the certifier.

EPA recognizes that the high cost of engine testing may present an impediment to enforcement of these rebuild requirements through recall testing alone. EPA requests comments

on additional methods of enforcing the above rebuild provisions which may or may not include actual emissions testing. Additionally, EPA requests comments on all aspects of the enhanced recall provisions.

5. Inspection and Maintenance (I/M) Program

As discussed in Section III.D.2.c. of the Preamble, covering the enhanced I/M program, EPA is proposing to include pre-1999 model year heavy-duty vehicles of GVWR 8,500–19,500 pounds in the enhanced I/M program. Furthermore, as discussed in Section A(4) covering the enhanced vehicle I/M program for new light-duty vehicles, EPA is proposing to include new heavy-duty vehicles of GVWR 8,500–14,000 pounds in the LDV/LDT enhanced vehicle program for 1999 and later model years, including I/M. EPA also requests comment on the desirability and feasibility of extending the enhanced I/M and enhanced vehicle I/M programs to other heavy-duty vehicles, particularly those in the weight classes up to 26,000 pounds GVWR (or any portion thereof). If this were done, the need to require these vehicles to be evaporative emission free, as discussed in Section B(3), and the need for these vehicles to be rebuilt, as discussed in Section B(4), could be reconsidered.

In considering this issue, commenters should refer to the detailed discussion of enhanced light-duty vehicle inspection and maintenance program requirements which would be applicable to these heavier vehicles as well except as noted below. These requirements address such issues as geographic scope, testing, enhanced I/M threshold, manufacturer liability, tracking of enhanced I/M test results, threshold calculation, data collection, and manufacturer notification of liability.

In addition, EPA would like to note several issues for which an enhanced I/M program for heavy-duty vehicles above 14,000 pounds GVWR would differ from the light-duty vehicle and light-duty truck program. First, the regulatory useful life for heavy-duty vehicles is 110,000 miles, 185,000 miles, or 290,000 miles, depending on the vehicle class. Therefore, in a manner similar to that described for the light-duty vehicle I/M program, after the threshold level was exceeded, the engine manufacturer would be responsible for repairing vehicles failing a enhanced vehicle I/M standard during the useful life period, or prior to engine rebuild, whichever came first. After the useful life period or after the engine was rebuilt, the responsibility for I/M repairs would depend on whether these vehicles were included in the enhanced vehicle rebuild program. Second, an I/M program for heavy-duty trucks would require the addition of I/M testing capacity for these heavier vehicles. EPA requests comment on all aspects of this proposal and encourages commenters to suggest options that would facilitate the achievement of the program's objectives as well as implementation.

6. Recall Program

The enhanced recall program for light-duty vehicles has already been described in Section A(5). The heavy-duty program will be the same as the light-duty program except for a change related to vehicle selection described below. Like the light-duty program, it is intended to ensure that vehicles and engines meet applicable standards throughout their life. Its provisions also apply to medium-duty vehicles that are equipped with engines certified to engine standards rather than being certified to the medium-duty vehicle chassis-based standards. Medium-duty vehicles certified to chassis-based standards will be subject to the light-duty recall program requirements. Rather than repeat the detailed provisions of the enhanced recall program for light-duty vehicles, the reader is referred to the light-duty discussion for more information. Both programs are based on the current recall program which interested readers should also review (39 FR 44375, December 23, 1974).

There is one difference between the heavy-duty and light-duty recall programs. For light-duty enhanced vehicles, EPA is proposing to draw recall test samples from only those vehicles subject to EPA's enhanced I/M program, generally corresponding to vehicles registered in the FIP areas. This would focus testing on identifying problems which were not being corrected by the I/M program. Because there is no I/M program for HDEs, this approach is not appropriate for heavy-duty. Therefore, EPA proposes to draw HDE recall test samples from vehicle families registered throughout California although the FIP areas would clearly be an important focus.

7. Multiple-State High-Emitting Engines

Many trucks operating in California are engaged in interstate commerce. CARB data show that more than 20 percent of the mileage accumulated by heavy-duty vehicles in California is from trucks registered to operate in at least one other state.[114] Even if new emission standards are adopted for California trucks, some interstate trucks would continue to be certified to less stringent federal emission standards. In that case, a significant amount of the potential benefit of the California standards would be lost. Given the cost impact expected for the California standards, there would also be an incentive to circumvent the intent of the standards by registering trucks in other states and operating them in California. EPA wants to avoid such a competitive disadvantage for trucking firms based in California.

To engage in commerce in multiple states, state law requires that trucks must be registered to operate in each state. The registration requirements allow each state to enforce its traffic laws and engage in some taxing. There are therefore three types of trucks operating in California: Those operating exclusively in California, those based in California but also operating in other states, and those based in other states but operating in California. Emissions control for engines operated exclusively in California is handled through the fleet averaging and importation requirements of the FIP. This section affects the two categories of trucks operating in other states in addition to California. It affects both categories equally.

Except as described below, EPA is proposing that owners of trucks registered in multiple states be required to participate in the fleet averaging program. Only that portion of an interstate trucking fleet registered in California would be involved in the program, including the calculation and assessment of surcharges. Trucks that never enter California would not be included.

EPA is concerned about the burden that the fleet averaging program may place on interstate trucking firms, especially if engine manufacturers choose to base their compliance with the proposed enhanced engine standards on alternative fuel technologies. The declining fleet average emissions requirement will eventually force owners of all trucks entering California to meet these standards or to pay increasingly stiff surcharges. Further, to the extent different fuels are used, interstate truckers may have difficulty finding adequate fuel supplies for their low-emitting trucks when they are traveling outside California. As a result, they may

[114] "Update on the Feasibility of Reducing Oxides of Nitrogen and Particulate Matter Emissions from Heavy-Duty Vehicles," CARB, July 1993.

be forced to maintain dedicated California fleets or to comply with the program requirements through the payment of surcharges, with little benefit to FIP area air quality.

As an alternative to requiring all interstate truck fleets to participate in the fleet averaging program, EPA is proposing to allow fleet owners, at their option, to comply with a use restriction on higher emitting engines. Beginning in 2001, any time a non-fleet averaged truck which does not meet the enhanced vehicle heavy-duty engine standards and has multiple-state registrations operates in the state, it would be allowed to make no more than one stop in either the South Coast, Ventura, or Sacramento FIP areas. This requirement would apply to all such trucks, regardless of whether or not the base of operation is in California. Any pickup or delivery would be considered a stop. Also, such trucks making a stop in one of the FIP areas would not be permitted to make more than a total of two stops statewide including any stop in a FIP area. An operator who could show that a trip into California will involve no driving in the South Coast, Ventura, or Sacramento FIP areas would be allowed to operate freely throughout the rest of the state. Of course, any vehicle which meets the enhanced heavy-duty engine standards or is part of a fleet complying with the averaging requirements would be able to operate throughout the state without restriction.

EPA would enforce the delivery restrictions by random vehicle checks and inspection of driving logs. EPA could inspect papers at weigh stations and at pickup and delivery points. Any evidence that the restrictions had been violated would subject the operator to a maximum fine of $25,000 for every day in violation. EPA is requesting comment on a further penalty of revocation of the right to register in California if multiple violations are recorded.

EPA also requests comment on an option under which, beginning in 2005, only engines certified at or below the 1998 federal 4.0 g/bhp-hr NO_X standard would be allowed in trucks with multiple-state registrations operating in California. This requirement would also apply to all trucks, notwithstanding the base of operations. Preventing earlier models from operating in California is intended to reduce the emission contribution from the interstate portion of the heavy-duty vehicle fleet. It would ensure that the cleanest national trucks are used in California.

EPA would begin the two-stop limitation in 2001 and the clean multi-state truck requirement in 2005. The Agency believes that this would allow sufficient time for them to be implemented without overly disrupting trucking operations in California.

EPA requests comment on the proposal to require trucks operating in multiple states to participate in the fleet averaging program (with and without the option of choosing usage restrictions). EPA also requests comment on whether or not owners of such fleets should also be required to have their 1999 and later model year trucks meet the enhanced vehicle standards, similar to requirements for in-state fleet owners. Comments are also requested on all aspects of the discretion to limit stops of higher-emitting trucks in the FIP areas, and on the alternative of limiting entry of older high-emitting trucks into the state.

8. Alternative Fuel Availability

As discussed earlier, the proposed enhanced heavy-duty vehicle standards will present significant feasibility challenges for diesel-fueled and gasoline-fueled heavy-duty vehicles. At this time compliance with the standards is more certain through use of alternative-fueled vehicles. As described above, such fuels could include methanol, ethanol, compressed or liquified natural gas and possibly others. These fuels are not widely available for vehicle use at this time. Thus, to the extent that fuels other than diesel and gasoline are chosen for compliance, the availability of fuel for these vehicles could be of concern. California regulators have also faced this concern during development of the LEV program and have addressed it through regulation, as described below.

California's existing fuel availability rules require major fuel suppliers to provide alternative fuels at a minimum number of their retail outlets. The minimum number of fuel outlets for each alternative fuel depends on the number of in-use vehicles requiring that fuel (20,000 is the current minimum trigger for fuel availability) and on how many years the fuel has been required under the fuel availability program. For 1994–96, the requirements apply only within the SCAQMD, while for 1997 and beyond, they apply throughout the entire state. For example, the first year an alternative fuel is designated a required clean fuel (i.e., the number of vehicles on the road requiring that fuel exceeds 20,000), at least a total of 90 fuel outlets must provide the fuel. In the second year, the minimum number would increase to 200. The required number of retail outlets could be greater if more than 20,000 vehicles required that alternative fuel. These outlets would be allocated to each of the major fuel producers in the region according to the amount of motor vehicle fuel they supplied. The fuel outlets would have to be geographically dispersed throughout the applicable region.

It is uncertain at this time how many enhanced heavy-duty engines will be alternative-fueled since technologies which will meet the standards are still being developed. Most of the heavy-duty vehicles are found in fleets, where fuel availability is easier to control. Therefore, California's fuel availability requirements appear to be sufficient. Therefore, EPA is not proposing any additional alternative fuel availability requirements. However, EPA requests comments on this issue and what, if any, additional actions may be appropriate to insure fuel availability.

9. Fleet Averaging Program

The enhanced program for heavy-duty vehicles will reduce emissions as planned only if people continue to purchase new vehicles and retire old ones at past rates. If people keep their old trucks longer than they have in the past or buy used vehicles from out of state, the emissions reductions would be substantially less. Because these reductions are critical for achieving attainment, EPA needs to ensure that vehicle turnover continues to occur at historical rates.

EPA is proposing to ensure that turnover is maintained by implementing a declining fleet average NO_X emissions program. Under the proposed fleet average program, if a fleet's turnover rate falls behind the historical California fleet average turnover rate for heavy-duty vehicles, then an emissions surcharge will be assessed on the additional NO_X emissions caused by the higher emitting engines. The fleet average NO_X emissions level allowed is reduced each registration cycle to reflect the appropriate turnover rates.

A fleet owner would determine the total NO_X emissions from his or her fleet by adding up the annual amount of NO_X emitted by each vehicle in the fleet and computing an average value for their heavy-duty vehicles between 19,500 and 33,000 pounds GVWR and their heavy-duty vehicles above 33,000 pounds GVWR. These average values would then be compared to the fleet average standards for those classes in that calendar year. If the actual emission rate exceeded the standard, an emissions surcharge would be applied to the excess amount.

The table below shows the calculation of the fleet average emission rates for the two classes of heavy-duty vehicles covered by the program. Besides the two vehicle classes, entries are provided for

model year groupings which have different applicable NO_X emission standards. The factors represent annual emissions of NO_X in tons for a vehicle in any given category. Adding each column and dividing by the number of vehicles in that class will yield the fleet's average per-vehicle NO_X emissions for the fleet owner's heavy-duty vehicles.

CALCULATION OF HEAVY-DUTY VEHICLE FLEET NO_X EMISSIONS

[tons]

Model year grouping	Emissions from HDVs[a] 19,501–33,000 lbs GVWR	Emissions from HDVs >33,000 lbs GVWR
1999+	[a] #×0.071	#×0.28
1998	#×0.19	#×0.74
1991–97	#×0.24	#×0.93
1988–90	#×0.28	#×1.12
1984–87	#×0.24	#×0.95
pre–1984	#×0.51	#×1.99
Total actual emissions		
Average per vehicle emissions[b]		

[a] "#" represents the number of vehicles in the given fleet for the specific model year/vehicle type grouping.
[b] Average per vehicle emissions equals the total actual emissions for a vehicle category divided by the total number of vehicles of that category in the given fleet.

The table below lists the average NO_X emissions allowed for each calendar year. These numbers are derived from the expected model year makeup of the California fleet as older vehicles are retired and replaced with enhanced heavy-duty vehicles.[115]

AVERAGE NO_X EMISSIONS ALLOWED FOR HEAVY-DUTY VEHICLES BY CALENDAR YEAR

[Tons]

Calendar year	19,500–33,000 pounds GVWR	33,000 pounds and greater GVWR
2000	0.28	1.1
2001	0.26	1.02
2002	0.24	0.94
2003	0.22	0.87
2004	0.20	0.80
2005	0.19	0.74
2006	0.17	0.68
2007	0.16	0.62
2008	0.15	0.57
2009	0.13	0.52
2010	0.13	0.49
2011	0.12	0.47
2012	0.11	0.45
2013	0.11	0.43
2014	0.10	0.41
2015	0.098	0.39
2016	0.093	0.37
2017	0.089	0.35
2018	0.086	0.34
2019	0.083	0.33
2020	0.080	0.31
2021	0.077	0.30
2022	0.075	0.29

[115] "Calculation of Average Emission Rates for Heavy-duty Onhighway and Nonroad Fleet Averaging Programs," EPA memo from Chris Lieske to Joanne Goldhand, February 1994.

AVERAGE NO_X EMISSIONS ALLOWED FOR HEAVY-DUTY VEHICLES BY CALENDAR YEAR—Continued

[Tons]

Calendar year	19,500–33,000 pounds GVWR	33,000 pounds and greater GVWR
2023	0.072	0.29
2024 and later	0.071	0.28

Compliance with the fleet average standard would be determined by comparing the values in the second table with those calculated in the first. If the actual values are below the standard, no emission surcharge is due. If either of the actual values exceed the standard for that year, a surcharge would be due based on the difference. It would be determined by multiplying the difference by the number of vehicles affected (in the specific vehicle category) and then by the surcharge rate of $10,000 per ton. It is important to note that so long as a fleet continues to replace vehicles at historical rates, no surcharge would be required.

In order to assure the maximum flexibility, EPA is also proposing to allow individual fleets to join together into larger fleets for determining compliance with the fleet standard. This provision should accommodate those fleets which may turn over slower or more quickly than the average, notwithstanding any effects of the enhanced vehicle program. Additionally, it could benefit very small fleets, such as independently owned trucks. The flexibility to join together should ease the impact of the steady reduction in the fleet average emissions allowed on any fleets with special compliance problems.

The annual emission rates developed in the above two tables are based on diesel engine values, even though the program applies to all heavy-duty vehicles above 19,500 pounds GVWR. This is consistent with the fact that diesels make up the dominant fraction of the affected fleets. It also could serve to encourage turnover of gasoline fueled engines faster than they otherwise would. This is because, even though they are generally less expensive than diesel engines, they would provide the same credit in the fleet average as turning over a diesel engine. Given the high evaporative emissions from gasoline engines, this is a desirable result. Comments are invited on this approach.

It should also be noted that the declining fleet average standards described above are proposed to apply only to heavy-duty vehicles above 19,500 pounds. Lighter HDVs are not included because EPA is proposing to include these vehicles in its enhanced I/M program. Because this group has a large number of gasoline fueled vehicles (which would particularly benefit from an I/M program) and a large number of small fleets (which would find the declining fleet average program particularly burdensome), the Agency believes this to be the best approach for these vehicles. Exclusion of LHDVs from the averaging program would not affect the role of 1999 and later LHDV engines in the other enhanced heavy-duty vehicle requirements already described. Comments are invited on the

alternative of including LHDVs in the declining fleet average program.

As discussed earlier, EPA is considering allowing enhanced HDVs to be equipped with engines certified to a 2.5 g/bhp-hr standard rather than a 1.5 g/bhp-hr standard as long as an appropriate new vehicle surcharge is paid by the purchaser. Because the surcharge is based on the excess NO_X emitted over the entire life of the vehicle, EPA believes that it would be appropriate to count these vehicles in the fleet average as emitting at 1.5 g/bhp-hr rather than 2.5 g/bhp-hr. Otherwise, the fleet owner would be required to pay twice for the same incremental emissions.

As described more fully below in the nonroad fleet averaging program, EPA is concerned that engine and truck dealers may be significantly hurt if fleet owners prebuy 4.0 g/bhp-hr NO_X engines to reduce the need for purchases of 1.5 g/bhp-hr NO_X engines in the initial years of the program. Dealers are generally local, unlike all manufacturers and some fleet owners. They therefore may have trouble surviving more than a year of slow movement in the California market. Therefore, EPA is requesting comment on a manufacturer sales mandate for heavy-duty onhighway similar to that for nonroad engines. Interested readers should review section C.(7)(b) of this appendix for more information.

EPA requests comments on all aspects of the heavy-duty declining fleet average proposal.

10. Fleets

As described in the enhanced light-duty vehicle section (A(6)), EPA is proposing a revised Clean Fuel Fleet program in the South Coast and requesting comment on expanding it into the other two FIP areas. As described in the Clean Air Act Title II, Part C and in EPA's Clean Fuel Fleet program regulations (see 58 FR 32474, June 10, 1993 and 58 FR 64679, December 9, 1993) the national Clean Fuel Fleet program would require certain centrally fueled fleets to make a certain percentage of their new vehicle purchases clean fuel vehicles. The CAA HD fleet program applies to fleets up to 26,000 pounds GVWR and requires that 50 percent of all purchased be Clean Fuel Vehicles.

As described in the light-duty enhanced vehicle program, EPA is proposing to require that the affected fleets purchase ILEVs which meet a composite NMHC standard set to reflect their low evaporative emission potential, rather than merely clean fuel vehicles. This requirement ensures that the fleet program will achieve significant hydrocarbon reductions beyond what is required by the general enhanced vehicle program. The application of this program is straightforward for most vehicles up to 14,000 lbs. GVWR. On the other hand, for vehicles certified to engine based standards (all vehicles above 14,000 lbs GVWR and some under that threshold), an ILEV requirement is already in place and therefore no composite is necessary. EPA therefore is proposing to apply the fleet program only to vehicles certified to a chassis-based standard, currently to vehicles up to 14,000 lbs GVWR. If EPA extends the chassis-based certification option to vehicles between 14,000 and 26,000 lbs. GVWR, the fleet program will extend to these vehicles as well.

11. General Enforcement

It would be a violation of federal law for any engine manufacturers or owners to fail to comply with the specific requirements and prohibitions described above. In addition, under the enhanced heavy-duty vehicle program, it would be a violation of federal law for the California Department of Motor Vehicles (DMV) or any other department of the State of California (or any political subdivision thereof) to register any vehicle subject to any requirement for which a valid certificate of compliance or waiver (either paper-based or electronic) has not been presented. Any person providing fraudulent certification or otherwise aiding or abetting in the violation of this section, would also be violating federal law.

That is, it is a violation to permit registration or facilitate reregistration of a model year 1999 or later engine for which there is not in force a valid certificate of conformity from EPA (either for the engine or for the rebuild). Further it is a violation to register any model year 1998 or previous vehicle or engine after 2001 without EPA confirmation that the appropriate fleet average fee, if any, has been paid. Violations could result in civil penalties under federal law of up to $25,000 per violation. Each instance of unlawful registration would be considered a separate offense.

C. Enhanced In-Use Compliance Program for Nonroad Engines Over 37 kw

1. Applicability

EPA intends the enhanced in-use compliance program for nonroad engines to apply to most nonroad engines at or above 37 kw, with the exceptions described above. This means that the Agency is adding two categories of nonroad engines not covered under the nationwide federal rulemaking. The first category is spark-ignition engines for all categories except recreational marine engines. The second is high speed Diesel marine engines which are at or above 37 kw; these engines are not included in other FIP regulations.

The enhanced nonroad engine program is proposed to include both CI and SI engines. EPA is concerned that applying more stringent emission standards only to CI engines would create an incentive to replace diesel (CI) engines with gasoline (SI) engines, because if left unregulated these engines could have a cost advantage. This shift would increase emissions because the unregulated gasoline engines would have higher exhaust levels and significantly higher evaporative emissions than diesel engines. EPA is therefore proposing exhaust emission regulations for both CI and SI engines (i.e., all engine types in the size range described) and adding a requirement to prevent evaporative emission increases. This strategy should level the playing field from an emissions perspective and avoid introducing an inappropriate encouragement to shift to gasoline and higher HC emissions.

The enhanced nonroad engine program is also proposed to include CI marine engines over 37 kw which have rated speeds at maximum torque of over 1200 revolutions per minute. These engines are generally used in non-oceangoing commercial vessels; oceangoing ships are dealt with in other portions of this FIP.

The Agency notes that the proposal would include generators at or above 37 kw used on oil platforms, if they fit the mobility requirements defining nonroad engines in EPA's nationwide rule. If not, they are regulated as part of the platform under EPA's Outer Continental Shelf (OCS) rules if they are permanently placed at the OCS site.

The provisions of this section apply only to engines sold for use in the FIP areas (although, as discussed later, EPA is considering options extending beyond the FIP areas). Nonroad engines are significantly less mobile than onhighway engines. Thus EPA has tailored its program to apply only to engines in the FIP areas. Any equipment with an applicable engine sold for use in a FIP area will be required to have a prominent exterior sticker showing that it meets the standards and other provisions of this program. A fleet averaging program, similar to that for on-highway, will also be applied to engines used in the FIP area to ensure continued turnover to cleaner engines.

The enforcement of these two requirements is discussed further in the nonroad fleets section below.

EPA proposes that after the inception of the nonroad engine program described in this Appendix, only engines complying with the provisions of this program may be imported for use into the FIP areas. Use of older engines, not previously used in the areas, is prohibited. Additionally, use of new engines which do not comply with the program is also prohibited.

2. Authority

EPA is proposing this enhanced in-use compliance program for nonroad engines using its broad remedial authority under section 110(c). Section 213 of the Clean Air Act provides EPA with specific authority to regulate nonroad engines. Moreover, no provision of section 213, or any other section of the Clean Air Act, prohibits EPA from exercising its section 110(c) authority in the manner proposed herein. EPA's data indicate that the engines regulated herein, nonroad engines at or above 37 kw including SI engines and diesel marine engines with speeds greater than 1200 RPM, contribute to ozone pollution in the FIP areas.

3. Emissions Standards

a. Oxides of Nitrogen Standard. Parallel to the onhighway requirements, EPA proposes that 1999 and later model year nonroad engines for use in the Ventura and South Coast nonattainment areas must meet a NO_X standard of 1.5 g/bhp-hr. For Sacramento, EPA proposes a 2.5 g/bhp-hr standard, reflecting a somewhat lesser need for control in that area, but is considering a 1.5 g/bhp-hr standard for reasons discussed below. EPA requests comment on these proposed standards and their areas of application.

As with onhighway engines, EPA is also considering an option to allow use of engines emitting up to 2.5 g/bhp-hr NO_X in the South Coast or Ventura areas, subject to an emissions surcharge which would be paid at the time of equipment purchase. This option is intended to cover unique applications where the 1.5 g/bhp-hr standard might present unacceptable limitations. The surcharge, shown in the table below for applicable nonroad categories, is based on a cost of $10,000 per ton of increased NO_X emissions over the life of the engine. The calculations are based on usage data supplied by manufacturers, as presented in EPA's "Draft Regulatory Support Document for Control of NO_X and Smoke Emissions from Nonroad Compression-Ignition Engines Greater than or Equal to 50 Horsepower" (April 1993). EPA assumed that each category of engines would be operated at its average annual rate (hours per year) for sixteen years. Lifetime emissions are discounted at a seven percent annual rate.

In computing the emissions surcharges, the Agency combined equipment types with similar surcharges into 7 different groups and assigned a surcharge value to each based on information from manufacturers. EPA is proposing that manufacturers of nonroad equipment containing an engine of over 37 kw must classify each type of equipment into one of these categories. Any equipment fitting possibly into two categories will be presumed to fit into the higher surcharge category unless further information is provided. Details of the individual values can be found in the docket.[116] EPA requests comment on the categories listed in the table below, especially whether any engine applications may be missing from the list, or whether the categories need further definition to distinguish between similar applications. EPA also requests comment on the possible need to further divide categories, perhaps by engine size, to avoid inappropriate fees for some engines. Any comments should reflect the need to keep the set of surcharges simple enough to maintain a manageable program.

SURCHARGES FOR HIGHER-POLLUTING NONROAD ENGINES

Class	Equipment types	Average rated HP	Load factor (percent)	Lifetime use (hrs)	Surcharge
I	Wood splitters	58	50	1,296	
	Sprayers	92	50	1,408	$400
	Swathers	82	62	1,600	
II	Other agricultural equipment	57	51	5,280	
	Combines	152	70	1,984	1,000
	Chippers/stump grinders	99	37	6,992	
	Balers	98	58	4,928	
III	Tractors/loaders/backhoes	71	38	11,200	
	Concrete/industrial saws	56	73	7,792	
	Forklifts	83	30	13,600	
	Rough terrain forklifts	84	35	13,968	
	Other matl. handling equip	111	59	6,496	3,000
	Paving equipment	99	53	8,112	
	Agricultural tractors	98	70	6,576	
	Concrete pavers	77	56	13,024	
	Asphalt pavers	77	56	13,024	
IV	Rollers	99	59	10,912	
	Other general indstrl equip	107	51	12,992	
	Other construction equipment	161	62	8,000	5,000
	Aircraft support equipment	137	51	11,712	
	Cranes	194	43	11,216	
	Bore/drill rigs	209	75	6,224	
V	Graders	147	54	14,784	
	Crawler tractors	134	57	16,336	
	Sweepers/scrubbers	97	68	19,904	
	Crushing/process equipment	127	78	13,440	
	Skidders	131	49	22,368	10,000
	Terminal tractors	96	82	19,200	

[116] "New Vehicle/Equipment Surcharges for Heavy-Duty Onhighway and Nonroad Engines Under the California FIP," EPA memo to the Docket from Alan Stout, February 1994.

SURCHARGES FOR HIGHER-POLLUTING NONROAD ENGINES—Continued

Class	Equipment types	Average rated HP	Load factor (percent)	Lifetime use (hrs)	Surcharge
	Excavators	143	59	19,040	
	Off-highway tractors	214	65	13,744	
	Rubber-tired loaders	175	54	22,368	
VI	Feller/bunchers	183	71	17,760	
	Rubber-tired dozers	356	59	13,088	20,000
	Scrapers	290	60	22,160	
VII	Off-highway trucks	658	25	52,668	60,000

With respect to the feasibility of the enhanced nonroad engine standards, the reader is referred to the discussion of the onhighway standards feasibility question. EPA believes that the technological approaches expected to be used for onhighway engines will also find application for nonroad engines. More specifically, diesel engine manufacturers make engines for both onhighway and nonroad applications and some individual engine families have been used for both. The Agency therefore projects that the diesel engine developments applied to onhighway engines will also need to be applied to nonroad engines. Although at this time there are very few gasoline or alternative fuel (mainly LPG) engines in these categories, such engines may find it easier to meet the nonroad NO_X standards than the onhighway standards because of the steady-state nature of the in-use test. (Gasoline may have difficulty with the evaporative hydrocarbon requirements described below.) Optimization of these engines may be less complex because transient fuel/air mixture control is less of a concern. Alternative fuel related technology and longer-term engine changes described for onhighway engines are also candidates for use in the nonroad market.

EPA is aware that packaging concerns can be an issue for nonroad equipment, as they are for onhighway vehicles. Many manufacturers of nonroad equipment will have to make changes to their equipment designs if the profile of the engine is altered substantially or there are other, new, requirements such as fuel system changes. Moreover, there are also differences in use between nonroad and onhighway engines which lead to different load requirements. EPA believes that the four-year lead time provided in the FIP will be sufficient for such issues to be resolved but requests comment from equipment manufacturers on unique packaging and use issues for nonroad equipment.

b. Hydrocarbon standard. EPA proposes to set the exhaust NMHC standard at 1.2 g/bhp-hr, the current onhighway heavy-duty diesel engine standard. If EPA, in the national rule for CI nonroad engines at or above 37 kw, finalizes a different standard for these engines, EPA will consider that standard for FIP engines as well. Additionally, since these engines are a small but significant contributor to HC inventories in the areas, EPA requests comment on lower HC standards such as those described in the proposal for onhighway heavy-duty vehicles (section B.(3)(b) of this appendix).

Once again paralleling the onhighway heavy-duty vehicle provisions, EPA proposes to require nonroad equipment using engines over 37 kw to have inherently low evaporative emissions. Qualifying as low evaporative would require a demonstration that the equipment does not have the potential for significant evaporative emissions when operating in high temperature conditions. The demonstration (via testing or engineering analysis) would be based on a maximum emission level of 5 grams for combined diurnal (adjusted to a nominal 20 gallon fuel tank volume), hot soak, running loss, and resting loss emissions, without an evaporative control system. Diurnal emissions would be based on the engine and fuel system being exposed to ambient heating from 72° to 96° F with a 40 percent fill of 9 psi RVP fuel, or the parallel California requirements of 65° to 105° F using 7 psi RVP fuel (if gasoline is used). EPA would have the option of testing to confirm the results. This requirement will ensure that evaporative emissions remain low in use, which is especially important given there is no inspection and maintenance program for these engines.

EPA data show most heavy-duty nonroad applications at or above 37 kw use diesel fuel or liquefied petroleum gas (propane). Engines operating on these fuels are likely to be able to comply with the low evaporative requirement without modification. The low evaporative requirement, therefore, would affect the small portion of the nonroad fleet operating on gasoline and would prevent other changes in the makeup of the existing fleet that could increase the potential for evaporative emissions. In applications where gasoline-fueled engines are used, new engines in this size range would have to be redesigned to operate low evaporative. Very low volatility gasoline could be investigated as an option to use of diesel or other fuels.

EPA seeks comment on other options that could provide assurance that hydrocarbon emissions would not increase from these engines and that a shift to high volatility gasoline engines would not occur. Commenters should review the treatment of light-duty vehicles under the enhanced in-use compliance program (section A. of this appendix).

c. Test requirements. EPA is proposing to conduct certification and enforcement testing of nonroad heavy-duty engines regulated under this program using the federal nonroad procedures for NO_X and hydrocarbon emission measurement expected to be finalized by May 30, 1994, except that test fuels would be based on applicable California specifications. The eight mode steady state duty-cycle and other test procedures that will be finalized in the national rule for CI engines are proposed here to apply to both compression-ignition and spark-ignition engines, regardless of fuel type. Exhaust hydrocarbon measurements would be quantified as nonmethane hydrocarbons (NMHC), or other fuel specific equivalents. Assembly-line testing would be performed under EPA's Selective Enforcement Audit testing program as described in 40 CFR part 89 subpart F.

Since the test procedure being proposed today is a steady-state procedure, it may not result in control designs for nonroad engines that produce the degree of in-use emissions reductions expected. For example, spark-ignition engines can exhibit very different emissions characteristics on different test cycles, such as cycles with transient operating conditions. The Agency is also concerned that the 8-mode test may be inadequate for

verifying the compliance of CI engines with the NMHC and NO_X standards proposed here, as discussed in the May 17, 1993 nationwide nonroad proposal.

Because of these concerns, the Agency will monitor engines produced and certified very carefully to be assured that engines do, in fact, yield proportional in-use emissions reductions. The Agency will also remain alert to the possible use of defeat devices or design approaches that result in non-proportional emissions reductions under operating conditions that are outside the test procedure operating conditions.

Additionally, the Agency is engaged in a program to characterize the in-use operation of nonroad engines. This program will allow EPA to develop representative duty cycles, evaluate the emissions impact of those cycles and determine which cycle will best ensure engine designs that will yield the expected level of in-use control. The Agency may change the duty cycle used to test nonroad engines in a subsequent rulemaking if the Agency determines that such a change is needed to assure that projected emission reductions actually occur in use.

Manufacturers of engines subject to the inherently low evaporative emissions requirement would submit test results or an engineering evaluation to demonstrate that the certified vehicles have inherently low evaporative emissions. Test procedures are described in EPA Clean Fuel Fleet program regulations (58 FR 11888, March 1, 1993).

The standards and procedures proposed for enhanced nonroad heavy-duty engines would apply equally to certification and vehicle recall testing. EPA requests comment on these test procedures, especially on the use of the steady-state test for spark ignition engines.

4. Inspection & Maintenance (I/M) Program

As mentioned earlier, EPA is not proposing I/M requirements for nonroad engines. Developing a new I/M program for the diverse set of applications involved would be a very difficult and complex undertaking and would present significant testing and administrative burdens. However, an in-use testing program (such as I/M) would allow EPA to reconsider the need to require nonroad engines to be low evaporative and the need for the nonroad engine rebuild requirements. EPA therefore requests comment on the feasibility and desirability of adopting an I/M program for heavy-duty nonroad engines covered under the enhanced in-use compliance program. The I/M program could apply to any or all nonroad engines over 50 hp sold for use in California's designated FIP areas. The reader is referred to the light-duty vehicle I/M discussion (section A.(4) of this appendix) for a detailed discussion of such enhanced vehicle requirements as geographic scope, testing, enhanced I/M threshold, manufacturer liability, tracking of enhanced I/M test results, threshold calculation, data collection, and manufacturer notification of liability.

Commenters recommending a nonroad I/M program should comment on the proper I/M test for heavy-duty nonroad engines and whether the capabilities for such tests would be needed at every facility. They should also comment on what the specifications for such a facility would be and whether any such facility could handle all types of nonroad equipment. An I/M program for nonroad engines would apply for the full operating life of the engine.

5. Nonroad Engine Rebuild Requirements

As with onhighway engines, nonroad engines are used for periods of time greatly exceeding the proposed useful life for nonroad engines (10 years, or 8000 hours, whichever comes first). For this reason, EPA proposes to apply the full rebuild program described for onhighway heavy-duty vehicles (section B.(4) of this appendix) to enhanced nonroad engines. As with onhighway engines, nonroad engines will not be subject to an I/M program and EPA is concerned about the possible adverse effect of engine rebuilding on the emissions from engines certified to the enhanced nonroad engine standards. If these engines are rebuilt improperly, they may have very high emissions which could outweigh many of the emissions benefits of the FIP programs.

EPA requests comments on all aspects of this proposal, especially on any aspects of the onhighway heavy-duty engine rebuild program which are inappropriate for nonroad engines.

6. Recall Program

EPA proposes to conduct all aspects of the enhanced nonroad engine recall program in the same manner as the enhanced onhighway recall program, as highlighted below. Interested readers should review the light-duty vehicle recall provisions (section A.(5) of this appendix) and the heavy-duty vehicle recall provisions (section B.(6) of this appendix) for additional details regarding this program.

Nonroad engines will be recall tested using certification test procedures and fuels discussed above in section C.(3)(c). As for the other enhanced vehicle programs, EPA proposes to test nonroad engines unless they have been subject to obvious abuse or tampering. If there are particular usage characteristics that could contribute to in-use emissions failures, manufacturers must consider them in the design of their products. For example, nonroad engines are likely to be used in environmental conditions that may include rough terrain, high levels of dust, and exposure to water. EPA would not consider exposure to such conditions grounds for excluding engines from the recall test sample. The Agency believes that addressing these challenges is appropriate and necessary to provide assurance that applicable emissions standards continue to be met in actual use throughout the life of the engine.

In connection with the engine rebuilding requirements described above, EPA also proposes to conduct recall testing throughout the operating life of engines. EPA believes that this is the most appropriate way to ensure that engines are meeting the enhanced nonroad engine standards in use. For recall testing after the end of the original useful life, EPA will group engines by the certified configuration. Any subsequent recall orders will hold the certifier of that engine configuration responsible for failure to comply with applicable emissions standards. Remedial actions would be solely the responsibility of the certifier.

EPA requests comments on all aspects of the enhanced in-use compliance recall program for nonroad engines, including the recall provisions that have been proposed for onhighway heavy-duty vehicles and light-duty vehicles.

7. Fleet Averaging Program

Like the heavy-duty onhighway program, the enhanced in-use compliance program for nonroad equipment will reduce emissions as projected only if new equipment is purchased and old equipment is retired at historical rates. Additionally, the use requirements which apply in the FIP areas must be obeyed to be effective. If old equipment is kept longer than in the past, the emissions reductions could be substantially less. These reductions are critical for achieving attainment; therefore, EPA is proposing fleet average and sticker programs to ensure traditional turnover rates and usage patterns continue. Due to the inherent complexities of such a program, among other things, EPA is also considering and requesting comment on a statewide nonroad program with sales requirements. Details of this alternative

program are provided at the end of this fleet averaging section.

Just as with heavy-duty onhighway engines, EPA is proposing to ensure that turnover is maintained by implementing a declining fleet average NO_X emissions program. Under the proposed fleet average program, if a fleet's turnover rate falls behind the historic average turnover rate for nonroad equipment, then an emissions surcharge will be assessed on the additional NO_X emissions caused by the higher emitting engines. The fleet average NO_X emissions level allowed is reduced each calendar year to reflect the appropriate turnover rates.

Owners of any nonroad equipment (hereafter fleet owners) would determine the total NO_X emissions from their equipment by adding up the annual amount of NO_X emitted by each piece of equipment. The annual amount of NO_X emitted by a piece of equipment is determined by reference to its expected emissions based on the equipment class and model year, as delineated in the table below. An average would be computed by dividing by the number of pieces of equipment. These averages would then be compared to the average which would occur if normal turnover was maintained (see the table below). EPA is proposing to determine the emissions levels and averages required using the same seven classes of nonroad equipment described above in section C.(3)(a). These classes are based on total emissions from equipment and were developed to ensure that any tradeoff between equipment due to averaging which occurs is emissions neutral. The target average emissions level would be reduced each calendar year. If the actual emission rate exceeded the fleet average standard in any year, an emissions surcharge would be applied to the excess amount of emissions for that year. As with the heavy-duty onhighway engine program the surcharge is based on $10,000 per ton of NO_X emissions.

The table below shows how to calculate the fleet average emission rates for the first two classes of nonroad equipment. (The reader is directed to the regulations or the docket for similar information for the remaining classes of nonroad equipment.) For each equipment class, annual emission levels are provided for model year groups which have different applicable NO_X emission standards. The numbers represent annual emissions of NO_X in tons for equipment in each category and must be multiplied by the number of engines in that category in a fleet to get total emissions. Adding each column and dividing by the total number of engines in each class will yield the fleet's average per-engine NO_X emissions for that category.

CALCULATION OF FLEET NO_X EMISSIONS FOR THE FIRST TWO CLASSES OF NONROAD ENGINES

[tons]

Model year grouping	Emissions from class I nonroad engines	Emissions from class II nonroad engines
1999+	[a] #×0.0062	#×0.027
1998	#×0.028	#×0.12
pre-1998	#×0.037	#×0.17
Total actual emissions [b]		
Fleet average emissions per nonroad engine [c]		

[a] "#" represents the number of nonroad engines in the given fleet for the specific model year/equipment class grouping.

[b] Multiply the number of affected nonroad engines in the given fleet for the specific model year/equipment class grouping by the listed emissions rate and sum down.

[c] Fleet average emissions per nonroad engine equals the total actual emissions for an equipment class divided by the total number of affected nonroad engines for that equipment class in the given fleet.

The numbers in the table above (and the similar numbers contained in the regulations for the other classes of nonroad equipment) reflect usage patterns for nonroad engines as described in EPA's draft Regulatory Support Document for the national nonroad rule. They reflect typical annual hours of use and load for each equipment type and applicable emissions standards. Further information regarding the calculation of these estimates is available in the Docket for this FIP.[117] EPA did not incorporate any seasonal adjustment for nonroad equipment that may only be used in the non-ozone season. EPA invites comment on whether there are any types of equipment affected that are used in FIP areas only under conditions that preclude ozone violations (for example, snow grooming equipment).

The table below ("Average NO_X Emissions Allowed by Calendar Year for Class I Nonroad Engines") lists the allowable average NO_X emissions for the first class of nonroad equipment during each calendar year for the South Coast and Ventura. The charts for Sacramento (which reflect turnover to 2.5 g/bhp-hr engines rather than to 1.5 g/bhp-hr engines) and those for the other classes of equipment are included in the regulations and are calculated in the same manner. These numbers are derived from the same average activity levels, load factors (as an average percent of rated horsepower), and uncontrolled emission levels described above. In addition, historical fleet turnover rates are incorporated in the fleet averages. Once the average actual emissions is determined for a fleet, it would be compared to the number in this chart corresponding to the appropriate class and year. That number represents the average that would occur if normal turnover of nonroad engines was maintained. These estimates are based on average 50 percent survival rates calculated for the EPA Nonroad Study and the documents associated with the national nonroad program NPRM benefits analysis.[118] Further information regarding the calculation of these numbers may be found in the Docket for this FIP. EPA invites comment on the use of these estimates.

[117] "Calculation of Average Emission Rates for Heavy-Duty Onhighway and Nonroad Fleet Averaging Programs," EPA memo from Chris Lieske to Joanne Goldhand, February 1994.

[118] "Calculation of Average Emission Rates for Heavy-Duty Onhighway and Nonroad Fleet Averaging Programs," EPA memo from Chris Lieske to Joanne Goldhand, February 1994.

AVERAGE NO_X EMISSIONS ALLOWED BY CALENDAR YEAR FOR CLASS I NONROAD ENGINES

[tons]

Calendar year	Class I
2000	0.035
2001	0.033
2002	0.031
2003	0.029
2004	0.027
2005	0.026
2006	0.024
2007	0.022
2008	0.021
2009	0.019
2010	0.017
2011	0.016
2012	0.015
2013	0.014
2014	0.013
2015	0.012
2016	0.011
2017	0.010
2018	0.0093
2019	0.0088
2020	0.0082
2021	0.0078
2022	0.0074
2023	0.0070
2024	0.0068
2025	0.0065
2026	0.0064
2027	0.0063
2028 and later	0.0062

Compliance with the fleet average standard would be determined by comparing the values in the second table with those calculated using the first. If the actual values are below the standard for that year, no emission surcharge is due. If the emissions level for any class of nonroad engines exceeds the standard for that year, a surcharge would be due based on the difference. The surcharge would be determined by multiplying the difference by the number of pieces of equipment in the class for the fleet and then by the surcharge rate of $10,000 per ton. It is important to note that so long as a fleet continues to replace equipment at historical rates, no surcharge would be charged.

In most other ways the declining average NO_X program for nonroad engines is similar to that for onhighway engines. They will both begin in 2000. In order to provide flexibility, EPA is proposing to allow individual fleets to join together into larger fleets for determining compliance with the fleet standard. (Because of the different NO_X standards for the Sacramento nonattainment area, individual fleets in Sacramento may only join with other fleets in Sacramento. Likewise, individual fleets in the South Coast Air Basin and Ventura County may only join together with fleets in the South Coast Air Basin and Ventura County.) This provision should accommodate those fleets which may turn over slower or more quickly than the average, notwithstanding any effects of the enhanced vehicle program. Additionally, it could benefit very small fleets. The flexibility to join together should ease the impact of the steady reduction in the fleet average emissions allowed on any fleets with special compliance problems. However, EPA is not proposing to allow averaging between different nonroad equipment classes because, due to the very different uses, there are few benefits to outweigh the complications an averaging scheme could create.

For the purpose of calculating surcharges, EPA will assume that all engines certifying at or below 1.5 g/bhp-hr NO_X have emission factors of 1.5 g/bhp-hr and that all engines certifying above 1.5 g/bhp-hr NO_X but at or below 2.5 g/bhp-hr NO_X have emission factors of 2.5 g/bhp-hr. However, if EPA permits use of engines certified at or below 2.5 g/bhp-hr NO_X in the South Coast or Ventura after payment of a lifetime emissions surcharge, as described above in section C.(3)(a), such engines will be treated as if they were 1.5 g/bhp-hr engines for the purpose of in-use fleet average emissions calculations.

a. *Administration of the fleet average nonroad program.* The fleet average requirement would be enforced through a program very similar to annual registration for onhighway vehicles. Nonroad registration is proposed to occur every January beginning in 1999. At that time, owners would bring documents representing their equipment to EPA along with a preliminary calculation of the surcharge due, if any. EPA would issue stickers for the equipment in the fleet as well as a certification that the fleet complies for that year.

Each piece of equipment that falls under the provisions of this section would be required to have an EPA sticker prominently displayed on it to be used or stored (except under certain conditions) in the FIP areas. EPA's regulations describe the size and color of the sticker and its placement. Individual stickers would be issued for each engine document (as described below) that has been reviewed by EPA. The engine documents would be designed to be marked each year in such a way that a fleet owner would be unable to use the same document to obtain two stickers. Documents would also show the name of the equipment owner, and only EPA could reissue documents when ownership is transferred. This system would be set up to limit the potential market for stolen documentation.

The documentation required must include the serial number of the engine, the equipment type, the horsepower rating, and the certified emission standard. For equipment produced after the effective date of this FIP, EPA proposes to require manufacturers to supply the documentation to purchasers just as do vehicle manufacturers. In the case of existing equipment, documentation would be created by EPA based on sworn statements by the owner. The documentation must also include the useful life renewal certificates as described in the rebuild program (for 1999 and later model year nonroad engines that are beyond their original useful life period) and proof that any necessary repairs have been performed by an authorized party for any nonroad engine subject to a recall action. Owners would be required to have documented all engines in their fleet by or during the first year of registration cycle in January 1999. Only those pre-1999 nonroad engines shown in a California fleet in that first year may be re-registered to be used in the FIP areas at any time after 1999. EPA retains the right to conduct physical inspections of the engines or deputize local government agencies to do so.

As with onhighway registration programs, stickers will be applied by owners since the equipment could not be brought into the surcharge office. To prevent cheating through the placement of stickers on improper equipment, stickers would be serially numbered and the sticker number recorded on the engine document and on a separate card with all fleet engine serial numbers which would be given to the owner. Stickers would also describe the engine type and serial number. EPA proposes that it or its deputies be able to inspect any site where affected engines are used or stored in the FIP areas and require surrender of such documentation.

EPA is proposing a system based on paper documents. However, a computerized registration data system, similar to the types of registration systems used for onhighway vehicles is possible. Such a system has the potential to minimize transaction problems, assist in title transfers, and reduce problems associated with sole reliance on physical documents. It would also require more resources. EPA is open to working with the California Department of Motor Vehicles to develop such a system and invites comments on its benefits and feasibility.

This sticker system will apply only to engines operated in the FIP areas.

However, the system is proposed to be accessible statewide to accommodate leasing companies which own a significant portion of the nonroad equipment used in the state. New nonroad equipment not meeting the enhanced in-use compliance program requirements will be allowed to be sold even in the FIP areas to accommodate distributors and such leasing companies. EPA plans to monitor sales and will target audits on any FIP area purchaser of significant numbers of non-FIP area equipment. EPA is proposing to require use of only stickered equipment in FIP areas year round. Such a program eases enforcement and is necessary, at least in Los Angeles, to prevent ozone exceedances. Nonstickered equipment will be allowed only if it is being transported through, or out of, the FIP area (and remains in a loaded condition while in the FIP area) or is being stored on an equipment leasing or distributor's lot for later use outside the FIP area. Such lots should not be on or adjacent to any job site in the FIP area.

EPA will have the authority to enter premises to inspect equipment, stickers, and other documentation. The unauthorized presence or operation of equipment without an appropriate sticker, the application of a sticker to any engine except the one for which it was designated, the use of false documents to obtain an EPA sticker, or the falsification of any documentation required under this section is strictly prohibited and will be punishable by fines of up to $25,000.

b. Optional state-wide program. EPA is concerned that the FIP areas may be too small to create sufficient market incentive for equipment manufacturers to develop and offer for sale equipment meeting the proposed standards and that therefore, little equipment would be provided meeting the requirements of this program. EPA is further concerned that even if there are such engines, that the availability of more traditional equipment in areas adjacent to the FIP areas will create incentives for people to attempt to avoid the fleet average requirements. Finally, EPA is concerned that FIP residents may choose to comply with the first years of the fleet average requirements by purchasing extra nationally-regulated engines right before the start of the program. While such a strategy does not impact air quality, provided full compliance occurs, it could be extremely destabilizing for the equipment dealers and could put the viability of dealers' businesses at risk.

To address these concerns, EPA is requesting comment on various revisions to the enhanced in-use compliance program for nonroad engines. First, as described in the standards discussion (section C.(3)), the Agency is requesting comment on a 1.5 g/bhp-hr NO_X standard for all three FIP areas. This revision would eliminate any problems that a Sacramento-only standard would create for manufacturers. Unfortunately, it would not address most of the other concerns.

Another option is to apply the enhanced nonroad emission standards statewide (including the 1.5 g/bhp-hr NO_X standard, the exhaust NMHC standard and the low evaporative requirements described in section C.(3)). Under this approach, only equipment certified to the enhanced nonroad engine standards would be available in California beginning in 1999. The statewide requirement expands the market available for engine and equipment manufacturers and should provide them sufficient incentive to offer all types of nonroad equipment. Further, in a statewide program, the size of the state and the location of the FIP areas should counteract any incentive to cheat by using higher emitting equipment available in neighboring areas.

Unfortunately, statewide application will not eliminate the possibility of significant pre-FIP purchasing and corresponding lack of purchasing in the early years of the program and the destabilizing effect on the economy both could have. EPA is therefore asking for comment on a requirement that engine manufacturers sell a similar fraction of their engines in the state in the FIP years as they did on average for the three years preceding the FIP. Fractional requirements would be converted into numerical requirements to facilitate averaging and trading among engine types and manufacturers. No banking would be allowed, since banking would create the destabilizing problems the program was designed to avoid. Trading and averaging permitted would be modeled on the current averaging, and trading program for heavy-duty on-highway engines (55 FR 30584, July 26, 1990). EPA is proposing to apply this requirement to engine manufacturers, rather than equipment manufacturers, because the equipment manufacturers cannot control the emissions level of their equipment without the cooperation of the engine manufacturers.

EPA is also considering a more flexible sales requirement to ensure that natural economic fluctuations do not affect compliance. Such a program would require that in the first year of the program manufacturers sell at least eighty percent of the number of engines they sold in the previous year. In the following several years the sales requirement could be reduced to seventy, sixty and fifty percent of the sales in the 1998 model year. Finally, once the transition to FIP engines was complete and market fluctuations were unlikely, the sales requirement could be dropped entirely.

Either form of the option would diminish somewhat the importance of the requirements for registration, fleet average determination, stickers and other enforcement programs directed towards the equipment user. Presumably, if manufacturers are selling the new equipment at historical rates, it is getting used and is replacing the old equipment at historical rates. EPA would consider, therefore, if it adopted a strict sales requirement, dropping the fleet average program and sticker enforcement. The Agency almost certainly would need to maintain a nonroad registration program as a check on the efficacy of the sales requirement. If the requirements proved to be ineffective in maintaining historical turnover, then EPA would have to implement a fleet average requirement in order to ensure the attainment targets were met.

While EPA acknowledges that sales requirements can force manufacturers to offer discounts and otherwise subsidize their engines, they are in a better position to accommodate the impacts of the program than fleets or dealers. Manufacturers sell throughout the nation and can recover costs by spreading small cost increases across a larger market than can fleets or dealers. On the other hand, lack of business in one area for a few years could put many dealers, which operate in much smaller areas, out of business. It is important to note that so long as the turnover rates stay at historical levels through the implementation of the FIP, both programs would be transparent to the regulated parties.

List of Subjects in 40 CFR Parts 52 and 81

Environmental protection, Air pollution control, Carbon monoxide, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Oxides of nitrogen, Ozone, Reporting and recordkeeping requirements.

Dated: February 14, 1994.

Carol M. Browner,

Administrator.

For the reasons set forth in the preamble, parts 52 and 81 of title 40 of the Code of Federal Regulations are proposed to be amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

2. 40 CFR part 52 is proposed to be amended by adding a new subpart GGG consisting of §§ 52.2950 through 52.3002 and Appendices A and B, to read as follows:

Subpart GGG—California Federal Implementation Plans

Sec.
52.2950 General FIP provisions.
52.2951 New technology measures applicable to VOC and NO_X.
52.2952 Stationary and area source caps (Sacramento).
52.2953 Stationary and area source caps (Ventura).
52.2954 Stationary and area source caps (South Coast).
52.2955 Stationary and area source NO_X cap rules (Ventura).
52.2956 Stationary and area source NO_X cap rules (South Coast) [Reserved].
52.2957 Consumer product rules.
52.2958 Aerosol coating products.
52.2959 Architectural coatings.
52.2960 Pesticides.
52.2961 Stationary and area source rules.
52.2962 Enhanced in-use compliance program for light- and medium-duty vehicles.
52.2963 Enhanced inspection/maintenance program.
52.2964 Importation of vehicles into California.
52.2965 Requirements for engines past their useful life.
52.2966 Enhanced in—use compliance heavy-duty engine and vehicle program.
52.2967–52.2968 [Reserved]
52.2969 Nonroad vehicles and engines, on-highway motorcycles.
52.2970 Civil aircraft operations.
52.2971 Locomotives.
52.2972 Military aircraft operations.
52.2973 Ships and ports.
52.2974 [Reserved]
52.2975 Enhanced in-use compliance program for nonroad engines over 37 kW.
52.2976–52.2998 [Reserved]
52.2999 Employee commute options program rule (Sacramento).
52.3000 General permit requirements (Sacramento).
52.3001 New source review (Sacramento).
52.3002 Emissions reduction credit authorization (Sacramento).

Appendix A to Subpart GGG of Part 52—Counties, Partial Counties, and Zip Codes for Partial Counties Included in the I/M Program

Appendix B to Subpart GGG of Part 52—Start-up and Final IM 240 Cutpoints for Light- and Heavy-duty Vehicles for the California FIP

Subpart GGG—California Federal Implementation Plans

§ 52.2950 General FIP provisions.

(a) *Definitions.* For the purposes of this section, the following definitions shall apply.

Administrator means the Administrator of EPA or his or her authorized representative.

Capture efficiency means the weight per unit time of VOC entering a capture system and delivered to a control device divided by the weight per unit time of total VOC generated by a source of VOC, expressed as a percentage.

Capture system means all equipment (including, but not limited to, hoods ducts, fans, booths, ovens, dryers, etc.) that contains, collects, and transports an air pollutant to a control device.

Clean Air Act means 42 U.S.C. 7401–7671q.

Control device means equipment (such as an incinerator or carbon adsorber) used to reduce, by destruction or removal, the amount of air pollutant(s) in an air stream prior to discharge to the ambient air.

Control efficiency means the product of the capture efficiency times the destruction or removal efficiency of a control system, expressed as a percentage.

Control system means a combination of one or more capture system(s) and control device(s) working in concert to reduce discharges of pollutants to the ambient air.

Destruction or removal efficiency means the amount of VOC destroyed or removed by a control device expressed as a percentage of the total amount of VOC entering the device.

EPA means the United States Environmental Protection Agency. Reports submitted to EPA shall be addressed care of U.S. EPA, Region IX (A–1), 75 Hawthorne Street, San Francisco, CA 94105.

Exempt compounds means any of the following compounds: methane; ethane; chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); dichlorotrifluoroethane (HCFC-123); tetrafluoroethane (HFC-134a); dichlorofluoroethane (HCFC-141b); chlorodifluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); methylene chloride; 1,1,1-trichloroethane (methyl chloroform); trichlorotrifluoroethane (CFC-113); dichlorodifluoromethane (CFC-12); trichlorofluoromethane (CFC-11); dichlorotetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); or perfluorocarbon compounds which fall into these classes: Cyclic, branched, or linear, completely fluorinated alkanes; Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; or Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Facility means all of the pollutant-emitting activities that are located on one or more contiguous or adjacent properties and are under the control of the same person (or persons under common control).

Grams of VOC per liter of coating, less water and less exempt compounds means the weight of VOC per combined volume of VOC and coating solids and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds} = \frac{W_S - W_W - W_{es}}{V_m - V_W - V_{es}}$$

Where: W_s=weight of volatile compounds in grams;

W_w=weight of water in grams;

W_{es}=weight of exempt compounds in grams;

V_m=volume of material in liters;

V_w=volume of water in liters; and

V_{es}=volume of exempt compounds in liters.

Person means any firm, business establishment, association, partnership, corporation or individual, whether acting as principal, agent, employee, or other capacity including any governmental entity or charitable organization.

Rate per calendar year means the amount applied between 12 a.m. January 1 and 11:59 p.m. December 31.

Rate per day means the amount applied between 12 a.m. and 11:59 p.m. on the same calendar day.

Transfer efficiency means the ratio of the weight of coating solids deposited on an object to the total weight of coating solids used in a coating application step, expressed as a percentage.

Volatile organic compound (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions other than those defined as exempt compounds. These exempt compounds have been determined to have negligible photochemical reactivity. For purposes of determining compliance with emission limits, VOC will be measured by test methods given in this section. Where such a method also measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emission standard. However, the U.S. EPA may require such owner or operator, as a precondition to excluding these compounds for purposes of determining compliance, to provide monitoring methods and monitoring results demonstrating, to the satisfaction of the U.S. EPA, the amount of negligibly reactive compounds in the source's emissions.

§ 52.2951 New technology measures applicable to VOC and NO_X.

(a) The applicable area of control is the South Coast Air Basin Nonattainment Area for ozone, as defined in 40 CFR 81.305. For purposes of this regulation, the definitions of § 52.2950 shall apply.

(b) *Stationary and area source VOC cap categories to be controlled.* For the purpose of this paragraph, the following categories of VOC emissions sources shall constitute the control categories. The categories are further defined in § 52.2954. Facilities which emit greater than or equal to 4 tons per year of VOCs from any of the following processes or combination of these processes are affected:

(1) Industrial and commercial solvents and coatings; [1]

(2) VOC emissions associated with the manufacturing of products;

(3) Disposal of materials containing VOCs;

(4) Commercial food preparation and/or baking; and

(5) Petroleum and natural gas extraction, processing, and storage.

(c) *Promulgation schedule and VOC reduction requirements for stationary and area sources.* EPA commits to publish rules to control VOC emissions from the sources described in paragraph (b) of this section according to the following schedule:

Proposal	Promulgation	Effective	Percent reduction
1/1/2004	1/1/2005	1/1/2007	2007–2008—60%
1/1/2006	1/1/2007	1/1/2009	2009—90%

The percent reduction requirement is a cumulative percent reduction from the baseline VOC emissions as defined in § 52.2954.

(d) *Stationary and area source NO_X categories to be controlled.* For the purpose of this paragraph, the following categories of NO_X emissions sources shall constitute the control categories. The categories are further defined in § 52.2955. Facilities which emit greater than or equal to 4 tons per year of NO_X from any of the following processes or combination of these processes are affected:

(1) Boilers, heaters, furnaces, ovens, dryers, incinerators, test cells, and any solid, liquid or gaseous fueled equipment with a maximum rated capacity:

(i) Greater than or equal to 40 but less than 500 million Btu per hour and an annual heat input greater than 90 billion Btu per year;

(ii) 500 million Btu per hour or more irrespective of annual heat input;

(2) Any internal combustion engine with rated brake horsepower (bhp) greater than or equal to 50 bhp, regardless of operating time;

(3) Any gas turbine rated greater than or equal to 0.2 megawatts excluding any emergency standby equipment or peaking unit;

(4) Any petroleum refinery fluid catalytic cracking unit;

(5) Any petroleum refinery tail gas unit;

(6) Any kiln or calciner with a rated process weight greater than or equal to 10 tons per hour;

(7) Any equipment burning or incinerating solid fuels or materials;

(8) Any sulfuric acid production unit;

(9) Any existing equipment using NO_X CEMS or that is required to install CEMS under State or local regulation to be implemented as of [Insert date of publication of the final rule];

(10) Any NO_X source elected by the Facility Permit holder or required by the State or local agency to be monitored with a CEMS;

(11) Any NO_X source for which NO_X emissions reported to the State or local agency were equal to or greater than 4 tons per year for the calendar year 1990.

(e) *Promulgation schedule and NO_X reduction requirements for stationary and area sources.* EPA commits to publish rules to control NO_X emissions from the sources described in paragraph (d) of this section according to the following schedule:

Proposal	Promulgation	Effective	Percent reduction
1/1/2004	1/1/2005	1/1/2007	2007–2008—50%
1/1/2006	1/1/2007	1/1/2009	2009—70%

The percent reduction requirement is a cumulative percent reduction from the baseline NO_X emissions as defined in § 52.2955.

(f) *Consumer products, aerosol paints, architectural coatings, and pesticides.* For the purposes of this paragraph, the definitions of subject source categories in §§ 52.2957, 52.2958, 52.2959, and 52.2960 apply.

(g) *Promulgation schedule and VOC reduction requirements for consumer products, aerosol paints, architectural coatings, and pesticides.* EPA commits to publish rules to control VOC emissions from the sources described in paragraph (c) of this section according to the following schedule:

Proposal	Promulgation	Effective	Percent reduction
1/1/2004	1/1/2005	1/1/2007	2007–2008—50%
1/1/2006	1/1/2007	1/1/2009	2009—80%

The percent reduction requirement is a cumulative percent reduction from year 2003 baseline VOC emissions.

(h) *Remaining stationary and area sources of VOC and NO_X.* For purposes of this paragraph, subject sources include all stationary and area sources exempt from the provisions of paragraphs (b), (c), (d), and (e) of this section. Subject sources include but are not limited to gasoline service stations, livestock waste operations, commercial food production and preparation, printing shops, miscellaneous coating and solvent cleaning operations, miscellaneous chemical/product manufacturing, bakeries, waste disposal sites, publicly owned treatment works, waste burning operations, miscellaneous fuel combustion sources, and miscellaneous fugitive emission sources.

(i) *Promulgation schedule and reduction requirements for stationary and area sources of VOC and NO_X.* EPA commits to publish rules to control VOC

[1] In the alternative, rules may apply to any manufacturer, or consortium of manufacturers, of industrial solvents or industrial/commercial coatings for sale or use within the State of California.

and NO_X emissions from the sources described in paragraph (h) of this section according to the following schedule:

Proposal	Promulgation	Effective	Percent reduction
1/1/2004	1/1/2005	1/1/2007	2007–2008—50%
1/1/2006	1/1/2007	1/1/2009	2009—80%

The percent reduction requirement is a cumulative percent reduction from year 2003 baseline VOC emissions and from year 2003 baseline NO_X emissions.

(j) *Mobile source VOC and NO_X source categories.* For purposes of this paragraph, subject sources comprise all onroad and nonroad vehicles and engines.

(k) *Promulgation schedule and VOC and NO_X reduction requirements for mobile sources.* EPA commits to publish rules to control VOC and NO_X emissions from the sources described in paragraph (j) of this section according to the following schedule:

Proposal	Promulgation	Effective	Percent reduction
1/1/2001	1/1/2002	1/1/2006	2006—24% VOC—19% NO_X

The percent reduction requirement is a further reduction from year 1990 baseline VOC and NO_X emissions, beyond all mobile source reductions required or credited in the California FIP as of [*Insert date of publication of the final rule*].

(l) *Contingency Measures.* EPA commits to publish contingency measures by 1/1/1999 to achieve the cumulative percent reduction in VOC and NO_X emissions from the sources described in paragraphs (b), (d), (f), (h), and (j) of this section, on the schedule set forth in paragraphs (c), (e), (g), (i), and (k) of this section, if the new technology measures are not developed or fail to achieve the emissions reductions specified in paragraphs (c), (e), (g), (i), and (k) of this section.

§ 52.2952 Stationary and area source caps (Sacramento).[2]

(a) *General Provisions.*

(1) *Applicability.* The provisions of this section shall apply to all stationary emission sources located in the "control area" as defined as the Sacramento Metro ozone nonattainment area in 40 CFR 81.305, and all other persons identified in subsequent applicability paragraphs in this section.

(2) *Compliance dates.* Unless otherwise specified in this section, compliance with all requirements of this section is required as of [*Insert date of publication of the final rule*]. This paragraph (a)(2) shall not operate to provide additional time for compliance under section 113(d) of the Act, 42 U.S.C 7413(d), for sources subject to compliance as of [*Insert date of publication of the final rule*].

(3) *Definitions.* For the purposes of this section, the following definitions apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Actual emissions means the actual quantity of VOC emissions from an emissions source during a particular time period.

Actual emissions rate means the actual quantity of VOC emissions from an emissions source per unit of actual production or throughput.

Agency means the United States Environmental Protection Agency.

Air contaminant means any solid, liquid, or gaseous matter, any odor, or any form of energy, that is capable of being released into the atmosphere from an emission source.

Air pollution means the presence in the atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.

Air pollution control equipment means any equipment or facility of a type intended to eliminate, prevent, reduce or control the emission of specified air contaminants to the atmosphere.

Allowable emissions rate means the most stringent of the applicable standards in 40 CFR parts 60 and 61; the applicable implementation plan; or a federally enforceable permit.

Baseline emissions means the emissions calculated using 1990 emission inventory data in the affected FIP areas and adjusted for emission reductions projected to occur by the implementation year of the FIP cap program in the affected FIP area. The baseline shall be denominated in pounds per year of FIP cap pollutant (e.g., pounds of VOC per year) and monthly caps shall be prorated based on this data.

Coating applicator means any equipment or device including but not limited to cloth, rollers, brushes, spray guns, or dip tanks used to apply a coating.

Day means a period of consecutive 24 hours beginning at 12 a.m. (midnight) local time, or beginning at a time consistent with a facility's operating schedule.

Emission rate means the total mass of VOCs released or discharged from an emissions source into the atmosphere per unit of production or throughput (e.g., pound VOC/gallon of coating solids).

Emission source or *source* means any building, structure, facility, property, equipment, device, container, or any combination thereof, at, from, or by reason which VOC is emitted or discharged into the atmosphere.

Facility means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control), except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two-digit code) as described in the "Standard Industrial Classification Manual, 1987" (National Technical Information Service order No. PB 87–10012).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator including those requirements contained in permits issued pursuant to 40 CFR parts 70 and 71, except those terms or conditions designated as not federally enforceable; those requirements developed pursuant to 40 CFR parts 60 and 61; requirements within any applicable implementation plan; and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, and 40 CFR 51.166.

Incinerator means a combustion apparatus in which solid, semi-solid, liquid, or gaseous combustible wastes are ignited and burned and from which the solid and gaseous residues contain little or no combustible material.

Monitor means to measure and record.

Organic compound means a chemical compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, carbonates, and ammonium carbonate.

Organic vapor means the gaseous phase of an organic compound or a mixture of organic compounds present in the atmosphere.

Owner or operator means any person who owns, operates, leases, controls, or supervises an emissions source or air pollution control equipment.

Person means any individual, corporation, copartnership, firm,

[2] EPA intends to issue a supplemental document in the **Federal Register** which addresses portions of proposed § 52.2952.

company, partnership, joint stock company, trust, association, State, municipality, political subdivision, or any other legal entity, or their legal representative, agent, or assigns.

Process means any stationary emission source other than a fuel combustion emission source or an incinerator.

Source means emission source.

Standard conditions means a temperature of 20 °C (68 °F) and a pressure of 760 mm Hg (29.92 in. Hg).

Stationary emission source and *Stationary source* mean an emission source which is not self-propelled.

(4) *Test Methods and Procedures.*

(i) *Coatings, Inks, and Fountain Solutions.* The following test methods and procedures shall be used to determine the VOC content of as applied coatings, inks, and fountain solutions to determine compliance with the limitations set forth in this section.

(A) *Sampling.* Samples collected for analyses shall be one-liter taken into a one-liter container at a location and time such that the sample will be representative of the coating as applied (i.e., the sample shall include any dilution solvent or other VOC added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOC added after the sample is taken must be measured and accounted for in the calculations in paragraph (a)(4)(i)(C) of this section. For multiple package coatings, separate samples of each component shall be obtained. A mixed sample shall not be obtained as it will cure in the container. Sampling procedures shall follow the guidelines presented in:

(1) ASTM D3925–81 (1985) Standard Practice for Sampling Liquid Paints and Related Pigment Coating. This practice is incorporated by reference in paragraph (c) of this section.

(2) ASTM E300 Standard Practice for Sampling Industrial Chemicals. This practice is incorporated by reference in paragraph (c) of this section.

(B) *Analyses.* The applicable analytical methods specified below shall be used to determine the composition of coatings, inks, or fountain solutions as applied.

(1) Method 24 of 40 CFR part 60, appendix A shall be used to determine the VOC content and density of coatings.

(2) Method 24A of 40 CFR part 60, appendix A, shall be used to determine the VOC content and density of publication rotogravure printing inks and related coatings.

(3) The following ASTM methods and practices are the analytical procedures for determining VOC:

(i) ASTM D1475–85: Standard Test Method for Density of Paint, Varnish, Lacquer and Related Products. This test method is incorporated by reference in paragraph (c) of this section.

(ii) ASTM D2369–87: Standard Test Method for Volatile Content of a Coating. This test method is incorporated by reference in paragraph (c) of this section. The following minor modifications should be used for multicomponent coatings. All components of the coating are to be weighed in the proper proportion into the analysis container and mixed together just prior to analysis and the mixture is allowed to stand for at least one hour but no more than 24 hours prior to being oven dried at 110 degrees celsius for one hour.

(iii) ASTM D3792–86: Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph. This test method is incorporated by reference in paragraph (c) of this section.

(iv) ASTM D4017–81 (1987): Standard Test Method for Water Content in Paints and Paint Materials by the Karl Fischer Method. This test method is incorporated by reference in paragraph (c) of this section.

(v) ASTM D4457–85: Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph. (The procedure delineated above can be used to develop protocols for any compounds specifically exempted from the definition of VOC.) This test method is incorporated by reference in paragraph (c) of this section.

(vi) ASTM D2697–86: Standard Test Method for Volume Non-volatile Matter in Clear or Pigmented Coatings. This test method is incorporated by reference in paragraph (c) of this section.

(vii) ASTM E180–85: Standard Practice for Determining the Precision Data of ASTM Methods for Analysis and Testing of Industrial Chemicals. This practice is incorporated by reference in paragraph (c) of this section.

(4) Use of an adaptation to any of the analytical methods specified in paragraphs (a)(4)(i)(B)*(1)*, *(2)*, and *(3)* of this section may be approved by the Administrator on a case-by-case basis. An owner or operator must submit sufficient documentation for the Administrator to find that the analytical methods specified in paragraphs (a)(4)(i)(B)*(1)*, *(2)*, and *(3)* of this section will yield inaccurate results and that the proposed adaptation is appropriate.

(C) *Calculations.* Calculations for determining the VOC content, water content, and the content of any compounds which are specifically exempted from the definition of VOC of coatings, inks, and fountain solutions as applied shall follow the guidance provided in the following documents.

(1) "A Guide for Surface Coating Calculation" EPA–340/1–86–016 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(2) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coatings" (revised June 1986) EPA–450/3–84–019 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(3) "A Guide for Graphic Arts Calculations" August 1988 EPA–340/1–88–003 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(ii) *Automobile or Light-Duty Truck Test Protocol.* The protocol for testing, including determining the transfer efficiency, of coating applicators at topcoat coating operations at an automobile assembly facility shall follow the procedure in: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations" December 1988 EPA–450/3–88–018 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161).

(iii) *Capture System Efficiency Test Protocols.*

(A) *Applicability.* The requirements of paragraph (a)(4)(iii)(B) of this section shall apply to all VOC emitting processes employing a capture system except those cases noted below.

(1) If a source installs a permanent total enclosure (PTE) that meets U.S.EPA specifications, and which directs all VOC to a control device, then the source is exempted from the requirements described in paragraph (a)(4)(iii)(B) of this section. The U.S.EPA specifications to determine whether a structure is considered a PTE are given in Procedure T of appendix B of 40 CFR 52.742. In this instance, the capture efficiency is assumed to be 100 percent and the source is still required to measure control efficiency using appropriate test methods as specified in paragraph (a)(4)(iv) of this section.

(2) If a source uses a control device designed to collect and recover VOC

(e.g., carbon adsorber), an explicit measurement of capture efficiency is not necessary provided that the conditions given below are met. The overall control of the system can be determined by directly comparing the input liquid VOC to the recovered liquid VOC. The general procedure for use in this situation is given in § 60.433 of this chapter, with the following additional restrictions:

(*i*) The source must be able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average, within 72 hours following the 24-hour period. In addition, one of the following two criteria must be met:

(*ii*) The solvent recovery system (i.e., capture and control system) must be dedicated to a single process, or

(*iii*) If the solvent recovery system controls multiple processes, then the source must be able to demonstrate that the overall control (i.e., the total recovered solvent VOC divided by the sum of liquid VOC input to all processes venting to the control system) meets or exceeds the most stringent standard applicable for any process venting to the control system.

(*3*) The following facilities are exempted from the requirements described in paragraph (a)(1)(iii)(B) of this section:

(*i*) Automobile-related assembly facilities subject to the "Automobile or Light-Duty Truck Test Protocol" described in paragraph (a)(4)(ii) of this section.

(*ii*) Heatset-web-offset lithographic printing units as defined in paragraph (b)(1)(i)(B) of this section.

(B) *Specific Requirements.* The capture efficiency of a process shall be measured using one of the four protocols given below. Any error margin associated with a test protocol may not be incorporated into the results of a capture efficiency test. If these techniques are not suitable for a particular process, then the source must present an alternative capture efficiency protocol and obtain approval for it by the Administrator as a SIP or FIP revision.

(*1*) Gas/gas method using temporary total enclosure (TTE). The U.S. EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T of appendix B of 40 CFR 52.741. The capture efficiency equation to be used for this protocol is:

$CE = G_w/(G_w + F_w)$

where

CE = capture efficiency, decimal fraction

G_w = mass of VOC captured and delivered to control device using a TTE

F_w = mass of fugitive VOC that escapes from a TTE Procedure G.2 contained in appendix B of 40 CFR 52.741 is used to obtain G_w. Procedure F.1 in appendix B of 40 CFR 52.741 is used to obtain F_w.

(*2*) Liquid/gas method using TTE. The U.S. EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T of appendix B of 40 CFR 52.741. The capture efficiency equation to be used for this protocol is:

$CE = (L-F_w)/L$

where

CE = capture efficiency, decimal fraction

L = mass of liquid VOC input to process

F_w = mass of fugitive VOC that escapes from a TTE Procedure L contained in appendix B of 40 CFR 52.741 is used to obtain L. Procedure F.1 in appendix B of 40 CFR 52.741 is used to obtain F_w.

(*3*) Gas/gas method using the building or room (building or room enclosure) in which the affected source is located as the enclosure and in which "F" and "G" are measured while operating only the affected facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$CE = G/(G + F_B)$

where

CE = capture efficiency, decimal fraction

G = mass of VOC captured and delivered to control device

F_B = mass of fugitive VOC that escapes from building enclosure

Procedure G.2 contained in appendix B of 40 CFR 52.741 is used to obtain G. Procedure F.2 in appendix B of 40 CFR 52.741 is used to obtain F_B.

(4) Liquid/gas method using the building or room (building or room enclosure) in which the affected source is located as the enclosure and in which "F" and "L" are measured while operating only the affected facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$CE = (L-F_B)/L$

where

CE = capture efficiency, decimal fraction

L = mass of liquid VOC input to process

F_B = mass of fugitive VOC that escapes from building enclosure

Procedure L contained in appendix B of 40 CFR 52.741 is used to obtain L. Procedure F.2 in appendix B of 40 CFR 52.741 is used to obtain F_B.

(C) *Recordkeeping and Reporting.*

(*1*) All affected facilities must maintain a copy of the capture efficiency protocol submitted to EPA on file. All results of the appropriate test methods and capture efficiency protocols must be reported to EPA within sixty (60) days of the test date. A copy of the results must be kept on file with the source for a period of five (5) years.

(*2*) If any changes are made to capture equipment, then affected facilities must notify EPA of these changes and a new test may be required by EPA.

(*3*) All affected facilities must notify the Administrator 30 days prior to performing any capture efficiency test. At that time, the source must notify the Administrator which capture efficiency protocol will be used.

(*4*) All affected facilities utilizing a PTE must demonstrate that this enclosure meets the requirement given in Procedure T in appendix B of 40 CFR 52.741 at all times.

(*5*) All affected facilities utilizing a TTE must demonstrate that their TTE meets the requirements given in Procedure T in appendix B of 40 CFR 52.741 for a TTE during testing of their control device. The source must also provide documentation that the quality assurance criteria for a TTE have been achieved.

(iv) *Control Device Efficiency Testing and Monitoring.*

(A) *Control Efficiency Test.* The control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOC concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in paragraph (a)(4)(vi) of this section.

(B) *Continuous Monitoring.* Any owner or operator that uses an afterburner or carbon adsorber to comply with any requirement of this section shall use continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications and which meets EPA-approved performance specifications at all times when the afterburner or carbon adsorber is in use. The continuous monitoring equipment must automatically monitor and record the following parameters:

(*1*) Combustion chamber temperature of each afterburner.

(*2*) Temperature rise across each catalytic afterburner bed or VOC concentration exhaust.

(*3*) The VOC concentration of each carbon adsorption bed exhaust.

(C) *Recordkeeping and Reporting.*

(*1*) All affected facilities must maintain a copy of all control efficiency test protocols for a period of five (5) years. All control test results must be reported to EPA within sixty (60) days of the test date. A copy of the results must be kept on file with the source for a period of five (5) years.

(*2*) All affected facilities must maintain copies of all required continuous monitoring records for a period of five (5) years.

(*3*) If any changes are made to control equipment, affected facilities must notify EPA of these changes and a new control efficiency test may be required by EPA.

(*4*) All affected facilities must notify the Administrator 30 days prior to performing any control efficiency test. At that time, the source must notify the Administrator which test methods will be used.

(v) *Overall Efficiency.*

(A) The overall efficiency of each emission control system shall be determined as the product of the capture system efficiency and the control device efficiency or by the liquid/liquid test protocol as specified in paragraph (a)(4)(iii)(A)(2) of this section for each solvent recovery system.

(B) The overall efficiency of the capture system and control device used to control VOC emissions from a paper, fabric, film, can, coil, or miscellaneous metal parts and products coating line, as determined by the test methods and procedures specified in paragraphs (a)(4)(iii), (a)(4)(iv), and (a)(4)(v)(A) of this section, shall be no less than the equivalent overall efficiency which shall be calculated by the following equation:

$$E = ([VOC_a - VOC_1]/VOC_a) \times 100$$

where:

E = Equivalent overall efficiency of the capture system and control device as a percentage,

VOC_a = Actual VOC content of a coating, or the daily-weighted average VOC content of two or more coatings (if more than one coating is used), as applied to the subject coating line as determined by the applicable test methods and procedures specified in paragraph (a)(4)(i) of this section in units of kg VOC/l (lb VOC/gal) of coating solids as applied, and

VOC_1 = The VOC emission limit specified in units of kg VOC/liter (lb VOC/gal) of coating solids as applied.

(vi) *Volatile Organic Compound Gas Phase Source Test Methods.* The methods in 40 CFR part 60, appendix A, delineated below shall be used to determine control device efficiencies.

(A) 40 CFR part 60, appendix A, Methods 18, 25, 25A, or 25B, as appropriate to the conditions at the site, shall be used to determine VOC concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in paragraphs (a)(4)(vi)(A) (*1*) and (*2*) of this section, the test shall consist of three separate runs, each lasting a minimum of 60 min., unless the Administrator determines that process variables dictate shorter sampling times.

(*1*) When the method is to be used to determine the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual adsorber vessels, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all the individual adsorber vessels.

(*2*) When the method is to be used to determine the efficiency of a carbon adsorption system with individual exhaust stacks for each adsorber vessel, each adsorber vessel shall be tested individually. The test for each adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

(B) 40 CFR part 60, appendix A, Method 1 or 1A shall be used for sample and velocity traverses.

(C) 40 CFR part 60, appendix A, Method 2, 2A, 2C, or 2D shall be used for velocity and volumetric flow rates.

(D) 40 CFR part 60, appendix A, Method 3, 3A or 3B shall be used for gas analysis.

(E) 40 CFR part 60, appendix A, Method 4 shall be used for stack gas moisture.

(F) 40 CFR part 60, appendix A, Methods 2, 2A, 2C, or 2D; 3, 3A, or 3B; and 4 shall be performed, as applicable, at least twice during each test run.

(G) Use of an adaptation to any of the test methods specified in paragraphs (a)(4)(vi) (A), (B), (C), (D), (E), and (F) of this section may be approved by the Administrator on a case-by-case basis. An owner or operator must submit sufficient documentation for the Administrator to find that the test methods specified in paragraphs (a)(4)(vi) (A), (B), (C), (D), (E), and (F) of this section will yield inaccurate results and that the proposed adaptation is appropriate.

(vii) *Leak Detection Methods for Volatile Organic Compounds.* Owners or operators required by the various subparts of this regulation to carry out a leak detection monitoring program shall comply with the following requirements:

(A) Leak Detection Monitoring.

(*1*) Monitoring shall comply with 40 CFR part 60, appendix A, Method 21.

(*2*) The detection instrument shall meet the performance criteria of 40 CFR part 60, appendix A, Method 21.

(*3*) The instrument shall be calibrated before use on each day of its use by the methods specified in 40 CFR part 60, appendix A, Method 21.

(*4*) Calibration gases shall be:

(*i*) Zero air (less than 10 ppm of hydrocarbon in air), and

(*ii*) A mixture of methane or n-hexane and air at a concentration of approximately, but no less than, 10,000 ppm methane or n-hexane.

(*5*) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in 40 CFR part 60, appendix A, Method 21.

(B) When equipment is tested for compliance with no detectable emissions as required, the test shall comply with the following requirements:

(*1*) The requirements of paragraphs (a)(4)(vii)(A)(*1*) through (vii)(A)(*5*) of this section shall apply.

(*2*) The background level shall be determined as set forth in 40 CFR part 60, appendix A, Method 21.

(C) Leak detection tests shall be performed consistent with:

(*1*) "APTI Course SI 417 Controlling Volatile Organic Compound Emissions from Leaking Process Equipment" EPA–450/2–82–015 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(*2*) "Portable Instrument User's Manual for Monitoring VOC Sources" EPA–340/1–86–015 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(*3*) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and VHAP" EPA–450/3–88–010 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(*4*) "Petroleum Refinery Enforcement Manual" EPA–340/1–80–008 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161)

(viii) *Bulk Gasoline Delivery System Test Protocol.*

(A) The method for determining the emissions of gasoline from a vapor recovery system are delineated in 40 CFR part 60, subpart XX, § 60.503.

(B) Other tests shall be performed consistent with:

(1) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: appendix D" EPA–340/1–80–012 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161).

(2) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: appendix A", EPA–450/2–77–026 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161).

(ix) *Vapor Pressure of Volatile Organic Liquids.*

(A) If the VOL consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference as specified in paragraph (c) of this section or the vapor pressure may be obtained from a published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986–87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(B) If the VOL is a mixture, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference as specified in paragraph (c) of this section) or by the following equation:

$$P_{vol} = \sum_{i=1}^{n} P_i X_i$$

where:

P_{vol}=Total vapor pressure of the mixture,

n=Number of components in the mixture,

i=Subscript denoting an individual component,

P_i=Vapor pressure of a component determined in accordance with paragraph (a)(4)(ix)(A) of this section, and X_i = Mole fraction of the component in the total mixture.

(x) *Vapor Pressure of Organic Material or Solvent.*

(A) If the organic material or solvent consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference in paragraph (c) of this section) or the vapor pressure may be obtained from a published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986–87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(B) If the organic material or solvent is in a mixture made up of both organic material compounds and compounds which are not organic material, the vapor pressure shall be determined by the following equation:

$$P_{om} = \frac{\sum_{i=1}^{n} P_i X_i}{\sum_{i=1}^{n} X_i}$$

where:

P_{om}=Total vapor pressure of the portion of the mixture which is composed of organic material,

n=Number of organic material components in the mixture,

i=Subscript denoting an individual component,

P_i=Vapor pressure of an organic material component determined in accordance with paragraph (a)(4)(x)(A) of this section, and

X_i=Mole fraction of the organic material component of the total mixture.

(C) If the organic material or solvent is in a mixture made up of only organic material compounds, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference in paragraph (c) of this section) or by the above equation.

(xi) *Vapor Pressure of Volatile Organic Compounds.*

(A) If the VOC consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference in paragraph (c) of this section) or the vapor pressure may be obtained from a published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986–87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(B) If the VOC is in a mixture made up of both VOC compounds and compounds which are not VOC, the vapor pressure shall be determined by the following equation:

$$P_{voc} = \frac{\sum_{i=1}^{n} P_i X_i}{\sum_{i=1}^{n} X_i}$$

where:

P_{voc}=Total vapor pressure of the portion of the mixture which is composed of VOC,

n=Number of VOC components in the mixture,

i=Subscript denoting an individual component,

P_i=Vapor pressure of a VOC component determined in accordance with paragraph (a)(4)(xi)(A) of this section, and

X_i=Mole fraction of the VOC component of the total mixture.

(C) If the VOC is in a mixture made up of only VOC compounds, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference in paragraph (c) of this section) or by the above equation.

(xii) *Baseline Emissions.* Unless otherwise specified in paragraph (b) of this section, baseline VOC emissions shall be calculated for each emissions source in accordance with one of the procedures specified below:

(A) If daily emissions records which are consistent with the emission inventory data submitted by the State for the control area on November 15, 1992 are available for the calendar years 1989 and 1990, baseline emissions shall be based on the median value of daily emissions recorded for the two-year period.

(B) If daily emissions records are not available for the calendar years 1989 and 1990 or are inconsistent with the emission inventory data submitted by the State for the control area on November 15, 1992 or were not submitted, baseline emissions shall be based on the average daily emissions value calculated for the two-year period. The average daily emissions value shall be calculated by dividing emissions for the two-year period by the operating or usage time for the two-year period. If solvent or coating usage data are not available, emissions associated with solvent or coating usage may be estimated from purchase-order records. The operating or usage time for the two-year period shall be based on one of the criteria specified as follows:

(1) The number of days specified in a federally enforceable permit if the emissions source operated under the conditions of a federally enforceable permit which restricted operating times during the two-year period,

(2) The average number of days that the emissions source was operated or used over the two-year period if documentation is available to support the number, or

(3) 730 days if documentation of the number of days that the emissions source was operated or used over the two-year period is not available.

(xiii) *Implementation Year Monthly Baseline Emissions.* Baseline emissions as defined in paragraph (a)(4)(xii) of this section shall be adjusted prior to the implementation year (2001) of the FIP cap program in the control area as follows:

(A) The reductions that are projected to occur as a result of both SIP and FIP measures between 1990 and 2001 shall be subtracted from the baseline emissions. This value shall be defined as the reduced daily baseline emissions and is denoted in pounds of VOC/day.

(B) The reduced daily baseline emissions shall be annualized by multiplying the daily value by 365. This value shall be defined as the reduced annual baseline emissions and is denoted in pounds of VOC/year.

(C) The reduced annual baseline emissions shall be converted into a monthly value by dividing by 12. This value shall be defined as the implementation year monthly baseline.

(5) *Enforcement.*

(i) All sources and facilities subject to provisions of § 52.2952 shall be subject to unannounced inspections by representatives of the USEPA pursuant to section 114 of the Clean Air Act.

(ii) Documentation maintained by all sources, facilities, and persons subject to this section must be sufficient to demonstrate compliance with all requirements of this section and must be provided to representatives of USEPA upon request.

(iii) Failure to comply with any provision of this section is a violation of the applicable implementation plan for purposes of section 113 of the Clean Air Act.

(iv) Each 50 pounds of emissions in excess of a facility's monthly cap shall be a separate violation for federal enforcement purposes.

(b) *Stationary and Area Source Control Measures.*

(1) *Industrial and Commercial Solvents/Coatings.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(1) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(1) of this section, the following definitions also apply:

Adhesives means any substance or mixture of substances intended to serve as a joining compound.

Aerospace component means the fabricated part, assembly of parts, or completed unit of any aircraft or space vehicle.

Aerospace component coating facility means a facility that includes one or more aerospace component coating unit(s).

Aerospace component coating unit means a coating unit in which any protective, decorative, or functional coating or reinforcing material is applied on or impregnated into an aerospace component.

Aircraft means any machine designed to travel through the air above ground without leaving the earth's atmosphere, whether heavier or lighter than air, including airplanes, balloons, dirigibles, helicopters, and missiles.

Automobile means a motor vehicle capable of carrying no more than 12 passengers.

Can means any cylindrical, single walled container that is manufactured from metal sheets thinner than 29 gauge (0.0141 in.); with or without a top, cover, spout, or handles; into which solid or liquid materials are packaged.

Can coating facility means a facility that includes one or more can coating unit(s).

Can coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of cans or can components.

Coating means a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealants, adhesives, thinners, diluents, inks, maskants, and/or temporary protective coatings.

Coating applicator means any equipment or device, including but not limited to cloth, rollers, brushes, spray guns, and dip tanks, used to apply a coating onto or into a substrate.

Coating unit means a series of one or more coating applicators and any associated drying areas and/or oven wherein a coating is applied, dried, and/or cured. A coating unit ends at the point where the coating is dried or cured, or prior to any subsequent application of a different coating. It is not necessary to have an oven or a flashoff area in order to be included in this definition.

Coil means any continuous metal sheet or strip with thickness of 0.15 mm (0.006 in.) or more that is packaged in a roll or coil.

Coil coating facility means a facility that includes one or more coil coating unit(s).

Coil coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of flat metal sheets, strips, rolls, or coils for industrial or commercial use.

Cold cleaning means the batch process of cleaning and removing soils from surfaces by spraying, brushing, flushing, or immersion while maintaining the organic solvent below its boiling point. Wipe cleaning is not included in this definition.

Conveyorized degreasing means the continuous process of cleaning and removing soils from surfaces using either cold or vaporized solvents.

Degreaser means any equipment or system used in solvent cleaning.

Degreasing facility means a facility that includes one or more cold cleaning, open-top vapor degreasing, and/or conveyorized degreasing processes.

Dry cleaning facility means a facility engaged in the cleaning of fabrics using an essentially nonaqueous solvent by means of one or more solvent washes, extraction of excess solvent by spinning, and drying by tumbling in an airstream. The facility includes, but is not limited to, washers, dryers, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

Fabric coating facility means a facility that includes one or more fabric coating unit(s).

Fabric coating unit means a web coating unit in which any protective, decorative, or functional coating or reinforcing material is applied on, saturated into, or impregnated into a textile fabric. A fabric printing unit is not considered a fabric coating unit.

Film coating facility means a facility that includes one or more film coating unit(s).

Film coating unit means a coating unit in which any protective, decorative, or functional coating is applied on, saturated into, or impregnated into any film substrate; other than paper, fabric, or vinyl; including but not limited to typewriter ribbons, photographic film, plastic film, magnetic tape, and metal foil.

Flatwood product means panels made of wood materials including; but not limited to; plywood, particle board, and hardboard.

Flatwood product coating facility means a facility that includes one or more flatwood product coating unit(s).

Flatwood product coating unit means a coating unit in which any protective, decorative, or functional coating is

applied on or impregnated into a flatwood product.

Flexographic printing means the application of words, designs, and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of elastomeric materials.

Flexographic printing press means a printing press in which each roll printer uses a roll with raised areas for applying an image such as words, designs, or pictures to a substrate. The image carrier on the roll is made of rubber or other elastomeric material.

Fountain solution means the solution which is applied to the lithographic printing plate to maintain hydrophilic properties of the nonimage areas.

Graphic arts coating facility means a facility that includes one or more graphic arts coating units.

Graphic arts coating unit means any packaging rotogravure printing, publication rotogravure printing, flexographic printing, lithographic printing, letterpress printing, laminating, or screen printing unit or any paper, fabric, or film coating unit operated in conjunction with a printing unit.

Group I vehicles and equipment means large-sized trucks, buses, and mobile equipment.

Group II vehicles means passenger cars, small-sized trucks and vans, medium-sized trucks and vans, and motorcycles.

Heatset means a class of web-offset lithography which requires a heated dryer to solidify the printing inks.

Heatset-web-offset lithographic printing unit means a lithographic printing unit in which a blanket cylinder is used to transfer ink from a plate cylinder to a substrate continuously fed from a roll or an extension process and an oven is used to solidify the printing inks.

Heavy off-highway vehicle products means heavy construction, mining, farming, or material handling equipment; heavy industrial engines; diesel-electric locomotives and associated power generation equipment; and the components of such equipment or engines.

Heavy off-highway vehicle products coating facility means a facility that includes one or more heavy off-highway vehicle products coating unit(s).

Heavy off-highway vehicle products coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of heavy off-highway vehicle products.

Highway means a way or place of whatever nature, publicly maintained and open to the public for purposes of vehicular travel. Highway includes street.

Industrial or commercial solvent use facility means any industrial or commercial facility that uses solvents which contain VOCs or substances that contain solvents which contain VOCs. Industrial and commercial solvent use facilities include, but are not limited to, perchloroethylene dry cleaning, petroleum dry cleaning, metal cleaning, degreasing, aerospace component coating, motor vehicle and mobile equipment assembly line coating, motor vehicle and mobile equipment refinishing, can coating, coil coating, fabric coating, film coating, flatwood product coating, graphic arts coating, large appliance coating, magnet wire coating, marine vessel coating, metal and wood furniture coating, miscellaneous metal parts and products coating, paper coating, and plastic parts coating facilities. Substances that contain solvents include, but are not limited to, coatings, inks, fountain solutions, adhesives, thinners, and clean-up solvents.

Ink means a coating used in printing, impressing, or transferring an image onto a substrate.

Laminating unit means a printing unit in which an adhesive is used to form two or more layers of material into a single, multiple-layer sheet.

Large appliance means the component metal parts (including, but not limited to, doors, cases, lids, panels, and interior support parts) of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dish washers, trash compactors, air conditioners, and other similar products under SIC Code 363.

Large appliance coating facility means a facility that includes one or more large appliance coating unit(s).

Large appliance coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of component metal parts of large appliances.

Letterpress printing unit means a printing unit in which the image area is raised relative to the nonimage area on the roll printer and the ink is transferred to the paper directly from the image surface.

Light-duty truck means any motor vehicle rated at 3864 kg (8500 lb) gross vehicle weight or less, designed mainly to transport property.

Lithographic printing unit means a printing unit in which the image and nonimage areas are on the same plane of the roll printer.

Magnet wire coating facility means a facility that includes one or more magnet coating unit(s).

Magnet wire coating unit means a coating unit in which electrically insulating varnish or enamel is applied onto the surface of wire to be used in electrical machinery.

Marine vessel means a ship or boat used to travel on, or a submarine used to travel through, the sea.

Marine vessel coating facility means a facility that includes one or more marine vessel coating unit(s).

Marine vessel coating unit means a coating unit in which any protective, decorative, or functional coating is applied on the fabricated part, assembly of parts, or completed unit of any marine vessel.

Metal furniture means any furniture piece made of metal or any metal part which is or will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece including, but not limited to, tables, chairs, waste baskets, beds, desks, lockers, benches, shelving, file cabinets, lamps, and room dividers. This definition shall not apply to any coating unit coating miscellaneous metal parts or products.

Metal furniture coating facility means a facility that includes one or more metal furniture coating unit(s).

Metal furniture coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of metal furniture.

Miscellaneous metal part or product means any metal part or metal product, even if attached to or combined with a nonmetal part or product.

Miscellaneous metal parts or products coating facility means a facility that includes one or more miscellaneous metal parts or products coating unit(s).

Miscellaneous metal parts or products coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of miscellaneous metal parts or products.

Mobile equipment means self-propelled equipment which is physically capable of being driven on a highway. Mobile equipment includes: Automobiles, motorcycles, trucks, vans, construction equipment (e.g., mobile cranes, bulldozers, concrete mixers), farming equipment (e.g., wheel tractors, pesticide sprayers), and miscellaneous equipment (e.g., street cleaners, golf carts, and hauling equipment used inside and around airports, docks, depots, and industrial and commercial plants).

Motor vehicle means a vehicle which is self-propelled and physically capable of being driven on a highway.

Motor vehicle or mobile equipment assembly line coating facility means a facility where parts are manufactured or finished for eventual inclusion into finished motor vehicles or mobile equipment ready for sale to motor vehicle or mobile equipment dealers. This definition does not include customizers, body shops, and/or other auto refinishing facilities.

Motor vehicle or mobile equipment refinishing facility means a facility where all or any part of used motor vehicles or mobile equipment is refinished, or customized, by the application of paint. This definition includes motor vehicles or mobile equipment dealerships who purchase new motor vehicle or mobile equipment from Original Equipment Manufacturers. This definition does not include motor vehicle or mobile equipment assembly line coating facilities.

Motorcycle means any motor vehicle other than a tractor having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground and weighing less than 1,500 lbs, except that four wheels may be in contact with the ground when two of the wheels are a functional part of a sidecar.

Offset means a blanket cylinder that is used to transfer ink from a plate cylinder to the substance to be printed.

Open-top vapor degreasing means the batch process of cleaning and removing soils from surfaces by condensing hot solvent vapor on the colder metal parts.

Oven means a chamber within which heat is used for one or more of the following purposes: To dry, bake, cure, or polymerize a coating or ink.

Packaging rotogravure printing means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates which are, in subsequent operations, formed into packaging products or labels for articles to be sold.

Packaging rotogravure printing press means a rotogravure printing press in which surface coatings are applied to paper, paperboard, metal foil, plastic film, or other substrates which are to be used to produce containers, packaging products, or labels for articles.

Paper coating facility means a facility that includes one or more paper coating unit(s).

Paper coating unit means a web coating unit where coating is applied to paper. Printing presses are not considered paper coating units. Products produced on a paper coating unit include, but are not limited to, adhesive tapes and labels, book covers, post cards, office copier paper, drafting paper, and pressure sensitive tapes. Paper coating units include, but are not limited to, application by impregnation or saturation or by the use of roll, knife, or rotogravure coating.

Printing unit means an operation consisting of a series of one or more roll printers and any associated roll coaters, drying areas, and/or ovens wherein one or more surface coatings are applied, dried, and/or cured. It is not necessary for an operation to have an oven, or flashoff area, or drying area to be included in this definition.

Publication rotogravure printing unit means a rotogravure printing unit in which surface coatings are applied to paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, or other types of printed material.

Refinish means to restore or replace coatings on Group I vehicles (large-sized trucks, buses, and mobile equipment) and Group II vehicles (passenger cars, small-sized trucks and vans, medium-sized trucks and vans, and motorcycles) and equipment, or their parts and components, except Original Equipment Manufacturer coatings applied at motor vehicle or mobile equipment assembly line coating facilities.

Roll coater means an apparatus in which a uniform layer of coating material is applied by means of a roll or rolls across the entire width of a moving substrate which is fed from an unwinding roll.

Roll printer means an apparatus in which a surface coating is applied by means of a roll or rolls with only partial coverage across the width of a moving substrate which is fed from an unwinding roll. The partial coverage results in the formation of words, designs, or pictures on the substrate.

Rotogravure printing means the application of words, designs, and pictures to a substrate using a gravure cylinder by means of a roll printing technique in which the pattern to be applied is recessed relative to the nonimage area.

Rotogravure printing unit means a printing unit in which each roll printer uses a roll with recessed areas for applying an image to a substrate.

Screen printing unit means a printing unit in which the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.

Solvent means a substance that is liquid at standard conditions that is used to dissolve or dilute another substance; this term includes, but is not limited to, organic materials used as dissolvers, viscosity reducers, degreasing agents, or cleaning agents.

Solvent cleaning means the process of cleaning soils from surfaces by cold cleaning, open-top vapor degreasing, or conveyorized degreasing.

Space vehicle means any vehicle designed to travel beyond the earth's atmosphere.

Street means a public road in a town or city.

Substrate means the surface to which a coating is applied on, saturated into, or impregnated into.

Vinyl coating facility means a facility that includes one or more vinyl coating unit(s).

Vinyl coating unit means a web coating unit in which any protective, decorative, or functional coating or printing ink is applied onto a continuous web of vinyl-coated fabric or vinyl sheets.

Web means an automatic system which supplies substrate from a continuous roll or an extrusion process.

Wood furniture means room furnishings including cabinets (kitchen, bath, and vanity), tables, chairs, beds, sofas, shutters, art objects, wood paneling, wood flooring, and any other coated furnishings made of wood, wood composition, or fabricated wood materials.

Wood furniture coating facility means a facility that includes one or more wood furniture coating unit(s).

Wood furniture coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto wood furniture.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(1 (iii)(A) and (B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of any degreasing facility or any motor vehicle or mobile equipment refinishing facility located in the control area as defined in paragraph (a)(1) of this section.

(B) The requirements of paragraphs (b)(1) (iii)(A) and (B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of an industrial or commercial solvent use facility located in the applicable area specified in paragraph (b)(1)(ii)(A) of this section at which actual emissions of VOC are greater than or equal to 6.8 kg (15 lbs) during any one day.

(C) The requirements of paragraphs (b)(1) (iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of an industrial or cominercial solvent use facility located in the applicable area specified in paragraph (b)(1)(ii)(A) of this section at which

actual emissions of VOC from all emissions sources are always less than 6.8 kg (15 lbs) during any one day. If actual emissions of VOC from a facility which is exempt from the limitations of paragraph (b)(1)(iii)(B) of this section ever exceed 6.8 kg (15 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(1)(iii)(B) *(1)* through *(5)*, (b)(1)(iv)(A), (b)(1)(v)(A), and (b)(1)(vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraphs (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraph (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[3]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(1)(ii) (A) or (B) of this section, shall limit actual monthly emissions of VOC from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \qquad (1)$$

where[4]

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \qquad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \qquad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \qquad (4)$$

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)(2) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \qquad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

---

[3] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B)*(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

[4] The range 0.04 to 0.09 reflects the 4% to 9% cumulative annual rate of emission reductions currently under consideration. In the first year, emissions would be reduced by 4% to 9% off of baseline levels; in the second year, emissions would be reduced by 8% to 18% off of baseline levels, and so on until the minimum 20% VOC reduction is made. As discussed in the preamble to the regulations this range of annual reductions is based on EPA's preliminary rate of reduction analysis and may change as the analysis continues prior to final promulgation of this FIP. In addition, EPA plans to review this value every three years after final rule promulgation.

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(1)(iii)(B)*(1)* through *(5)* of this section, as described under paragraph (b)(1)(ii)(A) or (B) of this section, shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(*1*) A declaration that the facility is in compliance with all of the requirements of this section, and

(*2*) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section shall comply with the following:

(*1*) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. This certification shall include:

(*i*) A declaration that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section; and

(*ii*) Calculations which demonstrate that total baseline VOC emissions from all emissions sources at the facility are and will remain less than 6.8 kg (15 lbs) during any one day. Baseline emissions shall be calculated in accordance with the procedures specified in paragraphs (b)(1)(iii)(A)*(2) (i)* and *(ii)* of this section.

(*2*) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that actual emissions of VOC from the facility exceeded 6.8 kg (15 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraphs (b)(1)(ii) (A) or (B) of this section shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(1)(ii)(C) of this section shall collect and record all information necessary to demonstrate that actual emissions of VOC from all emissions sources are less than 6.8 kg (15 lbs) during each day and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraphs (b)(1)(ii) (A) or (B) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to demonstrate that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(2) *VOC Emissions Associated with the Manufacturing of Products.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(2) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(2) of this section, the following definitions also apply:

Facility which manufactures products containing VOCs means any facility where VOCs are emitted from processes which are used to manufacture or fabricate products. These products include, but are not limited to, the products specified in paragraphs (*1*) through (*7*) of this definition. This definition does not include facilities which are subject to any of the requirements of paragraph (b)(1), (b)(4), or (b)(5) of this section.

(*1*) Industrial and agricultural organic chemicals and gases. Industrial organic chemicals include, but are not limited to, gum and wood chemicals, cyclic organic crudes and intermediates, organic dyes and pigments, and the chemicals listed in 40 CFR 52.741, appendix A. Agricultural organic chemicals include, but are not limited to, pesticides, livestock dips, soil conditioners, and fertilizers.

(*2*) Plastic materials, synthetic resins, synthetic rubber, elastomizers, and cellulosic and manmade fibers.

(*3*) Drugs which include, but are not limited to, medicinal chemicals and botanical products, pharmaceutical preparations, in vitro and in vivo diagnostic substances, and biological products.

(*4*) Soaps; detergents; cleaning, polishing, and sanitizing preparations; surface active agents, finishing agents, sulfonated oils, and assistants; and perfumes and cosmetics.

(*5*) Food additives and sweeteners.

(*6*) Paints, varnishes, lacquers, enamels, inks, primers, paint removers, thinners, stains, shellacs, cleaners, putty, coatings, adhesives, fillers, sealants, explosives, and carbon black.

(*7*) Fabricated rubber and miscellaneous plastics products including, but not limited to, tires and inner tubes; rubber and plastics footware, hose, belting, gasket, packing, and sealing devices; and molded, extruded, and lathe-cut mechanical rubber goods.

Manufacture means to produce or combine any ingredients contained in any product.

Manufacturing process means a process or a series of processes used to convert raw materials, feed stocks, subassemblies, or other components into a product which will be sold, offered for sale, supplied, or distributed or will be used as a component in a subsequent manufacturing process. This definition includes the storage and handling of organic compounds or gases which are used in a manufacturing process and the handling of organic

compounds or gases used to clean-up a manufacturing process.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(2)(iii)(A), (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of a facility which manufactures products containing VOCs located in the control area as defined in paragraph (a)(1) of this section at which total VOC emissions are greater than or equal to 4.5 kg (10 lbs) during any one day.

(B) The requirements of paragraphs (b)(2)(iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of a facility which manufactures products containing VOCs located in the applicable area specified in paragraph (b)(2)(ii)(A) of this section at which total VOC emissions from all emissions sources are always less than 4.5 kg (10 lbs) during any one day. If uncontrolled VOC emissions from a facility which is exempt from the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section ever exceed 4.5 kg (10 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(2)(iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraphs (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's title V (of the Clean Air Act) operating permit. For sources not subject to title V, sources shall submit all information which would be required for sources subject to title V.[5]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(2)(ii)(A) of this section, shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \qquad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)(2) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \qquad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \qquad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \qquad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

[5] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B)*(1)* through *(5)* of this section. The methods may include but are not limited to: (1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(A) of this section, shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the facility is in compliance with all of the requirements of this section; and

(2) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(B) of this section, shall comply with the following:

(1) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section. This certification shall include:

(i) A declaration that the facility is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(B) of this section; and

(ii) Calculations which demonstrate that total baseline VOC emissions from all emissions sources at the facility are and will remain less than 4.5 kg (10 lbs) during any one day. Baseline emissions shall be calculated in accordance with the procedures specified in paragraphs (b)(2)(iii)(A) *(1)* and *(2)* of this section.

(2) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that total VOC emissions from the facility exceeded 4.5 kg (10 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(A) of this section, shall collect and record all information necessary to demonstrate compliance with the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(B) of this section, shall collect and record all information necessary to demonstrate that total VOC emissions from all emissions sources are less than 4.5 kg (10 lbs) during each day and maintain the information at the facility for a period of three years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(A) of this section, to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of section to demonstrate compliance with the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(2)(ii)(B) to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to demonstrate that the facility is exempt from the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section.

(3) *Disposal of Materials Containing Volatile Organic Compounds.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(3) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(3) of this section, the following definitions also apply:

Biodegradable waste means any organic waste that can be broken down into its basic elements by microorganisms.

Biodegradable waste disposal facility means any facility which is operated as a business or owned by a state or municipality and is used to treat, store, or dispose of biodegradable waste or to reclaim or recycle organic compounds or gases from biodegradable wastes.

Organic waste disposal facility means any facility which is operated as a business or owned by a state or municipality and is used to treat, store, or dispose of organic wastes that contain VOCs or to reclaim or recycle organic compounds or gases from organic wastes that contain VOCs. Such facilities include, but are not limited to, biodegradable waste disposal facilities (e.g., landfills); publicly owned treatment works; hazardous waste treatment, storage, and disposal facilities; and sewage sludge, solid waste, and hazardous waste incinerators.

Publicly owned treatment work (POTW) means any device or system which is owned by a state or municipality and is used to treat (including recycling and reclamation) municipal sewage or industrial liquid waste.

(ii) *Applicability.* The requirements of paragraphs (b)(3) (iii), (iv), (v), and (vi) of this section shall apply to any owner or operator of any organic waste disposal facility located in the control area as defined in paragraph (a)(1) of this section.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the

provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's title V operating permit. For sources not subject to title V, sources shall submit all information which would be required for sources subject to title V.[6]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph because of paragraph (b)(3)(ii) of this section shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \qquad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \qquad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \qquad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \qquad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \qquad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(3)(ii) of this section shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(A) A declaration that the facility is in compliance with all of the requirements of this section; and

(B) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section.

(v) *Recordkeeping.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(3)(ii) of this section, shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(3)(iii)(B)

[6] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to: (1) the test methods and procedures specified in paragraph (a)(4) of this section, and (2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

(1) through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.* The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(3)(ii) of this section, to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section.

(4) *Commercial Food Preparation and/or Baking.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(4) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(4) of this section, the following definitions also apply:

Brandy-making facility means a facility that distills wine, the refuse of a wine press, or any other fermented fruit juices to produce alcoholic liquors.

Charcoal means any substance obtained by charring wood or any other organic matter by a process of smothered combustion to exclude air.

Commercial baking facility means a facility that bakes bread, biscuits, rolls, pies, cakes, cookies, or other similar products.

Commercial charbroiling facility means a facility that broils any type of food over a charcoal or gas-fired broiler.

Food preparation facility means any commercial baking, commercial charbroiling, wine- or brandy-making, fruit and vegetable preservation, grain mill production, vegetable oil production, or malt beverage production facility. This definition includes restaurants involved in activities described in the previous sentence.

Fruit and vegetable preservation facility means a facility that preserves food by, but not limited to, canning, curing, pickling, salting, smoking, cooking, or freezing.

Grain mill production facility means a facility that grinds any grain including, but not limited to, wheat, rice, corn, or rye into flour or meal.

Malt beverage production facility means a facility engaged in malting, fermentation, aging, or packaging of barley or any other grain for the purpose of producing an alcoholic beverage.

Vegetable oil production facility means a facility that extracts oil from any vegetable seed.

Wine- or brandy-making facility means a facility that ferments juices from grapes or any other fruit for the purpose of producing alcoholic beverages.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(4) (iii)(A) and (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of a commercial food preparation facility located in the control area as defined in paragraph (a)(1) of this section at which VOC emissions are greater than or equal to 4.5 kg (10 lbs) during any one day.

(B) The requirements of paragraphs (b)(4) (iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of a commercial food preparation facility located in the applicable area specified in paragraph (b)(4)(ii)(A) of this section at which total uncontrolled VOC emissions from all emissions sources are always less than 4.5 kg (10 lbs) during any one day. If VOC emissions from a facility which is exempt from the limitations of paragraph (b)(4)(iii)(B) of this section ever exceed 4.5 kg (10 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(4) (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(2)(iii)(A) *(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[7]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(4)(ii)(A) of this section shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \qquad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

[7] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B)*(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \quad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(A) of this section shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the facility is in compliance with all of the requirements of this section; and

(2) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(4)(iii)(B)*(1)* through *(5)* of this section.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(4)(iii)(B)*(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(B) of this section shall comply with the following:

(1) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraphs (b)(4)(iii)(B)*(1)* through *(5)* of this section. This certification shall include:

(i) A declaration that the facility is exempt from the limitations of paragraphs (b)(4)(iii)(B)*(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(B) of this section; and

(ii) Calculations which demonstrate that total baseline VOC emissions from all emissions sources at the facility are and will remain less than 4.5 kg (10 lbs) during any one day. Baseline emissions shall be calculated in accordance with the procedures specified in paragraphs (b)(4)(iii)(A) *(1)* and *(2)* of this section.

(2) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that total VOC emissions from the facility exceeded 4.5 kg (10 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(A) of this section, shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(B) of this section, shall collect and record all information necessary to demonstrate that total VOC emissions from all emissions sources are less than 4.5 kg (10 lbs) during each day and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(A) of this section, to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(4)(ii)(B) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to

demonstrate that the facility is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section.

(5) *Petroleum and Natural Gas Extraction, Processing, and Storage.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(5) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(5) of this section, the following definitions also apply:

Crude oil means a naturally occurring mixture which consists of hydrocarbons and sulfur, nitrogen, or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

Extraction facility means any facility where drilling and servicing equipment, flow lines, separators, gathering lines, and auxiliary nontransportation related equipment are used to extract petroleum or natural gas from a well.

Gasoline means any petroleum distillate which is used as a motor fuel.

Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

Processing facility means any facility where petroleum or natural gas is used as a feedstock to produce gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other related products.

Storage facility means any extraction facility, processing facility, bulk gasoline plant, bulk gasoline terminal, or any petroleum storage facility which distributes petroleum, natural gas, or gasoline to retail outlet and wholesale purchaser-consumer facilities. This definition does not apply to retail gasoline service stations.

(ii) *Applicability.* The requirements of paragraphs (b)(5) (iii), (iv), (v), and (vi) of this section shall apply to any owner or operator of any petroleum or natural gas extraction, processing, or storage facility located in the control area as defined in paragraph (a)(1) of this section.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[8]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph (b)(5) because of paragraph (b)(5)(ii) of this section shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \qquad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \qquad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \qquad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

---

[8] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(5)(ii) of this section shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(A) A declaration that the facility is in compliance with all of the requirements of this section; and

(B) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section.

(v) *Recordkeeping.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(5)(ii) of this section shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.* The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(5)(ii) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section.

(c) *Incorporated by Reference.* The materials listed below are incorporated by reference. The incorporation by reference was approved by the Director of the Office of Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.[9] These materials are incorporated as they exist on the date of approval, and a notice of any change in these materials will be published in the **Federal Register**.

(1) ASTM D3925–81 (1985) Standard Practice for Sampling Liquid Paints and Related Pigment Coating.

(2) ASTM E300 Standard Practice for Sampling Industrial Chemicals.

(3) ASTM D1475–85: Standard Test Method for Density of Paint, Varnish, Lacquer and Related Products.

(4) ASTM D2369–87: Standard Test Method for Volatile Content of a Coating.

(5) ASTM D3792–86: Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph.

(6) ASTM D4017–81 (1987): Standard Test Method for Water Content in Paints and Paint Materials by the Karl Fischer Method.

(7) ASTM D4457–85: Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph.

(8) ASTM D2697–86: Standard Test Method for Volume Non-volatile Matter in Clear or Pigmented Coatings.

(9) ASTM E180–85: Standard Practice for Determining the Precision Data of ASTM Methods for Analysis and Testing of Industrial Chemicals.

(10) ASTM Method D2879–86: Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.

§ 52.2953 Stationary and area source caps (Ventura).[10]

(a) *General Provisions.*

(1) *Applicability.* The provisions of this section shall apply to all stationary emission sources located in the "control area" as defined as the Ventura ozone nonattainment area in 40 CFR 81.305, and all other persons identified in subsequent applicability paragraphs in this section.

(2) *Compliance dates.* Unless otherwise specified in this section, compliance with all requirements of this section is required as of [*Insert date of publication of the final rule*]. This paragraph shall not operate to provide additional time for compliance under Section 113(d) of the Act, 42 U.S.C 7413(d), for sources subject to compliance as of [*Insert date of publication of the final rule*].

(3) *Definitions.* For the purposes of this section, the following definitions apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Actual emissions means the actual quantity of VOC emissions from an emissions source during a particular time period.

Actual emissions rate means the actual quantity of VOC emissions from an emissions source per unit of production or throughput.

Agency means the United States Environmental Protection Agency.

Air contaminant means any solid, liquid, or gaseous matter, any odor, or any form of energy, that is capable of being released into the atmosphere from an emission source.

Air pollution means the presence in the atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.

Air pollution control equipment means any equipment or facility of a type intended to eliminate, prevent, reduce or control the emission of specified air contaminants to the atmosphere.

Allowable emissions rate means the most stringent of the applicable standards in 40 CFR parts 60 and 61; the applicable implementation plan; or a federally enforceable permit.

[9] Incorporation by reference is pending approval by the Office of Federal Register.

[10] EPA intends to issue a supplemental document in the **Federal Register** which addresses portions of proposed § 52.2953.

Baseline emissions means the emissions calculated using 1990 emission inventory data in the affected FIP areas and adjusted for emission reductions projected to occur by the implementation year of the FIP cap program in the affected FIP area. The baseline shall be denominated in pounds per year of FIP cap pollutant (e.g., pounds of VOC per year) and monthly caps shall be prorated based on this data.

Coating applicator means any equipment or device including but not limited to cloth, rollers, brushes, spray guns, or dip tanks used to apply a coating.

Day means a period of consecutive 24 hours beginning at 12 a.m. (midnight) local time, or beginning at a time consistent with a facility's operating schedule.

Emission rate means the total mass of VOCs released or discharged from an emissions source into the atmosphere per unit of production or throughput (e.g., pound VOC/gallon of coating solids).

Emission source or *source* means any building, structure, facility, property, equipment, device, container, or any combination thereof, at, from, or by reason which VOC is emitted or discharged into the atmosphere.

Facility means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control), except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two-digit code) as described in the "Standard Industrial Classification Manual, 1987" (National Technical Information Service order No. PB 87–10012).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator including those requirements contained in permits issued pursuant to 40 CFR parts 70 and 71, except those terms or conditions designated as not federally enforceable; those requirements developed pursuant to 40 CFR parts 60 and 61; requirements within any applicable implementation plan; and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, and 40 CFR 51.166.

Incinerator means a combustion apparatus in which solid, semi-solid, liquid, or gaseous combustible wastes are ignited and burned and from which the solid and gaseous residues contain little or no combustible material.

Monitor means to measure and record.

Organic compound means a chemical compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, carbonates, and ammonium carbonate.

Organic vapor means the gaseous phase of an organic compound or a mixture of organic compounds present in the atmosphere.

Owner or operator means any person who owns, operates, leases, controls, or supervises an emissions source or air pollution control equipment.

Person means any individual, corporation, copartnership, firm, company, partnership, joint stock company, trust, association, State, municipality, political subdivision, or any other legal entity, or their legal representative, agent, or assigns.

Process means any stationary emission source other than a fuel combustion emission source or an incinerator.

Source means emission source.

Standard conditions means a temperature of 20°C (68°F) and a pressure of 760 mm Hg (29.92 in. Hg).

Stationary emission source and *Stationary source* mean an emission source which is not self-propelled.

(4) *Test Methods and Procedures.*

(i) *Coatings, Inks, and Fountain Solutions.* The following test methods and procedures shall be used to determine the VOC content of as applied coatings, inks, and fountain solutions to determine compliance with the limitations set forth in this section.

(A) *Sampling.* Samples collected for analyses shall be one-liter taken into a one-liter container at a location and time such that the sample will be representative of the coating as applied (i.e., the sample shall include any dilution solvent or other VOC added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOC added after the sample is taken must be measured and accounted for in the calculations in paragraph (a)(4)(i)(C) of this section. For multiple package coatings, separate samples of each component shall be obtained. A mixed sample shall not be obtained as it will cure in the container. Sampling procedures shall follow the guidelines presented in:

(1) ASTM D3925–81 (1985) Standard Practice for Sampling Liquid Paints and Related Pigment Coating. This practice is incorporated by reference in paragraph (c) of this section.

(2) ASTM E300 Standard Practice for Sampling Industrial Chemicals. This practice is incorporated by reference in paragraph (c) of this section.

(B) *Analyses.* The applicable analytical methods specified below shall be used to determine the composition of coatings, inks, or fountain solutions as applied.

(1) Method 24 of 40 CFR part 60, appendix A shall be used to determine the VOC content and density of coatings.

(2) Method 24A of 40 CFR part 60, appendix A, shall be used to determine the VOC content and density of publication rotogravure printing inks and related coatings.

(3) The following ASTM methods and practices are the analytical procedures for determining VOC:

(i) ASTM D1475–85: Standard Test Method for Density of Paint, Varnish, Lacquer and Related Products. This test method is incorporated by reference in paragraph (c) of this section.

(ii) ASTM D2369–87: Standard Test Method for Volatile Content of a Coating. This test method is incorporated by reference in paragraph (c) of this section. The following minor modifications should be used for multicomponent coatings. All components of the coating are to be weighed in the proper proportion into the analysis container and mixed together just prior to analysis and the mixture is allowed to stand for at least one hour but no more than 24 hours prior to being oven dried at 110 degrees celsius for one hour.

(iii) ASTM D3792–86: Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph. This test method is incorporated by reference in paragraph (c) of this section.

(iv) ASTM D4017–81 (1987): Standard Test Method for Water Content in Paints and Paint Materials by the Karl Fischer Method. This test method is incorporated by reference in paragraph (c) of this section.

(v) ASTM D4457–85: Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph. (The procedure delineated above can be used to develop protocols for any compounds specifically exempted from the definition of VOC.) This test method is incorporated by reference in paragraph (c) of this section.

(vi) ASTM D2697–86: Standard Test Method for Volume Non-volatile Matter in Clear or Pigmented Coatings. This

test method is incorporated by reference in paragraph (c) of this section.

(vii) ASTM E180–85: Standard Practice for Determining the Precision Data of ASTM Methods for Analysis and Testing of Industrial Chemicals. This practice is incorporated by reference in paragraph (c) of this section.

(4) Use of an adaptation to any of the analytical methods specified in paragraphs (a)(4)(i)(B) *(1)*, *(2)*, and *(3)* of this section may be approved by the Administrator on a case-by-case basis. An owner or operator must submit sufficient documentation for the Administrator to find that the analytical methods specified in paragraphs (a)(4)(i)(B) *(1)*, *(2)*, and *(3)* of this section will yield inaccurate results and that the proposed adaptation is appropriate.

(C) *Calculations.* Calculations for determining the VOC content, water content, and the content of any compounds which are specifically exempted from the definition of VOC of coatings, inks, and fountain solutions as applied shall follow the guidance provided in the following documents.

(1) "A Guide for Surface Coating Calculation" EPA–340/1–86–016 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(2) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coatings" (revised June 1986) EPA–450/3–84–019 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(3) "A Guide for Graphic Arts Calculations" August 1988 EPA–340/1–88–003 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(ii) *Automobile or Light-Duty Truck Test Protocol.* The protocol for testing, including determining the transfer efficiency, of coating applicators at topcoat coating operations at an automobile assembly facility shall follow the procedure in: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations" December 1988 EPA–450/3–88–018 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161).

(iii) *Capture System Efficiency Test Protocols.*

(A) *Applicability.* The requirements of paragraph (a)(4)(iii)(B) of this section shall apply to all VOC emitting processes employing a capture system except those cases noted below.

(1) If a source installs a permanent total enclosure (PTE) that meets U.S.EPA specifications, and which directs all VOC to a control device, then the source is exempted from the requirements described in paragraph (a)(4)(iii)(B) of this section. The U.S.EPA specifications to determine whether a structure is considered a PTE are given in Procedure T of appendix B of 40 CFR 52.742. In this instance, the capture efficiency is assumed to be 100 percent and the source is still required to measure control efficiency using appropriate test methods as specified in paragraph (a)(4)(iv) of this section.

(2) If a source uses a control device designed to collect and recover VOC (e.g., carbon adsorber), an explicit measurement of capture efficiency is not necessary provided that the conditions given below are met. The overall control of the system can be determined by directly comparing the input liquid VOC to the recovered liquid VOC. The general procedure for use in this situation is given in § 60.433 of this chapter, with the following additional restrictions:

(i) The source must be able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average, within 72 hours following the 24-hour period. In addition, one of the following two criteria must be met:

(ii) The solvent recovery system (i.e., capture and control system) must be dedicated to a single process, or

(iii) If the solvent recovery system controls multiple processes, then the source must be able to demonstrate that the overall control (i.e., the total recovered solvent VOC divided by the sum of liquid VOC input to all processes venting to the control system) meets or exceeds the most stringent standard applicable for any process venting to the control system.

(3) The following facilities are exempted from the requirements described in paragraph (a)(1)(iii)(B) of this section:

(i) Automobile-related assembly facilities subject to the "Automobile or Light-Duty Truck Test Protocol" described in paragraph (a)(4)(ii) of this section.

(ii) Heatset-web-offset lithographic printing units as defined in paragraph (b)(1)(i)(B) of this section.

(B) *Specific Requirements.* The capture efficiency of a process shall be measured using one of the four protocols given below. Any error margin associated with a test protocol may not be incorporated into the results of a capture efficiency test. If these techniques are not suitable for a particular process, then the source must present an alternative capture efficiency protocol and obtain approval for it by the Administrator as a SIP or FIP revision.

(1) Gas/gas method using temporary total enclosure (TTE). The U.S. EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T of appendix B of 40 CFR 52.741. The capture efficiency equation to be used for this protocol is:

$CE=G_w/(G_w+F_w)$

where

CE=capture efficiency, decimal fraction

G_w=mass of VOC captured and delivered to control device using a TTE

F_w=mass of fugitive VOC that escapes from a TTE Procedure G.2 contained in appendix B of 40 CFR 52.741 is used to obtain G_w. Procedure F.1 in appendix B of 40 CFR 52.741 is used to obtain F_w.

(2) Liquid/gas method using TTE. The U.S. EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T of appendix B of 40 CFR 52.741. The capture efficiency equation to be used for this protocol is:

$CE=(L-F_w)/L$

where

CE=capture efficiency, decimal fraction

L=mass of liquid VOC input to process

F_w=mass of fugitive VOC that escapes from a TTE Procedure L contained in appendix B of 40 CFR 52.741 is used to obtain L. Procedure F.1 in appendix B of 40 CFR 52.741 is used to obtain F_w.

(3) Gas/gas method using the building or room (building or room enclosure) in which the affected source is located as the enclosure and in which "F" and "G" are measured while operating only the affected facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$CE=G/(G+F_B)$

where

CE=capture efficiency, decimal fraction

G=mass of VOC captured and delivered to control device

F_B=mass of fugitive VOC that escapes from building enclosure

Procedure G.2 contained in appendix B of 40 CFR 52.741 is used to obtain G. Procedure F.2 in appendix B of 40 CFR 52.741 is used to obtain F_B.

(4) Liquid/gas method using the building or room (building or room enclosure) in which the affected source is located as the enclosure and in which "F" and "L" are measured while

operating only the affected facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$CE=(L-F_B)/L$

where

CE=capture efficiency, decimal fraction

L=mass of liquid VOC input to process

F_B=mass of fugitive VOC that escapes from building enclosure

Procedure L contained in appendix B of 40 CFR 52.741 is used to obtain L. Procedure F.2 in appendix B of 40 CFR 52.741 is used to obtain F_B.

(C) *Recordkeeping and Reporting.*

(1) All affected facilities must maintain a copy of the capture efficiency protocol submitted to EPA on file. All results of the appropriate test methods and capture efficiency protocols must be reported to EPA within sixty (60) days of the test date. A copy of the results must be kept on file with the source for a period of five (5) years.

(2) If any changes are made to capture equipment, then affected facilities must notify EPA of these changes and a new test may be required by EPA.

(3) All affected facilities must notify the Administrator 30 days prior to performing any capture efficiency test. At that time, the source must notify the Administrator which capture efficiency protocol will be used.

(4) All affected facilities utilizing a PTE must demonstrate that this enclosure meets the requirement given in Procedure T in appendix B of 40 CFR 52.741 at all times.

(5) All affected facilities utilizing a TTE must demonstrate that their TTE meets the requirements given in Procedure T in appendix B of 40 CFR 52.741 for a TTE during testing of their control device. The source must also provide documentation that the quality assurance criteria for a TTE have been achieved.

(iv) *Control Device Efficiency Testing and Monitoring.*

(A) *Control Efficiency Test.* The control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOC concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in paragraph (a)(4)(vi) of this section.

(B) *Continuous Monitoring.* Any owner or operator that uses an afterburner or carbon adsorber to comply with any requirement of this section shall use continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications and which meets EPA-approved performance specifications at all times when the afterburner or carbon adsorber is in use. The continuous monitoring equipment must automatically monitor and record the following parameters:

(1) Combustion chamber temperature of each afterburner.

(2) Temperature rise across each catalytic afterburner bed or VOC concentration exhaust.

(3) The VOC concentration of each carbon adsorption bed exhaust.

(C) *Recordkeeping and Reporting.*

(1) All affected facilities must maintain a copy of all control efficiency test protocols for a period of five (5) years. All control test results must be reported to EPA within sixty (60) days of the test date. A copy of the results must be kept on file with the source for a period of five (5) years.

(2) All affected facilities must maintain copies of all required continuous monitoring records for a period of five (5) years.

(3) If any changes are made to control equipment, affected facilities must notify EPA of these changes and a new control efficiency test may be required by EPA.

(4) All affected facilities must notify the Administrator 30 days prior to performing any control efficiency test. At that time, the source must notify the Administrator which test methods will be used.

(v) *Overall Efficiency.*

(A) The overall efficiency of each emission control system shall be determined as the product of the capture system efficiency and the control device efficiency or by the liquid/liquid test protocol as specified in paragraph (a)(4)(iii)(A)*(2)* of this section for each solvent recovery system.

(B) The overall efficiency of the capture system and control device used to control VOC emissions from a paper, fabric, film, can, coil, or miscellaneous metal parts and products coating line, as determined by the test methods and procedures specified in paragraphs (a)(4)(iii), (a)(4)(iv), and (a)(4)(v)(A) of this section, shall be no less than the equivalent overall efficiency which shall be calculated by the following equation:

$E = ([VOC_a - VOC_l]/VOC_a) \times 100$

where:

E=Equivalent overall efficiency of the capture system and control device as a percentage,

VOC_a = Actual VOC content of a coating, or the daily-weighted average VOC content of two or more coatings (if more than one coating is used), as applied to the subject coating line as determined by the applicable test methods and procedures specified in paragraph (a)(4)(i) of this section in units of kg VOC/l (lb VOC/gal) of coating solids as applied, and

VOC_l=The VOC emission limit specified in units of kg VOC/liter (lb VOC/gal) of coating solids as applied.

(vi) *Volatile Organic Compound Gas Phase Source Test Methods.* The methods in 40 CFR part 60, appendix A, delineated below shall be used to determine control device efficiencies.

(A) 40 CFR part 60, appendix A, Methods 18, 25, 25A, or 25B, as appropriate to the conditions at the site, shall be used to determine VOC concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in paragraphs (a)(4)(vi)(A) *(1)* and *(2)* of this section, the test shall consist of three separate runs, each lasting a minimum of 60 min., unless the Administrator determines that process variables dictate shorter sampling times.

(1) When the method is to be used to determine the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual adsorber vessels, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all the individual adsorber vessels.

(2) When the method is to be used to determine the efficiency of a carbon adsorption system with individual exhaust stacks for each adsorber vessel, each adsorber vessel shall be tested individually. The test for each adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

(B) 40 CFR part 60, appendix A, Method 1 or 1A shall be used for sample and velocity traverses.

(C) 40 CFR part 60, appendix A, Method 2, 2A, 2C, or 2D shall be used for velocity and volumetric flow rates.

(D) 40 CFR part 60, appendix A, Method 3, 3A, or 3B shall be used for gas analysis.

(E) 40 CFR part 60, appendix A, Method 4 shall be used for stack gas moisture.

(F) 40 CFR part 60, appendix A, Methods 2, 2A, 2C, 2D, 3, 3A, 3B, or 4 shall be performed, as applicable, at least twice during each test run.

(G) Use of an adaptation to any of the test methods specified in paragraphs

(a)(4)(vi) (A), (B), (C), (D), (E), and (F) of this section may be approved by the Administrator on a case-by-case basis. An owner or operator must submit sufficient documentation for the Administrator to find that the test methods specified in paragraphs (a)(4)(vi) (A), (B), (C), (D), (E), and (F) of this section will yield inaccurate results and that the proposed adaptation is appropriate.

(vii) *Leak Detection Methods for Volatile Organic Compounds.* Owners or operators required by the various subparts of this regulation to carry out a leak detection monitoring program shall comply with the following requirements:

(A) Leak Detection Monitoring.

(1) Monitoring shall comply with 40 CFR part 60, appendix A, Method 21.

(2) The detection instrument shall meet the performance criteria of 40 CFR part 60, appendix A, Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the methods specified in 40 CFR part 60, appendix A, Method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air), and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but no less than, 10,000 ppm methane or n-hexane.

(5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in 40 CFR part 60, appendix A, Method 21.

(B) When equipment is tested for compliance with no detectable emissions as required, the test shall comply with the following requirements:

(1) The requirements of paragraphs (a)(4)(vii)(A) *(1)* through *(5)* of this section shall apply.

(2) The background level shall be determined as set forth in 40 CFR part 60, appendix A, Method 21.

(C) Leak detection tests shall be performed consistent with:

(1) "APTI Course SI 417 Controlling Volatile Organic Compound Emissions from Leaking Process Equipment" EPA-450/2-82-015 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161).

(2) "Portable Instrument User's Manual for Monitoring VOC Sources" EPA-340/1-86-015 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161).

(3) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and VHAP" EPA-450/3-88-010 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161).

(4) "Petroleum Refinery Enforcement Manual" EPA-340/1-80-008 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161).

(viii) *Bulk Gasoline Delivery System Test Protocol.*

(A) The method for determining the emissions of gasoline from a vapor recovery system are delineated in 40 CFR 60.503.

(B) Other tests shall be performed consistent with:

(1) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: appendix D" EPA-340/1-80-012 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161).

(2) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: appendix A", EPA-450/2-77-026 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(ix) *Vapor Pressure of Volatile Organic Liquids.*

(A) If the VOL consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879-86 (incorporated by reference as specified in paragraph (c) of this section or the vapor pressure may be obtained from a published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(B) If the VOL is a mixture, the vapor pressure shall be determined by ASTM Method D2879-86 (incorporated by reference as specified in paragraph (c) of this section) or by the following equation:

$$P_{vol} = \sum_{i=1}^{n} P_i X_i$$

where:

P_{vol}=Total vapor pressure of the mixture,

n=Number of components in the mixture,

i=Subscript denoting an individual component,

P_i=Vapor pressure of a component determined in accordance with paragraph (a)(4)(ix)(A) of this section, and X_i=Mole fraction of the component in the total mixture.

(x) *Vapor Pressure of Organic Material or Solvent.*

(A) If the organic material or solvent consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879-86 (incorporated by reference in paragraph (c) of this section) or the vapor pressure may be obtained from a published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(B) If the organic material or solvent is in a mixture made up of both organic material compounds and compounds which are not organic material, the vapor pressure shall be determined by the following equation:

$$P_{om} = \frac{\sum_{i=1}^{n} P_i X_i}{\sum_{i=1}^{n} X_i}$$

where:

P_{om}=Total vapor pressure of the portion of the mixture which is composed of organic material,

n=Number of organic material components in the mixture,

i=Subscript denoting an individual component,

P_i=Vapor pressure of an organic material component determined in accordance with paragraph (a)(4)(x)(A) of this section, and

X_i=Mole fraction of the organic material component of the total mixture.

(C) If the organic material or solvent is in a mixture made up of only organic material compounds, the vapor pressure shall be determined by ASTM Method D2879-86 (incorporated by reference in paragraph (c) of this section) or by the above equation.

(xi) *Vapor Pressure of Volatile Organic Compounds.*

(A) If the VOC consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879-86 (incorporated by reference in paragraph (c) of this section) or the vapor pressure may be obtained from a published source such as: Boublik, T.,

V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986–87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(B) If the VOC is in a mixture made up of both VOC compounds and compounds which are not VOC, the vapor pressure shall be determined by the following equation:

$$P_{voc} = \frac{\sum_{i=1}^{n} P_i X_i}{\sum_{i=1}^{n} X_i}$$

where:

P_{voc}=Total vapor pressure of the portion of the mixture which is composed of VOC,

n=Number of VOC components in the mixture,

i=Subscript denoting an individual component,

P_i=Vapor pressure of a VOC component determined in accordance with paragraph (a)(4)(xi)(A) of this section, and

X_i=Mole fraction of the VOC component of the total mixture.

(C) If the VOC is in a mixture made up of only VOC compounds, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference in paragraph (c) of this section) or by the above equation.

(xii) *Baseline Emissions.* Unless otherwise specified in paragraph (b) of this section, baseline VOC emissions shall be calculated for each emissions source in accordance with one of the procedures specified below:

(A) If daily emissions records which are consistent with the emission inventory data submitted by the State for the control area on November 15, 1992 are available for the calendar years 1989 and 1990, baseline emissions shall be based on the median value of daily emissions recorded for the two-year period.

(B) If daily emissions records are not available for the calendar years 1989 and 1990 or are inconsistent with the emission inventory data submitted by the State for the control area on November 15, 1992 or were not submitted, baseline emissions shall be based on the average daily emissions value calculated for the two-year period. The average daily emissions value shall be calculated by dividing emissions for the two-year period by the operating or usage time for the two-year period. If solvent or coating usage data are not available, emissions associated with solvent or coating usage may be estimated from purchase-order records. The operating or usage time for the two-year period shall be based on one of the criteria specified as follows:

(*1*) The number of days specified in a federally enforceable permit if the emissions source operated under the conditions of a federally enforceable permit which restricted operating times during the two-year period,

(*2*) The average number of days that the emissions source was operated or used over the two-year period if documentation is available to support the number, or

(*3*) 730 days if documentation of the number of days that the emissions source was operated or used over the two-year period is not available.

(xiii) *Implementation Year Monthly Baseline Emissions.* Baseline emissions as defined in paragraph (a)(4)(xii) of this section shall be adjusted prior to the implementation year (2001) of the FIP cap program in the control area as follows:

(A) The reductions that are projected to occur as a result of both SIP and FIP measures between 1990 and 2001 shall be subtracted from the baseline emissions. This value shall be defined as the reduced daily baseline emissions and is denoted in pounds of VOC/day.

(B) The reduced daily baseline emissions shall be annualized by multiplying the daily value by 365. This value shall be defined as the reduced annual baseline emissions and is denoted in pounds of VOC/year.

(C) The reduced annual baseline emissions shall be converted into a monthly value by dividing by 12. This value shall be defined as the implementation year monthly baseline.

(5) *Enforcement.*

(i) All sources and facilities subject to provisions of § 52.2952 shall be subject to unannounced inspections by representatives of the USEPA pursuant to section 114 of the Clean Air Act.

(ii) Documentation maintained by all sources, facilities, and persons subject to this section must be sufficient to demonstrate compliance with all requirements of this section and must be provided to representatives of USEPA upon request.

(iii) Failure to comply with any provision of this section is a violation of the applicable implementation plan for purposes of section 113 of the Clean Air Act.

(iv) Each 50 pounds of emissions in excess of a facility's monthly cap shall be a separate violation for federal enforcement purposes.

(b) *Stationary and Area Source Control Measures.*

(1) *Industrial and Commercial Solvents/Coatings.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(1) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(1) of this section, the following definitions also apply:

Adhesives means any substance or mixture of substances intended to serve as a joining compound.

Aerospace component means the fabricated part, assembly of parts, or completed unit of any aircraft or space vehicle.

Aerospace component coating facility means a facility that includes one or more aerospace component coating unit(s).

Aerospace component coating unit means a coating unit in which any protective, decorative, or functional coating or reinforcing material is applied on or impregnated into an aerospace component.

Aircraft means any machine designed to travel through the air above ground without leaving the earth's atmosphere, whether heavier or lighter than air, including airplanes, balloons, dirigibles, helicopters, and missiles.

Automobile means a motor vehicle capable of carrying no more than 12 passengers.

Can means any cylindrical, single walled container that is manufactured from metal sheets thinner than 29 gauge (0.0141 in.); with or without a top, cover, spout, or handles; into which solid or liquid materials are packaged.

Can coating facility means a facility that includes one or more can coating unit(s).

Can coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of cans or can components.

Coating means a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealants, adhesives, thinners, diluents, inks, maskants, and/or temporary protective coatings.

Coating applicator means any equipment or device, including but not limited to cloth, rollers, brushes, spray guns, and dip tanks, used to apply a coating onto or into a substrate.

Coating unit means a series of one or more coating applicators and any associated drying areas and/or oven

wherein a coating is applied, dried, and/or cured. A coating unit ends at the point where the coating is dried or cured, or prior to any subsequent application of a different coating. It is not necessary to have an oven or a flashoff area in order to be included in this definition.

Coil means any continuous metal sheet or strip with thickness of 0.15 mm (0.006 in.) or more that is packaged in a roll or coil.

Coil coating facility means a facility that includes one or more coil coating unit(s).

Coil coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of flat metal sheets, strips, rolls, or coils for industrial or commercial use.

Cold cleaning means the batch process of cleaning and removing soils from surfaces by spraying, brushing, flushing, or immersion while maintaining the organic solvent below its boiling point. Wipe cleaning is not included in this definition.

Conveyorized degreasing means the continuous process of cleaning and removing soils from surfaces using either cold or vaporized solvents.

Degreaser means any equipment or system used in solvent cleaning.

Degreasing facility means a facility that includes one or more cold cleaning, open-top vapor degreasing, and/or conveyorized degreasing processes.

Dry cleaning facility means a facility engaged in the cleaning of fabrics using an essentially nonaqueous solvent by means of one or more solvent washes, extraction of excess solvent by spinning, and drying by tumbling in an airstream. The facility includes, but is not limited to, washers, dryers, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

Fabric coating facility means a facility that includes one or more fabric coating unit(s).

Fabric coating unit means a web coating unit in which any protective, decorative, or functional coating or reinforcing material is applied on, saturated into, or impregnated into a textile fabric. A fabric printing unit is not considered a fabric coating unit.

Film coating facility means a facility that includes one or more film coating unit(s).

Film coating unit means a coating unit in which any protective, decorative, or functional coating is applied on, saturated into, or impregnated into any film substrate; other than paper, fabric, or vinyl; including but not limited to typewriter ribbons, photographic film, plastic film, magnetic tape, and metal foil.

Flatwood product means panels made of wood materials including; but not limited to; plywood, particle board, and hardboard.

Flatwood product coating facility means a facility that includes one or more flatwood product coating unit(s).

Flatwood product coating unit means a coating unit in which any protective, decorative, or functional coating is applied on or impregnated into a flatwood product.

Flexographic printing means the application of words, designs, and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of elastomeric materials.

Flexographic printing press means a printing press in which each roll printer uses a roll with raised areas for applying an image such as words, designs, or pictures to a substrate. The image carrier on the roll is made of rubber or other elastomeric material.

Fountain solution means the solution which is applied to the lithographic printing plate to maintain hydrophilic properties of the nonimage areas.

Graphic arts coating facility means a facility that includes one or more graphic arts coating units.

Graphic arts coating unit means any packaging rotogravure printing, publication rotogravure printing, flexographic printing, lithographic printing, letterpress printing, laminating, or screen printing unit or any paper, fabric, or film coating unit operated in conjunction with a printing unit.

Group I vehicles and equipment means large-sized trucks, buses, and mobile equipment.

Group II vehicles means passenger cars, small-sized trucks and vans, medium-sized trucks and vans, and motorcycles.

Heatset means a class of web-offset lithography which requires a heated dryer to solidify the printing inks.

Heatset-web-offset lithographic printing unit means a lithographic printing unit in which a blanket cylinder is used to transfer ink from a plate cylinder to a substrate continuously fed from a roll or an extension process and an oven is used to solidify the printing inks.

Heavy off-highway vehicle products means heavy construction, mining, farming, or material handling equipment; heavy industrial engines; diesel-electric locomotives and associated power generation equipment; and the components of such equipment or engines.

Heavy off-highway vehicle products coating facility means a facility that includes one or more heavy off-highway vehicle products coating unit(s).

Heavy off-highway vehicle products coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of heavy off-highway vehicle products.

Highway means a way or place of whatever nature, publicly maintained and open to the public for purposes of vehicular travel. Highway includes street.

Industrial or commercial solvent use facility means any industrial or commercial facility that uses solvents which contain VOCs or substances that contain solvents which contain VOCs. Industrial and commercial solvent use facilities include, but are not limited to, perchloroethylene dry cleaning, petroleum dry cleaning, metal cleaning, degreasing, aerospace component coating, motor vehicle and mobile equipment assembly line coating, motor vehicle and mobile equipment refinishing, can coating, coil coating, fabric coating, film coating, flatwood product coating, graphic arts coating, large appliance coating, magnet wire coating, marine vessel coating, metal and wood furniture coating, miscellaneous metal parts and products coating, paper coating, and plastic parts coating facilities. Substances that contain solvents include, but are not limited to, coatings, inks, fountain solutions, adhesives, thinners, and clean-up solvents.

Ink means a coating used in printing, impressing, or transferring an image onto a substrate.

Laminating unit means a printing unit in which an adhesive is used to form two or more layers of material into a single, multiple-layer sheet.

Large appliance means the component metal parts (including, but not limited to, doors, cases, lids, panels, and interior support parts) of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dish washers, trash compactors, air conditioners, and other similar products under SIC Code 363.

Large appliance coating facility means a facility that includes one or more large appliance coating unit(s).

Large appliance coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of component metal parts of large appliances.

Letterpress printing unit means a printing unit in which the image area is

raised relative to the nonimage area on the roll printer and the ink is transferred to the paper directly from the image surface.

Light-duty truck means any motor vehicle rated at 3864 kg (8500 lb) gross vehicle weight or less, designed mainly to transport property.

Lithographic printing unit means a printing unit in which the image and nonimage areas are on the same plane of the roll printer.

Magnet wire coating facility means a facility that includes one or more magnet coating unit(s).

Magnet wire coating unit means a coating unit in which electrically insulating varnish or enamel is applied onto the surface of wire to be used in electrical machinery.

Marine vessel means a ship or boat used to travel on, or a submarine used to travel through, the sea.

Marine vessel coating facility means a facility that includes one or more marine vessel coating unit(s).

Marine vessel coating unit means a coating unit in which any protective, decorative, or functional coating is applied on the fabricated part, assembly of parts, or completed unit of any marine vessel.

Metal furniture means any furniture piece made of metal or any metal part which is or will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece including, but not limited to, tables, chairs, waste baskets, beds, desks, lockers, benches, shelving, file cabinets, lamps, and room dividers. This definition shall not apply to any coating unit coating miscellaneous metal parts or products.

Metal furniture coating facility means a facility that includes one or more metal furniture coating unit(s).

Metal furniture coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of metal furniture.

Miscellaneous metal part or product means any metal part or metal product, even if attached to or combined with a nonmetal part or product.

Miscellaneous metal parts or products coating facility means a facility that includes one or more miscellaneous metal parts or products coating unit(s).

Miscellaneous metal parts or products coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of miscellaneous metal parts or products.

Mobile equipment means self-propelled equipment which is physically capable of being driven on a highway. Mobile equipment includes: automobiles, motorcycles, trucks, vans, construction equipment (e.g., mobile cranes, bulldozers, concrete mixers), farming equipment (e.g., wheel tractors, pesticide sprayers), and miscellaneous equipment (e.g., street cleaners, golf carts, and hauling equipment used inside and around airports, docks, depots, and industrial and commercial plants).

Motor vehicle means a vehicle which is self-propelled and physically capable of being driven on a highway.

Motor vehicle or mobile equipment assembly line coating facility means a facility where parts are manufactured or finished for eventual inclusion into finished motor vehicles or mobile equipment ready for sale to motor vehicle or mobile equipment dealers. This definition does not include customizers, body shops, and/or other auto refinishing facilities.

Motor vehicle or mobile equipment refinishing facility means a facility where all or any part of used motor vehicles or mobile equipment is refinished, or customized, by the application of paint. This definition includes motor vehicles or mobile equipment dealerships who purchase new motor vehicle or mobile equipment from Original Equipment Manufacturers. This definition does not include motor vehicle or mobile equipment assembly line coating facilities.

Motorcycle means any motor vehicle other than a tractor having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground and weighing less than 1,500 lbs, except that four wheels may be in contact with the ground when two of the wheels are a functional part of a sidecar.

Offset means a blanket cylinder that is used to transfer ink from a plate cylinder to the substance to be printed.

Open-top vapor degreasing means the batch process of cleaning and removing soils from surfaces by condensing hot solvent vapor on the colder metal parts.

Oven means a chamber within which heat is used for one or more of the following purposes: to dry, bake, cure, or polymerize a coating or ink.

Packaging rotogravure printing means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates which are, in subsequent operations, formed into packaging products or labels for articles to be sold.

Packaging rotogravure printing press means a rotogravure printing press in which surface coatings are applied to paper, paperboard, metal foil, plastic film, or other substrates which are to be used to produce containers, packaging products, or labels for articles.

Paper coating facility means a facility that includes one or more paper coating unit(s).

Paper coating unit means a web coating unit where coating is applied to paper. Printing presses are not considered paper coating units. Products produced on a paper coating unit include, but are not limited to, adhesive tapes and labels, book covers, post cards, office copier paper, drafting paper, and pressure sensitive tapes. Paper coating units include, but are not limited to, application by impregnation or saturation or by the use of roll, knife, or rotogravure coating.

Printing unit means an operation consisting of a series of one or more roll printers and any associated roll coaters, drying areas, and/or ovens wherein one or more surface coatings are applied, dried, and/or cured. It is not necessary for an operation to have an oven, or flashoff area, or drying area to be included in this definition.

Publication rotogravure printing unit means a rotogravure printing unit in which surface coatings are applied to paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, or other types of printed material.

Refinish means to restore or replace coatings on Group I vehicles (large-sized trucks, buses, and mobile equipment) and Group II vehicles (passenger cars, small-sized trucks and vans, medium-sized trucks and vans, and motorcycles) and equipment, or their parts and components, except Original Equipment Manufacturer coatings applied at motor vehicle or mobile equipment assembly line coating facilities.

Roll coater means an apparatus in which a uniform layer of coating material is applied by means of a roll or rolls across the entire width of a moving substrate which is fed from an unwinding roll.

Roll printer means an apparatus in which a surface coating is applied by means of a roll or rolls with only partial coverage across the width of a moving substrate which is fed from an unwinding roll. The partial coverage results in the formation of words, designs, or pictures on the substrate.

Rotogravure printing means the application of words, designs, and pictures to a substrate using a gravure cylinder by means of a roll printing technique in which the pattern to be applied is recessed relative to the nonimage area.

Rotogravure printing unit means a printing unit in which each roll printer

uses a roll with recessed areas for applying an image to a substrate.

Screen printing unit means a printing unit in which the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.

Solvent means a substance that is liquid at standard conditions that is used to dissolve or dilute another substance; this term includes, but is not limited to, organic materials used as dissolvers, viscosity reducers, degreasing agents, or cleaning agents.

Solvent cleaning means the process of cleaning soils from surfaces by cold cleaning, open-top vapor degreasing, or conveyorized degreasing.

Space vehicle means any vehicle designed to travel beyond the earth's atmosphere.

Street means a public road in a town or city.

Substrate means the surface to which a coating is applied on, saturated into, or impregnated into.

Vinyl coating facility means a facility that includes one or more vinyl coating unit(s).

Vinyl coating unit means a web coating unit in which any protective, decorative, or functional coating or printing ink is applied onto a continuous web of vinyl-coated fabric or vinyl sheets.

Web means an automatic system which supplies substrate from a continuous roll or an extrusion process.

Wood furniture means room furnishings including cabinets (kitchen, bath, and vanity), tables, chairs, beds, sofas, shutters, art objects, wood paneling, wood flooring, and any other coated furnishings made of wood, wood composition, or fabricated wood materials.

Wood furniture coating facility means a facility that includes one or more wood furniture coating unit(s).

Wood furniture coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto wood furniture.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(1)(iii) (A) and (B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of any degreasing facility or any motor vehicle or mobile equipment refinishing facility located in the control area as defined in paragraph (a)(1) of this section.

(B) The requirements of paragraphs (b)(1)(iii) (A) and (B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of an industrial or commercial solvent use facility located in the applicable area specified in paragraph (b)(1)(ii)(A) of this section at which actual emissions of VOC are greater than or equal to 6.8 kg (15 lbs) during any one day.

(C) The requirements of paragraphs (b)(1)(iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of an industrial or commercial solvent use facility located in the applicable area specified in paragraph (b)(1)(ii)(A) of this section at which actual emissions of VOC from all emissions sources are always less than 6.8 kg (15 lbs) during any one day. If actual emissions of VOC from a facility which is exempt from the limitations of paragraph (b)(1)(iii)(B) of this section ever exceed 6.8 kg (15 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(1)(iii)(B) *(1)* through *(5)*, (b)(1)(iv)(A), (b)(1)(v)(A), and (b)(1)(vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B)*(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraph (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's title V operating permit. For sources not subject to title V, sources shall submit all information which would be required for sources subject to title V.[11]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(1)(ii) (A) or (B) of this section, shall limit actual monthly emissions of VOC from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \qquad (1)$$

where[12]

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each

[11] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

[12] The range 0.04 to 0.09 reflects the 4% to 9% cumulative annual rate of emission reductions currently under consideration. In the first year, emissions would be reduced by 4% to 9% off of baseline levels; in the second year, emissions would be reduced by 8% to 18% off of baseline levels, and so on until the minimum 20% VOC reduction is made. As discussed in the preamble to the regulations this range of annual reductions is based on EPA's preliminary rate of reduction analysis and may change as the analysis continues prior to final promulgation of this FIP. In addition, EPA plans to review this value every three years after final rule promulgation.

emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \quad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(1)(ii) (A) or (B) of this section, shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the facility is in compliance with all of the requirements of this section, and

(2) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section shall comply with the following:

(1) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. This certification shall include:

(i) A declaration that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section; and

(ii) Calculations which demonstrate that total baseline VOC emissions from all emissions sources at the facility are and will remain less than 6.8 kg (15 lbs) during any one day. Baseline emissions shall be calculated in accordance with the procedures specified in paragraphs (b)(1)(iii)(A) (2) *(i)* and *(ii)* of this section.

(2) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that actual emissions of VOC from the facility exceeded 6.8 kg (15 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraphs (b)(1)(ii)(A) or (B) of this section shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(1)(ii)(C) of this section shall collect and record all information necessary to demonstrate that actual emissions of VOC from all emissions sources are less than 6.8 kg (15 lbs) during each day and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraphs (b)(1)(ii) (A) or (B) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to demonstrate that the facility is exempt

from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(2) *VOC Emissions Associated with the Manufacturing of Products.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(2) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(2) of this section, the following definitions also apply:

Facility which manufactures products containing VOCs means any facility where VOCs are emitted from processes which are used to manufacture or fabricate products. These products include, but are not limited to, the products specified in paragraphs *(1)* through *(7)* of this definition. This definition does not include facilities which are subject to any of the requirements of paragraphs (b)(1), (b)(4), or (b)(5) of this section.

(1) Industrial and agricultural organic chemicals and gases. Industrial organic chemicals include, but are not limited to, gum and wood chemicals, cyclic organic crudes and intermediates, organic dyes and pigments, and the chemicals listed in 40 CFR 52.741, appendix A. Agricultural organic chemicals include, but are not limited to, pesticides, livestock dips, soil conditioners, and fertilizers.

(2) Plastic materials, synthetic resins, synthetic rubber, elastomizers, and cellulosic and manmade fibers.

(3) Drugs which include, but are not limited to, medicinal chemicals and botanical products, pharmaceutical preparations, in vitro and in vivo diagnostic substances, and biological products.

(4) Soaps; detergents; cleaning, polishing, and sanitizing preparations; surface active agents, finishing agents, sulfonated oils, and assistants; and perfumes and cosmetics.

(5) Food additives and sweeteners.

(6) Paints, varnishes, lacquers, enamels, inks, primers, paint removers, thinners, stains, shellacs, cleaners, putty, coatings, adhesives, fillers, sealants, explosives, and carbon black.

(7) Fabricated rubber and miscellaneous plastics products including, but not limited to, tires and inner tubes; rubber and plastics footware, hose, belting, gasket, packing, and sealing devices; and molded, extruded, and lathe-cut mechanical rubber goods.

Manufacture means to produce or combine any ingredients contained in any product.

Manufacturing process means a process or a series of processes used to convert raw materials, feed stocks, subassemblies, or other components into a product which will be sold, offered for sale, supplied, or distributed or will be used as a component in a subsequent manufacturing process. This definition includes the storage and handling of organic compounds or gases which are used in a manufacturing process and the handling of organic compounds or gases used to clean-up a manufacturing process.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(2) (iii)(A), (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of a facility which manufactures products containing VOCs located in the control area as defined in paragraph (a)(1) of this section at which total VOC emissions are greater than or equal to 4.5 kg (10 lbs) during any one day.

(B) The requirements of paragraphs (b)(2) (iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of a facility which manufactures products containing VOCs located in the applicable area specified in paragraph (b)(2)(ii)(A) of this section at which total VOC emissions from all emissions sources are always less than 4.5 kg (10 lbs) during any one day. If uncontrolled VOC emissions from a facility which is exempt from the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section ever exceed 4.5 kg (10 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(2) (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V (of the Clean Air Act) operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[13]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(2)(ii)(A) of this section, shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

---

[13] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \quad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \quad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(A) of this section, shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the facility is in compliance with all of the requirements of this section; and

(2) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(B) of this section, shall comply with the following:

(1) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section. This certification shall include:

(i) A declaration that the facility is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(B) of this section; and

(ii) Calculations which demonstrate that total baseline VOC emissions from all emissions sources at the facility are and will remain less than 4.5 kg (10 lbs) during any one day. Baseline emissions shall be calculated in accordance with the procedures specified in paragraphs (b)(2)(iii)(A) *(1)* and *(2)* of this section.

(2) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that total VOC emissions from the facility exceeded 4.5 kg (10 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(A) of this section, shall collect and record all information necessary to demonstrate compliance with the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(B) of this section, shall collect and record all information necessary to demonstrate that total VOC emissions from all emissions sources are less than 4.5 kg (10 lbs) during each day and maintain the information at the facility for a period of three years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(A) of this section, to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of section to demonstrate compliance with the

limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(2)(ii)(B) to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to demonstrate that the facility is exempt from the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section.

(3) *Disposal of Materials Containing Volatile Organic Compounds.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(3) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(3) of this section, the following definitions also apply:

Biodegradable waste means any organic waste that can be broken down into its basic elements by microorganisms.

Biodegradable waste disposal facility means any facility which is operated as a business or owned by a state or municipality and is used to treat, store, or dispose of biodegradable waste or to reclaim or recycle organic compounds or gases from biodegradable wastes.

Organic waste disposal facility means any facility which is operated as a business or owned by a state or municipality and is used to treat, store, or dispose of organic wastes that contain VOCs or to reclaim or recycle organic compounds or gases from organic wastes that contain VOCs. Such facilities include, but are not limited to, biodegradable waste disposal facilities (e.g., landfills); publicly owned treatment works; hazardous waste treatment, storage, and disposal facilities; and sewage sludge, solid waste, and hazardous waste incinerators.

Publicly owned treatment work (POTW) means any device or system which is owned by a state or municipality and is used to treat (including recycling and reclamation) municipal sewage or industrial liquid waste.

(ii) *Applicability.* The requirements of paragraphs (b)(3) (iii), (iv), (v), and (vi) of this section shall apply to any owner or operator of any organic waste disposal facility located in the control area as defined in paragraph (a)(1) of this section.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[14]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph because of paragraph (b)(3)(ii) of this section shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \qquad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \qquad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \qquad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

[14] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)(2) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)(2) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(3)(ii) of this section shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(A) A declaration that the facility is in compliance with all of the requirements of this section; and

(B) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section.

(v) *Recordkeeping.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(3)(ii) of this section, shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.* The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(3)(ii) of this section, to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section.

(4) *Commercial Food Preparation and/or Baking.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(4) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(4) of this section, the following definitions also apply:

Brandy-making facility means a facility that distills wine, the refuse of a wine press, or any other fermented fruit juices to produce alcoholic liquors.

Charcoal means any substance obtained by charring wood or any other organic matter by a process of smothered combustion to exclude air.

Commercial baking facility means a facility that bakes bread, biscuits, rolls, pies, cakes, cookies, or other similar products.

Commercial charbroiling facility means a facility that broils any type of food over a charcoal or gas-fired broiler.

Food preparation facility means any commercial baking, commercial charbroiling, wine- or brandy-making, fruit and vegetable preservation, grain mill production, vegetable oil production, or malt beverage production facility. This definition includes restaurants involved in activities described in the previous sentence.

Fruit and vegetable preservation facility means a facility that preserves food by, but not limited to, canning, curing, pickling, salting, smoking, cooking, or freezing.

Grain mill production facility means a facility that grinds any grain including, but not limited to, wheat, rice, corn, or rye into flour or meal.

Malt beverage production facility means a facility engaged in malting, fermentation, aging, or packaging of barley or any other grain for the purpose of producing an alcoholic beverage.

Vegetable oil production facility means a facility that extracts oil from any vegetable seed.

Wine- or brandy-making facility means a facility that ferments juices from grapes or any other fruit for the purpose of producing alcoholic beverages.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(4) (iii)(A), (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of a commercial food preparation facility located in the control area as defined in paragraph (a)(1) of this section at which VOC emissions are greater than or equal to 4.5 kg (10 lbs) during any one day.

(B) The requirements of paragraphs (b)(4) (iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of a commercial food preparation facility located in the applicable area specified in paragraph (b)(4)(ii)(A) of this section at which total uncontrolled VOC emissions from all emissions sources are always less than 4.5 kg (10 lbs) during any one day. If VOC emissions from a facility which is exempt from the limitations of paragraph (b)(4)(iii)(B) of this section ever exceed 4.5 kg (10 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(4) (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or

operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraphs (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[15]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(4)(ii)(A) of this section shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \quad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \quad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)(1) of this section.)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(A) of this section shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the facility is in compliance with all of the requirements of this section; and

(2) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section.

[15] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(B) of this section shall comply with the following:

(*1*) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section. This certification shall include:

(i) A declaration that the facility is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(B) of this section; and

(ii) Calculations which demonstrate that total baseline VOC emissions from all emissions sources at the facility are and will remain less than 4.5 kg (10 lbs) during any one day. Baseline emissions shall be calculated in accordance with the procedures specified in paragraphs (b)(4)(iii)(A) *(1)* and *(2)* of this section.

(2) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that total VOC emissions from the facility exceeded 4.5 kg (10 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(A) of this section, shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(B) of this section, shall collect and record all information necessary to demonstrate that total VOC emissions from all emissions sources are less than 4.5 kg (10 lbs) during each day and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(A) of this section, to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(4)(ii)(B) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to demonstrate that the facility is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section.

(5) Petroleum and Natural Gas Extraction, Processing, and Storage.

(i) *Definitions.*

(A) For the purpose of paragraph (b)(5) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(5) of this section, the following definitions also apply:

Crude oil means a naturally occurring mixture which consists of hydrocarbons and sulfur, nitrogen, or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

Extraction facility means any facility where drilling and servicing equipment, flow lines, separators, gathering lines, and auxiliary nontransportation related equipment are used to extract petroleum or natural gas from a well.

Gasoline means any petroleum distillate which is used as a motor fuel.

Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

Processing facility means any facility where petroleum or natural gas is used as a feedstock to produce gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other related products.

Storage facility means any extraction facility, processing facility, bulk gasoline plant, bulk gasoline terminal, or any petroleum storage facility which distributes petroleum, natural gas, or gasoline to retail outlet and wholesale purchaser-consumer facilities. This definition does not apply to retail gasoline service stations.

(ii) *Applicability.* The requirements of paragraphs (b)(5) (iii), (iv), (v), and (vi) of this section shall apply to any owner or operator of any petroleum or natural gas extraction, processing, or storage facility located in the control area as defined in paragraph (a)(1) of this section.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) (*1*) through (*5*) of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(*1*) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)(*2*) of this section.

(*2*) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (a)(4)(xiii) of this section.

(*3*) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) (*1*) through (*5*) of this section. Methods may include but are not limited to:

(*i*) Installation of capture systems and control devices;

(*ii*) Modifications to increase the efficiency of existing capture systems and/or control devices;

(*iii*) Process modifications and/or substitutions; and

(*iv*) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(*4*) Projections of annual VOC emissions for each emissions source through the year 2005 after application

of the reduction methods described in paragraphs (b)(2)(iii)(A)(*3*) of this section.

(*5*) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[16]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph because of paragraph (b)(5)(ii) of this section shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \quad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)(*1*) of this section.)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)(*2*) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \quad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)(*1*) of this section.)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)(*2*) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)(*1*) of this section.)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)(*2*) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)(*1*) of this section.)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)(*2*) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)(*1*) of this section.)

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)(*2*) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(5)(ii) of this section shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(A) A declaration that the facility is in compliance with all of the requirements of this section; and

(B) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section.

(v) Recordkeeping. Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(5)(ii) of this section shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.* The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(5)(ii) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section.

(c) *Incorporated by Reference.* The materials listed below are incorporated by reference. The incorporation by reference was approved by the Director of the Office of Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.[17] These materials are incorporated as they exist on the date of approval, and a notice of any change in these materials will be published in the **Federal Register**.

(1) ASTM D3925–81 (1985) Standard Practice for Sampling Liquid Paints and Related Pigment Coating.

(2) ASTM E300 Standard Practice for Sampling Industrial Chemicals.

[16] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) (*1*) through (*5*) of this section. The methods may include but are not limited to: (1) The test methods and procedures specified in paragraph (a)(4) of this section, and (2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

[17] Incorporation by reference is pending approval by the Office of Federal Register.

(3) ASTM D1475–85: Standard Test Method for Density of Paint, Varnish, Lacquer and Related Products.

(4) ASTM D2369–87: Standard Test Method for Volatile Content of a Coating.

(5) ASTM D3792–86: Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph.

(6) ASTM D4017–81 (1987): Standard Test Method for Water Content in Paints and Paint Materials by the Karl Fischer Method.

(7) ASTM D4457–85: Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph.

(8) ASTM D2697–86: Standard Test Method for Volume Non-volatile Matter in Clear or Pigmented Coatings.

(9) ASTM E180–85: Standard Practice for Determining the Precision Data of ASTM Methods for Analysis and Testing of Industrial Chemicals.

(10) ASTM Method D2879–86: Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.

§ 52.2954 Stationary and area source caps (South Coast).[18]

(a) *General Provisions.*

(1) *Applicability.* The provisions of this section shall apply to all stationary emission sources located in the "control area" as defined as the Los Angeles-South Coast Air Basin ozone nonattainment area in 40 CFR 81.305, and all other persons identified in subsequent applicability paragraphs in this section.

(2) *Compliance dates.* Unless otherwise specified in this section, compliance with all requirements of this section is required as of [Insert date of publication of the final rule]. This paragraph (a)(2) shall not operate to provide additional time for compliance under Section 113(d) of the Act, 42 U.S.C 7413(d), for sources subject to compliance as of [Insert date of publication of the final rule].

(3) *Definitions.* For the purposes of this section, the following definitions apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Actual emissions means the actual quantity of VOC emissions from an emissions source during a particular time period.

Actual emissions rate means the actual quantity of VOC emissions from an emissions source per unit of actual production or throughput.

Agency means the United States Environmental Protection Agency.

Air contaminant means any solid, liquid, or gaseous matter, any odor, or any form of energy, that is capable of being released into the atmosphere from an emission source.

Air pollution means the presence in the atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.

Air pollution control equipment means any equipment or facility of a type intended to eliminate, prevent, reduce or control the emission of specified air contaminants to the atmosphere.

Allowable emissions rate means the most stringent of the applicable standards in 40 CFR parts 60 and 61; the applicable implementation plan; or a federally enforceable permit.

Baseline emissions means the emissions calculated using 1990 emission inventory data in the affected FIP areas and adjusted for emission reductions projected to occur by the implementation year of the FIP cap program in the affected FIP area. The baseline shall be denominated in pounds per year of FIP cap pollutant (e.g., pounds of VOC per year) and monthly caps shall be prorated based on this data.

Coating applicator means any equipment or device including but not limited to cloth, rollers, brushes, spray guns, or dip tanks used to apply a coating.

Day means a period of consecutive 24 hours beginning at 12 a.m. (midnight) local time, or beginning at a time consistent with a facility's operating schedule.

Emission rate means the total mass of VOCs released or discharged from an emissions source into the atmosphere per unit of production or throughput (e.g., pound VOC/gallon of coating solids).

Emission source or *source* means any building, structure, facility, property, equipment, device, container, or any combination thereof, at, from, or by reason which VOC is emitted or discharged into the atmosphere.

Facility means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control), except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two-digit code) as described in the "Standard Industrial Classification Manual, 1987" (National Technical Information Service order No. PB 87–10012).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator including those requirements contained in permits issued pursuant to 40 CFR parts 70 and 71, except those terms or conditions designated as not federally enforceable; those requirements developed pursuant to 40 CFR parts 60 and 61; requirements within any applicable implementation plan; and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, and 40 CFR 51.166.

Incinerator means a combustion apparatus in which solid, semi-solid, liquid, or gaseous combustible wastes are ignited and burned and from which the solid and gaseous residues contain little or no combustible material.

Monitor means to measure and record.

Organic compound means a chemical compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, carbonates, and ammonium carbonate.

Organic vapor means the gaseous phase of an organic compound or a mixture of organic compounds present in the atmosphere.

Owner or operator means any person who owns, operates, leases, controls, or supervises an emissions source or air pollution control equipment.

Person means any individual, corporation, copartnership, firm, company, partnership, joint stock company, trust, association, State, municipality, political subdivision, or any other legal entity, or their legal representative, agent, or assigns.

Process means any stationary emission source other than a fuel combustion emission source or an incinerator.

Source means emission source.

Standard conditions means a temperature of 20°C (68°F) and a pressure of 760 mm Hg (29.92 in. Hg).

Stationary emission source and *Stationary source* mean an emission source which is not self-propelled.

(4) *Test Methods and Procedures.*

(i) *Coatings, Inks, and Fountain Solutions.* The following test methods and procedures shall be used to

[18] EPA intends to issue a supplemental document in the **Federal Register** which addresses portions of proposed § 52.2954.

determine the VOC content of as applied coatings, inks, and fountain solutions to determine compliance with the limitations set forth in this section.

(A) *Sampling.* Samples collected for analyses shall be one-liter taken into a one-liter container at a location and time such that the sample will be representative of the coating as applied (i.e., the sample shall include any dilution solvent or other VOC added during the manufacturing process). The container must be tightly sealed immediately after the sample is taken. Any solvent or other VOC added after the sample is taken must be measured and accounted for in the calculations in paragraph (a)(4)(i)(C) of this section. For multiple package coatings, separate samples of each component shall be obtained. A mixed sample shall not be obtained as it will cure in the container. Sampling procedures shall follow the guidelines presented in:

(1) ASTM D3925–81 (1985) Standard Practice for Sampling Liquid Paints and Related Pigment Coating. This practice is incorporated by reference in paragraph (c) of this section.

(2) ASTM E300 Standard Practice for Sampling Industrial Chemicals. This practice is incorporated by reference in paragraph (c) of this section.

(B) *Analyses.* The applicable analytical methods specified below shall be used to determine the composition of coatings, inks, or fountain solutions as applied.

(1) Method 24 of 40 CFR part 60, appendix A shall be used to determine the VOC content and density of coatings.

(2) Method 24A of 40 CFR part 60, appendix A, shall be used to determine the VOC content and density of publication rotogravure printing inks and related coatings.

(3) The following ASTM methods and practices are the analytical procedures for determining VOC:

(i) ASTM D1475–85: Standard Test Method for Density of Paint, Varnish, Lacquer and Related Products. This test method is incorporated by reference in paragraph (c) of this section.

(ii) ASTM D2369–87: Standard Test Method for Volatile Content of a Coating. This test method is incorporated by reference in paragraph (c) of this section. The following minor modifications should be used for multicomponent coatings. All components of the coating are to be weighed in the proper proportion into the analysis container and mixed together just prior to analysis and the mixture is allowed to stand for at least one hour but no more than 24 hours prior to being oven dried at 110 degrees celsius for one hour.

(iii) ASTM D3792–86: Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph. This test method is incorporated by reference in paragraph (c) of this section.

(iv) ASTM D4017–81 (1987): Standard Test Method for Water Content in Paints and Paint Materials by the Karl Fischer Method. This test method is incorporated by reference in paragraph (c) of this section.

(v) ASTM D4457–85: Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph. (The procedure delineated above can be used to develop protocols for any compounds specifically exempted from the definition of VOC.) This test method is incorporated by reference in paragraph (c) of this section.

(vi) ASTM D2697–86: Standard Test Method for Volume Non-volatile Matter in Clear or Pigmented Coatings. This test method is incorporated by reference in paragraph (c) of this section.

(vii) ASTM E180–85: Standard Practice for Determining the Precision Data of ASTM Methods for Analysis and Testing of Industrial Chemicals. This practice is incorporated by reference in paragraph (c) of this section.

(4) Use of an adaptation to any of the analytical methods specified in paragraphs (a)(4)(i)(B) *(1)*, *(2)*, and *(3)* of this section may be approved by the Administrator on a case-by-case basis. An owner or operator must submit sufficient documentation for the Administrator to find that the analytical methods specified in paragraphs (a)(4)(i)(B) *(1)*, *(2)*, and *(3)* of this section will yield inaccurate results and that the proposed adaptation is appropriate.

(C) *Calculations.* Calculations for determining the VOC content, water content, and the content of any compounds which are specifically exempted from the definition of VOC of coatings, inks, and fountain solutions as applied shall follow the guidance provided in the following documents.

(1) "A Guide for Surface Coating Calculation" EPA–340/1–86–016 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(2) "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink and Other Coatings" (revised June 1986) EPA–450/3–84–019 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(3) "A Guide for Graphic Arts Calculations" August 1988 EPA–340/1–88–003 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(ii) *Automobile or Light-Duty Truck Test Protocol.* The protocol for testing, including determining the transfer efficiency, of coating applicators at topcoat coating operations at an automobile assembly facility shall follow the procedure in: "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations" December 1988 EPA–450/3–88–018 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161).

(iii) *Capture System Efficiency Test Protocols.*

(A) *Applicability.* The requirements of paragraph (a)(4)(iii)(B) of this section shall apply to all VOC emitting processes employing a capture system except those cases noted below.

(1) If a source installs a permanent total enclosure (PTE) that meets USEPA specifications, and which directs all VOC to a control device, then the source is exempted from the requirements described in paragraph (a)(4)(iii)(B) of this section. The USEPA specifications to determine whether a structure is considered a PTE are given in Procedure T of appendix B of 40 CFR 52.742. In this instance, the capture efficiency is assumed to be 100 percent and the source is still required to measure control efficiency using appropriate test methods as specified in paragraph (a)(4)(iv) of this section.

(2) If a source uses a control device designed to collect and recover VOC (e.g., carbon adsorber), an explicit measurement of capture efficiency is not necessary provided that the conditions given below are met. The overall control of the system can be determined by directly comparing the input liquid VOC to the recovered liquid VOC. The general procedure for use in this situation is given in § 60.433 of this chapter, with the following additional restrictions:

(i) The source must be able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average, within 72 hours following the 24-hour period. In addition, one of the following two criteria must be met:

(ii) The solvent recovery system (i.e., capture and control system) must be dedicated to a single process, or

(iii) If the solvent recovery system controls multiple processes, then the source must be able to demonstrate that the overall control (i.e., the total recovered solvent VOC divided by the sum of liquid VOC input to all processes venting to the control system) meets or exceeds the most stringent standard applicable for any process venting to the control system.

(3) The following facilities are exempted from the requirements described in paragraph (a)(1)(iii)(B) of this section:

(i) Automobile-related assembly facilities subject to the "Automobile or Light-Duty Truck Test Protocol" described in paragraph (a)(4)(ii) of this section.

(ii) Heatset-web-offset lithographic printing units as defined in paragraph (b)(1)(i)(B) of this section.

(B) *Specific Requirements.* The capture efficiency of a process shall be measured using one of the four protocols given below. Any error margin associated with a test protocol may not be incorporated into the results of a capture efficiency test. If these techniques are not suitable for a particular process, then the source must present an alternative capture efficiency protocol and obtain approval for it by the Administrator as a SIP or FIP revision.

(1) Gas/gas method using temporary total enclosure (TTE). The USEPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T of appendix B of 40 CFR 52.741. The capture efficiency equation to be used for this protocol is:

$CE=G_w/(G_w+F_w)$

where

CE=capture efficiency, decimal fraction

G_w=mass of VOC captured and delivered to control device using a TTE

F_w=mass of fugitive VOC that escapes from a TTE Procedure G.2 contained in appendix B of 40 CFR 52.741 is used to obtain G_w. Procedure F.1 in appendix B of 40 CFR 52.741 in used to obtain F_w.

(2) Liquid/gas method using TTE. The USEPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T of appendix B of 40 CFR 52.741. The capture efficiency equation to be used for this protocol is:

$CE=(L-F_w)/L$

where

CE=capture efficiency, decimal fraction

L=mass of liquid VOC input to process

F_w=mass of fugitive VOC that escapes from a TTE Procedure L contained in appendix B of 40 CFR 52.741 is used to obtain L. Procedure F.1 in appendix B of 40 CFR 52.741 is used to obtain F_w.

(3) Gas/gas method using the building or room (building or room enclosure) in which the affected source is located as the enclosure and in which "F" and "G" are measured while operating only the affected facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$CE=G/(G+F_B$

where

CE=capture efficiency, decimal fraction

G=mass of VOC captured and delivered to control device

F_B=mass of fugitive VOC that escapes from building enclosure

Procedure G.2 contained in appendix B of 40 CFR 52.741 is used to obtain G. Procedure F.2 in appendix B of 40 CFR 52.741 is used to obtain F_B.

(4) Liquid/gas method using the building or room (building or room enclosure) in which the affected source is located as the enclosure and in which "F" and "L" are measured while operating only the affected facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

$CE=(L-F_B)/L$

where

CE=capture efficiency, decimal fraction

L=mass of liquid VOC input to process

F_B=mass of fugitive VOC that escapes from building enclosure

Procedure L contained in appendix B of 40 CFR 52.741 is used to obtain L. Procedure F.2 in appendix B of 40 CFR 52.741 is used to obtain F_B.

(C) *Recordkeeping and Reporting.*

(1) All affected facilities must maintain a copy of the capture efficiency protocol submitted to EPA on file. All results of the appropriate test methods and capture efficiency protocols must be reported to EPA within sixty (60) days of the test date. A copy of the results must be kept on file with the source for a period of five (5) years.

(2) If any changes are made to capture equipment, then affected facilities must notify EPA of these changes and a new test may be required by EPA.

(3) All affected facilities must notify the Administrator 30 days prior to performing any capture efficiency test. At that time, the source must notify the Administrator which capture efficiency protocol will be used.

(4) All affected facilities utilizing a PTE must demonstrate that this enclosure meets the requirement given in Procedure T in appendix B of 40 CFR 52.741 at all times.

(5) All affected facilities utilizing a TTE must demonstrate that their TTE meets the requirements given in Procedure T in appendix B of 40 CFR 52.741 for a TTE during testing of their control device. The source must also provide documentation that the quality assurance criteria for a TTE have been achieved.

(iv) *Control Device Efficiency Testing and Monitoring.*

(A) *Control Efficiency Test.* The control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOC concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified in paragraph (a)(4)(vi) of this section.

(B) *Continuous Monitoring.* Any owner or operator that uses an afterburner or carbon adsorber to comply with any requirement of this section shall use continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications and which meets EPA-approved performance specifications at all times when the afterburner or carbon adsorber is in use. The continuous monitoring equipment must automatically monitor and record the following parameters:

(1) Combustion chamber temperature of each afterburner.

(2) Temperature rise across each catalytic afterburner bed or VOC concentration exhaust.

(3) The VOC concentration of each carbon adsorption bed exhaust.

(C) *Recordkeeping and Reporting.*

(1) All affected facilities must maintain a copy of all control efficiency test protocols for a period of five (5) years. All control test results must be reported to EPA within sixty (60) days of the test date. A copy of the results must be kept on file with the source for a period of five (5) years.

(2) All affected facilities must maintain copies of all required continuous monitoring records for a period of five (5) years.

(3) If any changes are made to control equipment, affected facilities must notify EPA of these changes and a new control efficiency test may be required by EPA.

(4) All affected facilities must notify the Administrator 30 days prior to performing any control efficiency test. At that time, the source must notify the Administrator which test methods will be used.

(v) *Overall Efficiency.*

(A) The overall efficiency of each emission control system shall be determined as the product of the capture system efficiency and the control device efficiency or by the liquid/liquid test protocol as specified in paragraph (a)(4)(iii)(A)*(2)* of this section for each solvent recovery system.

(B) The overall efficiency of the capture system and control device used to control VOC emissions from a paper, fabric, film, can, coil, or miscellaneous metal parts and products coating line, as determined by the test methods and procedures specified in paragraphs (a)(4)(iii), (a)(4)(iv), and (a)(4)(v)(A) of this section, shall be no less than the equivalent overall efficiency which shall be calculated by the following equation:

$E=([VOC_a-VOC_1]/VOC_a)\times 100$

where:

E=Equivalent overall efficiency of the capture system and control device as a percentage,

VOC_a=Actual VOC content of a coating, or the daily-weighted average VOC content of two or more coatings (if more than one coating is used), as applied to the subject coating line as determined by the applicable test methods and procedures specified in paragraph (a)(4)(i) of this section in units of kg VOC/l (lb VOC/gal) of coating solids as applied, and

VOC_1=The VOC emission limit specified in units of kg VOC/liter (lb VOC/gal) of coating solids as applied.

(vi) *Volatile Organic Compound Gas Phase Source Test Methods.* The methods in 40 CFR part 60, appendix A, delineated below shall be used to determine control device efficiencies.

(A) 40 CFR part 60, appendix A, Methods 18, 25, 25A, or 25B, as appropriate to the conditions at the site, shall be used to determine VOC concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in paragraphs (a)(4)(vi)(A) *(1)* and *(2)* of this section, the test shall consist of three separate runs, each lasting a minimum of 60 min., unless the Administrator determines that process variables dictate shorter sampling times.

(1) When the method is to be used to determine the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual adsorber vessels, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all the individual adsorber vessels.

(2) When the method is to be used to determine the efficiency of a carbon adsorption system with individual exhaust stacks for each adsorber vessel, each adsorber vessel shall be tested individually. The test for each adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.

(B) 40 CFR part 60, appendix A, Method 1 or 1A shall be used for sample and velocity traverses.

(C) 40 CFR part 60, appendix A, Method 2, 2A, 2C, or 2D shall be used for velocity and volumetric flow rates.

(D) 40 CFR part 60, appendix A, Method 3, 3A or 3B shall be used for gas analysis.

(E) 40 CFR part 60, appendix A, Method 4 shall be used for stack gas moisture.

(F) 40 CFR part 60, appendix A, Methods 2, 2A, 2C, or 2D; 3, 3A, or 3B; and 4 shall be performed, as applicable, at least twice during each test run.

(G) Use of an adaptation to any of the test methods specified in paragraphs (a)(4)(vi) (A), (B), (C), (D), (E), and (F) of this section may be approved by the Administrator on a case-by-case basis. An owner or operator must submit sufficient documentation for the Administrator to find that the test methods specified in paragraphs (a)(4)(vi) (A), (B), (C), (D), (E), and (F) of this section will yield inaccurate results and that the proposed adaptation is appropriate.

(vii) *Leak Detection Methods for Volatile Organic Compounds.* Owners or operators required by the various subparts of this regulation to carry out a leak detection monitoring program shall comply with the following requirements:

(A) Leak Detection Monitoring.

(1) Monitoring shall comply with 40 CFR part 60, appendix A, Method 21.

(2) The detection instrument shall meet the performance criteria of 40 CFR part 60, appendix A, Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the methods specified in 40 CFR part 60, appendix A, Method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air), and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but no less than, 10,000 ppm methane or n-hexane.

(5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in 40 CFR part 60, appendix A, Method 21.

(B) When equipment is tested for compliance with no detectable emissions as required, the test shall comply with the following requirements:

(1) The requirements of paragraphs (a)(4)(vii)(A)*(1)* through (vii)(A)*(5)* of this section shall apply.

(2) The background level shall be determined as set forth in 40 CFR part 60, appendix A, Method 21.

(C) Leak detection tests shall be performed consistent with:

(1) "APTI Course SI 417 Controlling Volatile Organic Compound Emissions from Leaking Process Equipment" EPA–450/2–82–015 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(2) "Portable Instrument User's Manual for Monitoring VOC Sources" EPA–340/1–86–015 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(3) "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and VHAP" EPA–450/3–88–010 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161).

(4) "Petroleum Refinery Enforcement Manual" EPA–340/1–80–008 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(viii) *Bulk Gasoline Delivery System Test Protocol.* (A) The method for determining the emissions of gasoline from a vapor recovery system are delineated in 40 CFR part 60, subpart XX, § 60.503.

(B) Other tests shall be performed consistent with:

(1) "Inspection Manual for Control of Volatile Organic Emissions from Gasoline Marketing Operations: appendix D" EPA–340/1–80–012 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161).

(2) "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals: appendix A", EPA–450/2–77–026 (which is available from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia, 22161)

(ix) *Vapor Pressure of Volatile Organic Liquids.*

(A) If the VOL consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference as specified in paragraph (c) of this section or the vapor pressure may be obtained

from a published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986–87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(B) If the VOL is a mixture, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference as specified in paragraph (c) of this section) or by the following equation:

$$P_{vol} = \sum_{i=1}^{n} P_i X_i$$

where:

P_{vol} = Total vapor pressure of the mixture,

n = Number of components in the mixture,

i = Subscript denoting an individual component,

P_i = Vapor pressure of a component determined in accordance with paragraph (a)(4)(ix)(A) of this section, and Xi = Mole fraction of the component in the total mixture.

(x) *Vapor Pressure of Organic Material or Solvent.*

(A) If the organic material or solvent consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference in paragraph (c) of this section) or the vapor pressure may be obtained from a published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986–87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(B) If the organic material or solvent is in a mixture made up of both organic material compounds and compounds which are not organic material, the vapor pressure shall be determined by the following equation:

$$P_{om} = \frac{\sum_{i=1}^{n} P_i X_i}{\sum_{i=1}^{n} X_i}$$

where:

P_{om} = Total vapor pressure of the portion of the mixture which is composed of organic material,

n = Number of organic material components in the mixture,

i = Subscript denoting an individual component,

P_i = Vapor pressure of an organic material component determined in accordance with paragraph (a)(4)(x)(A) of this section, and

X_i = Mole fraction of the organic material component of the total mixture.

(C) If the organic material or solvent is in a mixture made up of only organic material compounds, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference in paragraph (c) of this section) or by the above equation.

(xi) *Vapor Pressure of Volatile Organic Compounds.*

(A) If the VOC consists of only a single compound, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference in paragraph (c) of this section) or the vapor pressure may be obtained from a published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986–87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(B) If the VOC is in a mixture made up of both VOC compounds and compounds which are not VOC, the vapor pressure shall be determined by the following equation:

$$P_{voc} = \frac{\sum_{i=1}^{n} P_i X_i}{\sum_{i=1}^{n} X_i}$$

where:

P_{voc} = Total vapor pressure of the portion of the mixture which is composed of VOC,

n = Number of VOC components in the mixture,

i = Subscript denoting an individual component,

P_i = Vapor pressure of a VOC component determined in accordance with paragraph (a)(4)(xi)(A) of this section, and

X_i = Mole fraction of the VOC component of the total mixture.

(C) If the VOC is in a mixture made up of only VOC compounds, the vapor pressure shall be determined by ASTM Method D2879–86 (incorporated by reference in paragraph (c) of this section) or by the above equation.

(xii) *Baseline Emissions.* Unless otherwise specified in paragraph (b) of this section, baseline VOC emissions shall be calculated for each emissions source in accordance with one of the procedures specified below:

(A) If daily emissions records which are consistent with the emission inventory data submitted by the State for the control area on November 15, 1992 are available for the calendar years 1989 and 1990, baseline emissions shall be based on the median value of daily emissions recorded for the two-year period.

(B) If daily emissions records are not available for the calendar years 1989 and 1990 or are inconsistent with the emission inventory data submitted by the State for the control area on November 15, 1992 or were not submitted, baseline emissions shall be based on the average daily emissions value calculated for the two-year period. The average daily emissions value shall be calculated by dividing emissions for the two-year period by the operating or usage time for the two-year period. If solvent or coating usage data are not available, emissions associated with solvent or coating usage may be estimated from purchase-order records. The operating or usage time for the two-year period shall be based on one of the criteria specified as follows:

(*1*) The number of days specified in a federally enforceable permit if the emissions source operated under the conditions of a federally enforceable permit which restricted operating times during the two-year period,

(*2*) The average number of days that the emissions source was operated or used over the two-year period if documentation is available to support the number, or

(*3*) 730 days if documentation of the number of days that the emissions source was operated or used over the two-year period is not available.

(xiii) *Implementation Year Monthly Baseline Emissions.* Baseline emissions as defined in paragraph (a)(4)(xii) of this section shall be adjusted prior to the implementation year (2001) of the FIP cap program in the control area as follows:

(A) The reductions that are projected to occur as a result of both SIP and FIP measures between 1990 and 2001 shall be subtracted from the baseline emissions. This value shall be defined

as the reduced daily baseline emissions and is denoted in pounds of VOC/day.

(B) The reduced daily baseline emissions shall be annualized by multiplying the daily value by 365. This value shall be defined as the reduced annual baseline emissions and is denoted in pounds of VOC/year.

(C) The reduced annual baseline emissions shall be converted into a monthly value by dividing by 12. This value shall be defined as the implementation year monthly baseline.

(5) *Enforcement.*

(i) All sources and facilities subject to provisions of § 52.2952 shall be subject to unannounced inspections by representatives of the USEPA pursuant to section 114 of the Clean Air Act.

(ii) Documentation maintained by all sources, facilities, and persons subject to this section must be sufficient to demonstrate compliance with all requirements of this section and must be provided to representatives of USEPA upon request.

(iii) Failure to comply with any provision of this section is a violation of the applicable implementation plan for purposes of section 113 of the Clean Air Act.

(iv) Each 50 pounds of emissions in excess of a facility's monthly cap shall be a separate violation for federal enforcement purposes.

(b) *Stationary and Area Source Control Measures.*

(1) *Industrial and Commercial Solvents/Coatings.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(1) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(1) of this section, the following definitions also apply:

Adhesives means any substance or mixture of substances intended to serve as a joining compound.

Aerospace component means the fabricated part, assembly of parts, or completed unit of any aircraft or space vehicle.

Aerospace component coating facility means a facility that includes one or more aerospace component coating unit(s).

Aerospace component coating unit means a coating unit in which any protective, decorative, or functional coating or reinforcing material is applied on or impregnated into an aerospace component.

Aircraft means any machine designed to travel through the air above ground without leaving the earth's atmosphere, whether heavier or lighter than air, including airplanes, balloons, dirigibles, helicopters, and missiles.

Automobile means a motor vehicle capable of carrying no more than 12 passengers.

Can means any cylindrical, single walled container that is manufactured from metal sheets thinner than 29 gauge (0.0141 in.); with or without a top, cover, spout, or handles; into which solid or liquid materials are packaged.

Can coating facility means a facility that includes one or more can coating unit(s).

Can coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of cans or can components.

Coating means a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealants, adhesives, thinners, diluents, inks, maskants, and/or temporary protective coatings.

Coating applicator means any equipment or device, including but not limited to cloth, rollers, brushes, spray guns, and dip tanks, used to apply a coating onto or into a substrate.

Coating unit means a series of one or more coating applicators and any associated drying areas and/or oven wherein a coating is applied, dried, and/or cured. A coating unit ends at the point where the coating is dried or cured, or prior to any subsequent application of a different coating. It is not necessary to have an oven or a flashoff area in order to be included in this definition.

Coil means any continuous metal sheet or strip with thickness of 0.15 mm (0.006 in.) or more that is packaged in a roll or coil.

Coil coating facility means a facility that includes one or more coil coating unit(s).

Coil coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of flat metal sheets, strips, rolls, or coils for industrial or commercial use.

Cold cleaning means the batch process of cleaning and removing soils from surfaces by spraying, brushing, flushing, or immersion while maintaining the organic solvent below its boiling point. Wipe cleaning is not included in this definition.

Conveyorized degreasing means the continuous process of cleaning and removing soils from surfaces using either cold or vaporized solvents.

Degreaser means any equipment or system used in solvent cleaning.

Degreasing facility means a facility that includes one or more cold cleaning, open-top vapor degreasing, and/or conveyorized degreasing processes.

Dry cleaning facility means a facility engaged in the cleaning of fabrics using an essentially nonaqueous solvent by means of one or more solvent washes, extraction of excess solvent by spinning, and drying by tumbling in an airstream. The facility includes, but is not limited to, washers, dryers, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

Fabric coating facility means a facility that includes one or more fabric coating unit(s).

Fabric coating unit means a web coating unit in which any protective, decorative, or functional coating or reinforcing material is applied on, saturated into, or impregnated into a textile fabric. A fabric printing unit is not considered a fabric coating unit.

Film coating facility means a facility that includes one or more film coating unit(s).

Film coating unit means a coating unit in which any protective, decorative, or functional coating is applied on, saturated into, or impregnated into any film substrate; other than paper, fabric, or vinyl; including but not limited to typewriter ribbons, photographic film, plastic film, magnetic tape, and metal foil.

Flatwood product means panels made of wood materials including; but not limited to; plywood, particle board, and hardboard.

Flatwood product coating facility means a facility that includes one or more flatwood product coating unit(s).

Flatwood product coating unit means a coating unit in which any protective, decorative, or functional coating is applied on or impregnated into a flatwood product.

Flexographic printing means the application of words, designs, and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of elastomeric materials.

Flexographic printing press means a printing press in which each roll printer uses a roll with raised areas for applying an image such as words, designs, or pictures to a substrate. The image carrier on the roll is made of rubber or other elastomeric material.

Fountain solution means the solution which is applied to the lithographic printing plate to maintain hydrophilic properties of the nonimage areas.

Graphic arts coating facility means a facility that includes one or more graphic arts coating units.

Graphic arts coating unit means any packaging rotogravure printing, publication rotogravure printing, flexographic printing, lithographic printing, letterpress printing, laminating, or screen printing unit or any paper, fabric, or film coating unit operated in conjunction with a printing unit.

Group I vehicles and equipment means large-sized trucks, buses, and mobile equipment.

Group II vehicles means passenger cars, small-sized trucks and vans, medium-sized trucks and vans, and motorcycles.

Heatset means a class of web-offset lithography which requires a heated dryer to solidify the printing inks.

Heatset-web-offset lithographic printing unit means a lithographic printing unit in which a blanket cylinder is used to transfer ink from a plate cylinder to a substrate continuously fed from a roll or an extension process and an oven is used to solidify the printing inks.

Heavy off-highway vehicle products means heavy construction, mining, farming, or material handling equipment; heavy industrial engines; diesel-electric locomotives and associated power generation equipment; and the components of such equipment or engines.

Heavy off-highway vehicle products coating facility means a facility that includes one or more heavy off-highway vehicle products coating unit(s).

Heavy off-highway vehicle products coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of heavy off-highway vehicle products.

Highway means a way or place of whatever nature, publicly maintained and open to the public for purposes of vehicular travel. Highway includes street.

Industrial or commercial solvent use facility means any industrial or commercial facility that uses solvents which contain VOCs or substances that contain solvents which contain VOCs. Industrial and commercial solvent use facilities include, but are not limited to, perchloroethylene dry cleaning, petroleum dry cleaning, metal cleaning, degreasing, aerospace component coating, motor vehicle and mobile equipment assembly line coating, motor vehicle and mobile equipment refinishing, can coating, coil coating, fabric coating, film coating, flatwood product coating, graphic arts coating, large appliance coating, magnet wire coating, marine vessel coating, metal and wood furniture coating, miscellaneous metal parts and products coating, paper coating, and plastic parts coating facilities. Substances that contain solvents include, but are not limited to, coatings, inks, fountain solutions, adhesives, thinners, and clean-up solvents.

Ink means a coating used in printing, impressing, or transferring an image onto a substrate.

Laminating unit means a printing unit in which an adhesive is used to form two or more layers of material into a single, multiple-layer sheet.

Large appliance means the component metal parts (including, but not limited to, doors, cases, lids, panels, and interior support parts) of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dish washers, trash compactors, air conditioners, and other similar products under SIC Code 363.

Large appliance coating facility means a facility that includes one or more large appliance coating unit(s).

Large appliance coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of component metal parts of large appliances.

Letterpress printing unit means a printing unit in which the image area is raised relative to the nonimage area on the roll printer and the ink is transferred to the paper directly from the image surface.

Light-duty truck means any motor vehicle rated at 3864 kg (8500 lb) gross vehicle weight or less, designed mainly to transport property.

Lithographic printing unit means a printing unit in which the image and nonimage areas are on the same plane of the roll printer.

Magnet wire coating facility means a facility that includes one or more magnet coating unit(s).

Magnet wire coating unit means a coating unit in which electrically insulating varnish or enamel is applied onto the surface of wire to be used in electrical machinery.

Marine vessel means a ship or boat used to travel on, or a submarine used to travel through, the sea.

Marine vessel coating facility means a facility that includes one or more marine vessel coating unit(s).

Marine vessel coating unit means a coating unit in which any protective, decorative, or functional coating is applied on the fabricated part, assembly of parts, or completed unit of any marine vessel.

Metal furniture means any furniture piece made of metal or any metal part which is or will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece including, but not limited to, tables, chairs, waste baskets, beds, desks, lockers, benches, shelving, file cabinets, lamps, and room dividers. This definition shall not apply to any coating unit coating miscellaneous metal parts or products.

Metal furniture coating facility means a facility that includes one or more metal furniture coating unit(s).

Metal furniture coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of metal furniture.

Miscellaneous metal part or product means any metal part or metal product, even if attached to or combined with a nonmetal part or product.

Miscellaneous metal parts or products coating facility means a facility that includes one or more miscellaneous metal parts or products coating unit(s).

Miscellaneous metal parts or products coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto the surface of miscellaneous metal parts or products.

Mobile equipment means self-propelled equipment which is physically capable of being driven on a highway. Mobile equipment includes: automobiles, motorcycles, trucks, vans, construction equipment (e.g., mobile cranes, bulldozers, concrete mixers), farming equipment (e.g., wheel tractors, pesticide sprayers), and miscellaneous equipment (e.g., street cleaners, golf carts, and hauling equipment used inside and around airports, docks, depots, and industrial and commercial plants).

Motor vehicle means a vehicle which is self-propelled and physically capable of being driven on a highway.

Motor vehicle or mobile equipment assembly line coating facility means a facility where parts are manufactured or finished for eventual inclusion into finished motor vehicles or mobile equipment ready for sale to motor vehicle or mobile equipment dealers. This definition does not include customizers, body shops, and/or other auto refinishing facilities.

Motor vehicle or mobile equipment refinishing facility means a facility where all or any part of used motor vehicles or mobile equipment is refinished, or customized, by the application of paint. This definition includes motor vehicles or mobile equipment dealerships who purchase new motor vehicle or mobile equipment from Original Equipment Manufacturers. This definition does not include motor vehicle or mobile

equipment assembly line coating facilities.

Motorcycle means any motor vehicle other than a tractor having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground and weighing less than 1,500 lbs, except that four wheels may be in contact with the ground when two of the wheels are a functional part of a sidecar.

Offset means a blanket cylinder that is used to transfer ink from a plate cylinder to the substance to be printed.

Open-top vapor degreasing means the batch process of cleaning and removing soils from surfaces by condensing hot solvent vapor on the colder metal parts.

Oven means a chamber within which heat is used for one or more of the following purposes: To dry, bake, cure, or polymerize a coating or ink.

Packaging rotogravure printing means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates which are, in subsequent operations, formed into packaging products or labels for articles to be sold.

Packaging rotogravure printing press means a rotogravure printing press in which surface coatings are applied to paper, paperboard, metal foil, plastic film, or other substrates which are to be used to produce containers, packaging products, or labels for articles.

Paper coating facility means a facility that includes one or more paper coating unit(s).

Paper coating unit means a web coating unit where coating is applied to paper. Printing presses are not considered paper coating units. Products produced on a paper coating unit include, but are not limited to, adhesive tapes and labels, book covers, post cards, office copier paper, drafting paper, and pressure sensitive tapes. Paper coating units include, but are not limited to, application by impregnation or saturation or by the use of roll, knife, or rotogravure coating.

Printing unit means an operation consisting of a series of one or more roll printers and any associated roll coaters, drying areas, and/or ovens wherein one or more surface coatings are applied, dried, and/or cured. It is not necessary for an operation to have an oven, or flashoff area, or drying area to be included in this definition.

Publication rotogravure printing unit means a rotogravure printing unit in which surface coatings are applied to paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, or other types of printed material.

Refinish means to restore or replace coatings on Group I vehicles (large-sized trucks, buses, and mobile equipment) and Group II vehicles (passenger cars, small-sized trucks and vans, medium-sized trucks and vans, and motorcycles) and equipment, or their parts and components, except Original Equipment Manufacturer coatings applied at motor vehicle or mobile equipment assembly line coating facilities.

Roll coater means an apparatus in which a uniform layer of coating material is applied by means of a roll or rolls across the entire width of a moving substrate which is fed from an unwinding roll.

Roll printer means an apparatus in which a surface coating is applied by means of a roll or rolls with only partial coverage across the width of a moving substrate which is fed from an unwinding roll. The partial coverage results in the formation of words, designs, or pictures on the substrate.

Rotogravure printing means the application of words, designs, and pictures to a substrate using a gravure cylinder by means of a roll printing technique in which the pattern to be applied is recessed relative to the nonimage area.

Rotogravure printing unit means a printing unit in which each roll printer uses a roll with recessed areas for applying an image to a substrate.

Screen printing unit means a printing unit in which the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.

Solvent means a substance that is liquid at standard conditions that is used to dissolve or dilute another substance; this term includes, but is not limited to, organic materials used as dissolvers, viscosity reducers, degreasing agents, or cleaning agents.

Solvent cleaning means the process of cleaning soils from surfaces by cold cleaning, open-top vapor degreasing, or conveyorized degreasing.

Space vehicle means any vehicle designed to travel beyond the earth's atmosphere.

Street means a public road in a town or city.

Substrate means the surface to which a coating is applied on, saturated into, or impregnated into.

Vinyl coating facility means a facility that includes one or more vinyl coating unit(s).

Vinyl coating unit means a web coating unit in which any protective, decorative, or functional coating or printing ink is applied onto a continuous web of vinyl-coated fabric or vinyl sheets.

Web means an automatic system which supplies substrate from a continuous roll or an extrusion process.

Wood furniture means room furnishings including cabinets (kitchen, bath, and vanity), tables, chairs, beds, sofas, shutters, art objects, wood paneling, wood flooring, and any other coated furnishings made of wood, wood composition, or fabricated wood materials.

Wood furniture coating facility means a facility that includes one or more wood furniture coating unit(s).

Wood furniture coating unit means a coating unit in which any protective, decorative, or functional coating is applied onto wood furniture.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(1)(iii) (A) and (B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of any degreasing facility or any motor vehicle or mobile equipment refinishing facility located in the control area as defined in paragraph (a)(1) of this section.

(B) The requirements of paragraphs (b)(1)(iii) (A) and (B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of an industrial or commercial solvent use facility located in the applicable area specified in paragraph (b)(1)(ii)(A) of this section at which actual emissions of VOC are greater than or equal to 6.8 kg (15 lbs) during any one day.

(C) The requirements of paragraphs (b)(1) (iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of an industrial or commercial solvent use facility located in the applicable area specified in paragraph (b)(1)(ii)(A) of this section at which actual emissions of VOC from all emissions sources are always less than 6.8 kg (15 lbs) during any one day. If actual emissions of VOC from a facility which is exempt from the limitations of paragraph (b)(1)(iii)(B) of this section ever exceed 6.8 kg (15 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(1)(iii)(B) *(1)* through *(5)*, (b)(1)(iv)(A), (b)(1)(v)(A), and (b)(1)(vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1,

1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraph (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[19]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(1)(ii) (A) or (B) of this section, shall limit actual monthly emissions of VOC from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \quad (1)$$

where[20]

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \quad (2)$$

(See footnote to paragraph (b)*(1)*(iii)(B)(1) of this section.)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)(2) of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.*

[19] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B)*(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) The test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

[20] The range 0.04 to 0.09 reflects the 4% to 9% cumulative annual rate of emission reductions currently under consideration. In the first year, emissions would be reduced by 4% to 9% off of baseline levels; in the second year, emissions would be reduced by 8% to 18% off of baseline levels, and so on until the minimum 20% VOC reduction is made. As discussed in the preamble to the regulations this range of annual reductions is based on EPA's preliminary rate of reduction analysis and may change as the analysis continues prior to final promulgation of this FIP. In addition, EPA plans to review this value every three years after final rule promulgation.

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(1)(ii) (A) or (B) of this section, shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the facility is in compliance with all of the requirements of this section, and

(2) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section shall comply with the following:

(1) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. This certification shall include:

(i) A declaration that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section; and

(ii) Calculations which demonstrate that total baseline VOC emissions from all emissions sources at the facility are and will remain less than 6.8 kg (15 lbs) during any one day. Baseline emissions shall be calculated in accordance with the procedures specified in paragraphs (b)(1)(iii)(A)*(2)* *(i)* and *(ii)* of this section.

(2) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that actual emissions of VOC from the facility exceeded 6.8 kg (15 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraphs (b)(1)(ii) (A) or (B) of this section shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(1)(ii)(C) of this section shall collect and record all information necessary to demonstrate that actual emissions of VOC from all emissions sources are less than 6.8 kg (15 lbs) during each day and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraphs (b)(1)(ii) (A) or (B) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to demonstrate that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(2) *VOC Emissions Associated with the Manufacturing of Products.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(2) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(2) of this section, the following definitions also apply:

Facility which manufactures products containing VOCs means any facility where VOCs are emitted from processes which are used to manufacture or fabricate products. These products include, but are not limited to, the products specified in paragraphs *(1)* through *(7)* of this definition. This definition does not include facilities which are subject to any of the requirements of paragraphs (b)(1), (b)(4), or (b)(5) of this section.

(1) Industrial and agricultural organic chemicals and gases. Industrial organic chemicals include, but are not limited to, gum and wood chemicals, cyclic organic crudes and intermediates, organic dyes and pigments, and the chemicals listed in 40 CFR 52.741, appendix A. Agricultural organic chemicals include, but are not limited to, pesticides, livestock dips, soil conditioners, and fertilizers.

(2) Plastic materials, synthetic resins, synthetic rubber, elastomizers, and cellulosic and manmade fibers.

(3) Drugs which include, but are not limited to, medicinal chemicals and botanical products, pharmaceutical preparations, in vitro and in vivo diagnostic substances, and biological products.

(4) Soaps; detergents; cleaning, polishing, and sanitizing preparations; surface active agents, finishing agents, sulfonated oils, and assistants; and perfumes and cosmetics.

(5) Food additives and sweeteners.

(6) Paints, varnishes, lacquers, enamels, inks, primers, paint removers, thinners, stains, shellacs, cleaners, putty, coatings, adhesives, fillers, sealants, explosives, and carbon black.

(7) Fabricated rubber and miscellaneous plastics products including, but not limited to, tires and inner tubes; rubber and plastics footware, hose, belting, gasket, packing, and sealing devices; and molded, extruded, and lathe-cut mechanical rubber goods.

Manufacture means to produce or combine any ingredients contained in any product.

Manufacturing process means a process or a series of processes used to convert raw materials, feed stocks, subassemblies, or other components into a product which will be sold, offered for sale, supplied, or distributed or will be used as a component in a subsequent manufacturing process. This definition includes the storage and handling of organic compounds or gases which are used in a manufacturing process and the handling of organic compounds or gases used to clean-up a manufacturing process.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(2)(iii)(A), (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of a facility which manufactures products containing VOCs located in the control area as defined in paragraph (a)(1) of this section at which total VOC emissions are greater than or equal to 4.5 kg (10 lbs) during any one day.

(B) The requirements of paragraphs (b)(2)(iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of a facility which manufactures products containing VOCs

located in the applicable area specified in paragraph (b)(2)(ii)(A) of this section at which total VOC emissions from all emissions sources are always less than 4.5 kg (10 lbs) during any one day. If uncontrolled VOC emissions from a facility which is exempt from the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section ever exceed 4.5 kg (10 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(2)(iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap• program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (a)(4)(xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(2)(iii)(A)(3) of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V (of the Clean Air Act) operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[21]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(2)(ii)(A) of this section, shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \quad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \quad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each

[21] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(2)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(A) of this section, shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the facility is in compliance with all of the requirements of this section; and

(2) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(B) of this section, shall comply with the following:

(1) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section. This certification shall include:

(i) A declaration that the facility is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through (5) of this section, as described under paragraph (b)(2)(ii)(B) of this section; and

(ii) Calculations which demonstrate that total baseline VOC emissions from all emissions sources at the facility are and will remain less than 4.5 kg (10 lbs) during any one day. Baseline emissions shall be calculated in accordance with the procedures specified in paragraphs (b)(2)(iii)(A) *(1)* and *(2)* of this section.

(2) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that total VOC emissions from the facility exceeded 4.5 kg (10 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(A) of this section, shall collect and record all information necessary to demonstrate compliance with the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraph (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(B) of this section, shall collect and record all information necessary to demonstrate that total VOC emissions from all emissions sources are less than 4.5 kg (10 lbs) during each day and maintain the information at the facility for a period of three years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(2)(ii)(A) of this section, to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of section to demonstrate compliance with the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(2)(ii)(B) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to demonstrate that the facility is exempt from the limitations of paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section.

(3) *Disposal of Materials Containing Volatile Organic Compounds.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(3) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(3) of this section, the following definitions also apply:

Biodegradable waste means any organic waste that can be broken down into its basic elements by microorganisms.

Biodegradable waste disposal facility means any facility which is operated as a business or owned by a state or municipality and is used to treat, store, or dispose of biodegradable waste or to reclaim or recycle organic compounds or gases from biodegradable wastes.

Organic waste disposal facility means any facility which is operated as a business or owned by a state or municipality and is used to treat, store, or dispose of organic wastes that contain VOCs or to reclaim or recycle organic compounds or gases from organic wastes that contain VOCs. Such facilities include, but are not limited to, biodegradable waste disposal facilities (e.g., landfills); publicly owned treatment works; hazardous waste treatment, storage, and disposal facilities; and sewage sludge, solid waste, and hazardous waste incinerators.

Publicly owned treatment work (POTW) means any device or system which is owned by a state or municipality and is used to treat (including recycling and reclamation) municipal sewage or industrial liquid waste.

(ii) *Applicability.* The requirements of paragraphs (b)(3) (iii), (iv), (v), and (vi) of this section shall apply to any owner or operator of any organic waste disposal facility located in the control area as defined in paragraph (a)(1) of this section.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-

up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4) (xii) and (xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[22]

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \quad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \quad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section.)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(3)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(3)(ii) of this section shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(A) A declaration that the facility is in compliance with all of the requirements of this section; and

(B) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section.

(v) *Recordkeeping.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(3)(ii) of this section, shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.* The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(3)(ii) of this section, to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the

[22] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and

(2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

limitations of paragraphs (b)(3)(iii)(B) *(1)* through *(5)* of this section.

(4) *Commercial Food Preparation and/or Baking.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(4) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(4) of this section, the following definitions also apply:

Brandy-making facility means a facility that distills wine, the refuse of a wine press, or any other fermented fruit juices to produce alcoholic liquors.

Charcoal means any substance obtained by charring wood or any other organic matter by a process of smothered combustion to exclude air.

Commercial baking facility means a facility that bakes bread, biscuits, rolls, pies, cakes, cookies, or other similar products.

Commercial charbroiling facility means a facility that broils any type of food over a charcoal or gas-fired broiler.

Food preparation facility means any commercial baking, commercial charbroiling, wine- or brandy-making, fruit and vegetable preservation, grain mill production, vegetable oil production, or malt beverage production facility. This definition includes restaurants involved in activities described in the previous sentence.

Fruit and vegetable preservation facility means a facility that preserves food by, but not limited to, canning, curing, pickling, salting, smoking, cooking, or freezing.

Grain mill production facility means a facility that grinds any grain including, but not limited to, wheat, rice, corn, or rye into flour or meal.

Malt beverage production facility means a facility engaged in malting, fermentation, aging, or packaging of barley or any other grain for the purpose of producing an alcoholic beverage.

Vegetable oil production facility means a facility that extracts oil from any vegetable seed.

Wine- or brandy-making facility means a facility that ferments juices from grapes or any other fruit for the purpose of producing alcoholic beverages.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(4) (iii)(A) and (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of a commercial food preparation facility located in the control area as defined in paragraph (a)(1) of this section at which VOC emissions are greater than or equal to 4.5 kg (10 lbs) during any one day.

(B) The requirements of paragraphs (b)(4)(iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of a commercial food preparation facility located in the applicable area specified in paragraph (b)(4)(ii)(A) of this section at which total uncontrolled VOC emissions from all emissions sources are always less than 4.5 kg (10 lbs) during any one day. If VOC emissions from a facility which is exempt from the limitations of paragraph (b)(4)(iii)(B) of this section ever exceed 4.5 kg (10 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(4)(iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4)(xii) and (xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraph (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[23]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(4)(ii)(A) of this section shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \qquad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \qquad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

[23] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to: (1) the test methods and procedures specified in paragraph (a)(4) of this section, and (2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,
R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.
i=Subscript denoting a specific emissions source, and
n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)
where
R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,
R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.
i=Subscript denoting a specific emissions source, and
n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)
where
R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,
R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.
i=Subscript denoting a specific emissions source, and
n=Total number of emissions sources at the facility.
(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

where
R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,
R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(4)(iii)(A)*(2)* of this section.
i=Subscript denoting a specific emissions source, and
n=Total number of emissions sources at the facility.

(iv) *Reporting.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(A) of this section shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the facility is in compliance with all of the requirements of this section; and

(2) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(B) of this section shall comply with the following:

(1) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section. This certification shall include:

(i) A declaration that the facility is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(B) of this section; and

(ii) Calculations which demonstrate that total baseline VOC emissions from all emissions sources at the facility are and will remain less than 4.5 kg (10 lbs) during any one day. Baseline emissions shall be calculated in accordance with the procedures specified in paragraphs (b)(4)(iii)(A) *(1)* and *(2)* of this section.

(2) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that total VOC emissions from the facility exceeded 4.5 kg (10 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(A) of this section, shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(B) of this section, shall collect and record all information necessary to demonstrate that total VOC emissions from all emissions sources are less than 4.5 kg (10 lbs) during each day and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(4)(ii)(A) of this section, to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(4)(ii)(B) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to demonstrate that the facility is exempt from the limitations of paragraphs (b)(4)(iii)(B) *(1)* through *(5)* of this section.

(5) *Petroleum and Natural Gas Extraction, Processing, and Storage.*

(i) *Definitions.*

(A) For the purpose of paragraph (b)(5) of this section, the general definitions in paragraph (a)(3) of this section apply.

(B) For the purpose of paragraph (b)(5) of this section, the following definitions also apply:

Crude oil means a naturally occurring mixture which consists of hydrocarbons

and sulfur, nitrogen, or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

Extraction facility means any facility where drilling and servicing equipment, flow lines, separators, gathering lines, and auxiliary nontransportation related equipment are used to extract petroleum or natural gas from a well.

Gasoline means any petroleum distillate which is used as a motor fuel.

Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

Processing facility means any facility where petroleum or natural gas is used as a feedstock to produce gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other related products.

Storage facility means any extraction facility, processing facility, bulk gasoline plant, bulk gasoline terminal, or any petroleum storage facility which distributes petroleum, natural gas, or gasoline to retail outlet and wholesale purchaser-consumer facilities. This definition does not apply to retail gasoline service stations.

(ii) *Applicability.* The requirements of paragraphs (b)(5) (iii), (iv), (v), and (vi) of this section shall apply to any owner or operator of any petroleum or natural gas extraction, processing, or storage facility located in the control area as defined in paragraph (a)(1) of this section.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to the FIP VOC emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a VOC emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline VOC emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of VOC emissions from all emissions sources at the facility including emissions associated with the use of architectural coatings and clean-up solvents. Baseline emissions shall be calculated as specified in paragraph (a)(4) (xii) and (xiii) of this section.

(3) Methods to be employed by the owner or operator to limit VOC emissions from emissions sources to within the emissions level required in paragraphs (b)(2)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual VOC emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraph (b)(2)(iii)(A)*(3)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[24]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph because of paragraph (b)(5)(ii) of this section shall limit total VOC emissions from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.04 \text{ thru } 0.09)) \qquad (1)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2001}=Allowable VOC for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.08 \text{ thru } 0.18)) \qquad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2002}=Allowable VOC for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.27)) \qquad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2003}=Allowable VOC for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.16 \text{ thru } 0.36)) \qquad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2004}=Allowable VOC for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.

[24] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the VOC emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to:

(1) the test methods and procedures specified in paragraph (a)(4) of this section, and (2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce VOC emissions.

i=Subscript denoting a specific emissions source, and
n=Total number of emissions sources at the facility.
(See footnote to paragraph (b)(1)(iii)(B)(1) of this section)

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.20 \text{ thru } 0.45)) \quad (5)$$

where
R_{2005}=Allowable VOC for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,
R_o=Baseline VOC emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(5)(iii)(A)*(2)* of this section.
i=Subscript denoting a specific emissions source, and
n=Total number of emissions sources at the facility.

(iv) *Reporting.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(5)(ii) of this section shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(A) A declaration that the facility is in compliance with all of the requirements of this section; and

(B) Documentation of methods used to achieve the VOC emissions reductions required in paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section.

(v) *Recordkeeping.* Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(5)(ii) of this section shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.* The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(5)(ii) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment specified in paragraph (a)(4)(iv)(B) of this section to demonstrate compliance with the limitations of paragraphs (b)(5)(iii)(B) *(1)* through *(5)* of this section.

(c) *Incorporated by Reference.* The materials listed below are incorporated by reference. The incorporation by reference was approved by the Director of the Office of Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.[25] These materials are incorporated as they exist on the date of approval, and a notice of any change in these materials will be published in the **Federal Register.**

(1) ASTM D3925–81 (1985) Standard Practice for Sampling Liquid Paints and Related Pigment Coating.

(2) ASTM E300 Standard Practice for Sampling Industrial Chemicals.

(3) ASTM D1475–85: Standard Test Method for Density of Paint, Varnish, Lacquer and Related Products.

(4) ASTM D2369–87: Standard Test Method for Volatile Content of a Coating.

(5) ASTM D3792–86: Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph.

(6) ASTM D4017–81 (1987): Standard Test Method for Water Content in Paints and Paint Materials by the Karl Fischer Method.

(7) ASTM D4457–85: Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph.

(8) ASTM D2697–86: Standard Test Method for Volume Non-volatile Matter in Clear or Pigmented Coatings.

(9) ASTM E180–85: Standard Practice for Determining the Precision Data of ASTM Methods for Analysis and Testing of Industrial Chemicals.

(10) ASTM Method D2879–86: Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.

§ 52.2955 Stationary and area source NO_X cap rules (Ventura).[26]

(a) *General Provisions.*

(1) *Applicability.* The provisions of § 52.2955 shall apply to all stationary emission sources located in the "control area" as defined as the Ventura County ozone nonattainment area in 40 CFR 81.305, and all other persons identified in subsequent applicability paragraphs in § 52.2955(b).

(2) *Compliance dates.* Compliance with all requirements of this section is required upon promulgation unless otherwise indicated by compliance dates contained in specific paragraphs in this section. This paragraph (a)(2) shall not operate to provide additional time for compliance under section 113(d) of the Clean Air Act, for sources subject to compliance upon promulgation.

(3) *Definitions.* For the purposes of this section, the following definitions apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Actual emissions means the actual quantity of NO_X emissions from an emissions source during a particular time period. "Actual emissions rate" means the actual quantity of NO_X emissions from an emissions source per unit of actual production or throughput.

Agency means the United States Environmental Protection Agency.

Air contaminant means any solid, liquid, or gaseous matter, any odor, or any form of energy, that is capable of being released into the atmosphere from an emission source.

Air pollution means the presence in the atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.

Air pollution control equipment means any equipment or facility of a type intended to eliminate, prevent, reduce or control the emission of specified air contaminants to the atmosphere.

Allowable emissions rate means the most stringent of the applicable standards in 40 CFR parts 60 and 61; the applicable implementation plan; or a federally enforceable permit.

Annual emissions report is a report which takes inventory of all pollutant emissions at a facility during a calendar year, submitted by the Facility to the EPA, within 30 days of the close of each year.

Baseline emissions means the emissions calculated using 1990 emission inventory data in the affected FIP areas and adjusted for emission reductions projected to occur by the implementation year of the FIP cap program in the affected FIP area. The baseline shall be denominated in pounds per year of FIP cap pollutant (e.g., pounds of NO_X per year) and monthly caps shall be prorated based on this data.

[25] Incorporation by reference is pending approval by the Office of Federal Register.

[26] EPA intends to issue a supplemental document in the **Federal Register** which addresses portions of proposed § 52.2955.

Cement kiln is a device for the calcining and clinkering of limestone, clay and other raw materials, and recycle dust in the dry-process manufacture of cement.

Clinker is a mass of fused material produced in a cement kiln from which the finished cement is manufactured by milling and grinding.

Combustion equipment is any equipment that burns fuel, including but not limited to natural gas or fuel oil in order to operate. Combustion equipment includes, but is not limited to, boilers, turbines, heaters, engines, kilns, furnaces, ovens, dryers, flares, and afterburners.

Continuous emissions monitoring system (CEMS) means any system of equipment that continuously measures all parameters necessary to directly determine mass emissions of a pollutant, and which meets all performance standards for CEMS set forth in this regulation.

Continuously measure means to measure at least once every 15 minutes except during periods of routine maintenance and calibration, or as otherwise specified in this regulation.

Daily means occurring once between 12 midnight and 24 hours later at midnight.

Day means a period of consecutive 24 hours beginning at 12:00 a.m. (midnight) local time, or beginning at a time consistent with a facility's operating schedule.

Direct monitoring device is a device that measures the emissions of NO_X and all other variables as specified in this regulation.

Electric utility is all facilities which generate power and are owned or operated by any one of the following: Southern California Edison or any of its successors.

Emission rate means the total mass of NO_X released or discharged from an emissions source into the atmosphere per unit of production, throughput, or heat input (e.g., pounds NO_X/mmBtu).

Emission source or *source* means any building, structure, facility, property, equipment, device, container, or any combination thereof, at, from, or by reason which NO_X is emitted or discharged into the atmosphere.

Facility means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control), except the activities of any marine vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two-digit code) as described in the "Standard Industrial Classification Manual, 1987" (incorporated by reference as specified in paragraph (b) of this section).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator including those requirements contained in permits issued pursuant to 40 CFR parts 70 and 71, except those terms or conditions designated as not federally enforceable; those requirements developed pursuant to 40 CFR parts 60 and 61; requirements within any applicable implementation plan; and any permit requirements established pursuant to § 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, and 40 CFR 51.166.

Gaseous fuels include, but are not limited to, any natural, process, synthetic, landfill, sewage digester or waste gases with a gross heating value of 300 Btu per cubic foot or higher, at standard conditions.

Incinerator means a combustion apparatus in which solid, semi-solid, liquid, or gaseous combustible wastes are ignited and burned and from which the solid and gaseous residues contain little or no combustible material.

Monitor means to measure and record.

Natural gas is a mixture of gaseous hydrocarbons, with at least 80 percent methane (by volume), and of pipeline quality, such as the gas sold or distributed by any utility company regulated by the California Public Utilities Commission.

NO_X emissions means the sum of nitric oxides and nitrogen dioxides emitted, calculated as nitrogen dioxide.

Non-cap program pollutants are those pollutants other than NO_X and VOC.

Owner or operator means any person who owns, operates, leases, controls, or supervises an emissions source or air pollution control equipment.

Person means any individual, corporation, copartnership, firm, company, partnership, joint stock company, trust, association, State, municipality, political subdivision, or any other legal entity, or their legal representative, agent, or assigns.

Process means any stationary emission source.

Quarter is a three-month period from January 1 to March 31, April 1 to June 30, July 1 to September 30, or October 1 to December 31, inclusive.

Rated brake horsepower (bhp) is the maximum rating specified by the manufacturer and listed on the nameplate.

Rental equipment is equipment which is rented or leased for operation by someone other than the owner of the equipment.

Research operations are those operations the sole purpose of which is to permit investigation of experimental research to advance the state of knowledge or state-of-the-art technology.

Source means emission source.

Standard conditions means a temperature of 20 °C (68 °F) and a pressure of 760 mm Hg (29.92 in. Hg).

Standard industrial code (SIC) is the classification number assigned to a facility based on its primary economic activity as specified in the "Standard Industrial Classification Manual," published by the Office of Management and Budget, dated 1987.

Stationary emission source and *Stationary source* mean an emission source which is not self-propelled.

Throughput means a measure of activity including, but not limited to: weight of glass pulled for a glass melting furnace, weight of clinker for cement kilns, amount of nitric acid used in metal stripping processes, amount of nitric acid manufactured for nitric acid manufacturing processes, weight of aluminum produced for aluminum production and/or fuel usage for all other sources as reported.

(4) *Test Methods and Procedures.*

(i) *Emissions monitoring and testing.* Major sources as defined under the CAA shall install CEMS that meet the quality assurance and quality control requirements of appendix A of the Enhanced Monitoring Program.[27] The test methods and procedures found in § 52.2961(m), (n), (o), (u), and (v) apply to all NO_X emission sources defined in paragraph (b) of this section. EPA-approved calculational methods shall be used in conjunction with the appropriate test methods found in § 52.2961 to determine mass emissions if conversion from a rate-based emissions result to a mass-based emissions result is necessary. [See additional discussion in section III.C.5.a.(5)(c) of the Supplementary Information section.]

(ii) *Baseline Emissions.* Unless otherwise specified in paragraph (b) of this section, baseline NO_X emissions shall be calculated for each emissions source in accordance with one of the procedures specified below:

(A) If daily emissions records which are consistent with the emission inventory data submitted by the State for the control area on November 15, 1992 are available for the calendar years 1989 and 1990, baseline emissions shall

[27] Proposed rule published in the Federal Register of October 22, 1993 (58 FR 54648).

be based on the median value of daily emissions recorded for the two-year period.

(B) If daily emissions records are not available for the calendar years 1989 and 1990 or are inconsistent with the emission inventory data submitted by the State for the control area on November 15, 1992 or were not submitted, baseline emissions shall be based on the average daily emissions value calculated for the two-year period. The average daily emissions value shall be calculated by dividing emissions for the two-year period by the operating or usage time for the two-year period. If emissions data are not available, emissions associated with fuel usage may be estimated from purchase records. The operating or usage time for the two-year period shall be based on one of the criteria specified as follows:

(1) The number of days specified in a federally enforceable permit if the emissions source operated under the conditions of a federally enforceable permit which restricted operating times during the two-year period,

(2) The average number of days that the emissions source was operated or used over the two-year period if documentation is available to support the number, or

(3) 730 days if documentation of the number of days that the emissions source was operated or used over the two-year period is not available.

(iii) *Implementation Year Monthly Baseline Emissions.* Baseline emissions as defined in paragraph (a)(4)(ii) of this section shall be adjusted prior to the implementation year (2001) of the FIP cap program in the control area as follows:

(A) The reductions that are projected to occur as a result of both SIP and FIP measures between 1990 and 2001 shall be subtracted from the baseline emissions. This value shall be defined as the reduced daily baseline emissions and is denoted in pounds of NO_X/day.

(B) The reduced daily baseline emissions shall be annualized by multiplying the daily value by 365. This value shall be defined as the reduced annual baseline emissions and is denoted in pounds of NO_X/year.

(C) The reduced annual baseline emissions shall be converted into a monthly value by dividing by 12. This value shall be defined as the implementation year monthly baseline.

(5) *Enforcement.*

(i) Inspections. All sources and facilities subject to provisions of this section shall be subject to unannounced inspections by representatives of the USEPA pursuant to section 114 of the Clean Air Act.

(ii) Information requests. Documentation maintained by all sources, facilities, and persons subject to this section must be sufficient to demonstrate compliance with all requirements of this section and must be provided to representatives of USEPA in response to information requests pursuant to section 114 of the Clean Air Act.

(iii) Failure to comply with any provision of this section is a violation of the applicable implementation plan for purposes of section 113 of the Clean Air Act.

(iv) Each 50 pounds of emissions in excess of a facility's monthly cap shall be a separate violation for federal enforcement purposes.

(b) *Stationary and area source control measures.*

(1) *NO_X* emission sources.

(i) *Definitions.* For purposes of this section, the general definitions in paragraph (a)(3) of this section apply.

(ii) *Applicability.*

(A) The requirements of paragraphs (b)(1), (iii)(A), (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of any of the following equipment at a facility located in the control area as defined in paragraph (a)(1) of this section:

(1) Any boiler, furnace, oven, dryer, heater, incinerator, test cell and any solid, liquid or gaseous fueled equipment with a maximum rated capacity greater than or equal to 2 million Btu per hour;

(2) Any internal combustion engine with rated brake horsepower (bhp) greater than or equal to 50 bhp, regardless of operating time;

(3) Any gas turbine rated greater than or equal to 0.2 megawatts excluding any emergency standby equipment or peaking unit;

(4) Any petroleum refinery fluid catalytic cracking unit;

(5) Any petroleum refinery tail gas unit;

(6) Any kiln or calciner;

(7) Any equipment burning or incinerating solid fuels or materials;

(8) Any sulfuric acid production unit;

(9) Any portable combustion and process equipment;

(10) Any emergency standby equipment or peaking unit;

(11) Any NO_X source for which NO_X emissions reported to the State or local agency were equal to or greater than 2 tons per year for the calendar year 1990.

(B) The requirements of paragraphs (b)(1), (iii)(A), (iii)(B), (iv)(A), (v)(A), and (vi)(A) of this section shall apply to any owner or operator of a NO_X source or combinations of sources, as described in paragraph (b)(1)(ii)(A) of this section at a facility located in the applicable area specified in paragraph (b)(1)(ii)(A) of this section at which actual emissions of NO_X are greater than or equal to 6.8 kg (15 lbs) during any one day.

(C) The requirements of paragraphs (b)(1) (iv)(B), (v)(B), and (vi)(B) of this section shall apply to any owner or operator of a NO_X source or combinations of sources, as described in paragraph (b)(1)(ii)(A) of this section at a facility located in the applicable area specified in paragraph (b)(1)(ii)(A) of this section at which actual emissions of NO_X from all emissions sources are always less than 6.8 kg (15 lbs) during any one day. If actual emissions of NO_X from a facility which is exempt from the limitations of paragraph (b)(1)(iii)(B) of this section ever exceed 6.8 kg (15 lbs) during any one day on or after January 1, 2000, the facility will lose its exempt status, and the owner or operator shall comply with the requirements of paragraphs (b)(1)(iii)(B), (b)(1)(iv)(A), (b)(1)(v)(A), and (b)(1)(vi)(A) of this section beginning January 1 of the calendar year following the date of the exceedance.

(iii) *Specific Provisions.*

(A) Each owner or operator of a source subject to FIP NO_X emissions cap program as defined in paragraph (b)(1)(ii) of this section shall submit a NO_X emissions reduction compliance plan to the Administrator by January 1, 1999. The plan shall be prepared for the years 2001 through 2005 and shall include all of the information specified in paragraphs (b)(1)(iii)(A) *(1)* through *(5)* of this section. Each owner or operator shall submit a revised plan to the Administrator within 30 calendar days of receipt of comments from the Administrator. Each owner or operator shall comply at all times with the provisions of the most recent plan approved by the Administrator.

(1) The name, title, address, and telephone number of the owner or operator of the facility, and of each person responsible for preparing the information required under paragraph (b)(1)(iii)(A)*(2)* of this section.

(2) Baseline NO_X emissions shall be calculated for each facility. Baseline emissions for each facility shall equal the sum of NO_X emissions from all emissions sources at the facility. Baseline emissions shall be calculated as specified in paragraphs (a)(4)(ii) and (a)(4)(iii) of this section.

(3) Methods to be employed by the owner or operator to limit NO_X emissions from emissions sources to within the emissions level required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. Methods may include but are not limited to:

(i) Installation of capture systems and control devices;

(ii) Modifications to increase the efficiency of existing capture systems and/or control devices;

(iii) Process modifications and/or substitutions; and

(iv) Reduction in operating schedules for one or more emissions sources at the facility. For those facilities choosing to comply through use of reduced operating schedules, operating schedules for baseline emissions levels and for emissions levels starting January 1, 2001, continuing for a period not less than 5 years.

(4) Projections of annual NO_X emissions for each emissions source through the year 2005 after application of the reduction methods described in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(5) For all sources subject to the FIP cap reduction requirements, all information required as part of the facility's Title V operating permit. For sources not subject to Title V, sources shall submit all information which would be required for sources subject to Title V.[28]

(B) Beginning January 1, 2001, each owner or operator of a facility which is subject to the limitations of this paragraph, as described under paragraph (b)(1)(ii)(A) or (ii)(B) of this section, shall limit actual monthly emissions of NO_X from the subject facility to the level calculated by the following equations:

$$R_{2001} \leq \sum_{i=1}^{n} R_o(1-(0.06 \text{ thru } 0.09)) \quad (1)$$

where[29]

R_{2001}=Allowable NO_X for all emissions sources at the facility for the year 2001 in units of kg (lbs) per month,

R_o=Baseline NO_X emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2002} \leq \sum_{i=1}^{n} R_o(1-(0.12 \text{ thru } 0.18)) \quad (2)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2002}=Allowable NO_X for all emissions sources at the facility for the year 2002 in units of kg (lbs) per month,

R_o=Baseline NO_X emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2003} \leq \sum_{i=1}^{n} R_o(1-(0.18 \text{ thru } 0.27)) \quad (3)$$

(See footnote to paragraph (b)(1)(iii)(B)(1) of this section)

where

R_{2003}=Allowable NO_X for all emissions sources at the facility for the year 2003 in units of kg (lbs) per month,

R_o=Baseline NO_X emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2004} \leq \sum_{i=1}^{n} R_o(1-(0.24 \text{ thru } 0.36)) \quad (4)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2004}=Allowable NO_X for all emissions sources at the facility for the year 2004 in units of kg (lbs) per month,

R_o=Baseline NO_X emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

$$R_{2005} \leq \sum_{i=1}^{n} R_o(1-(0.30 \text{ thru } 0.45)) \quad (5)$$

(See footnote to paragraph (b)(1)(iii)(B)*(1)* of this section)

where

R_{2005}=Allowable NO_X for all emissions sources at the facility for the year 2005 in units of kg (lbs) per month,

R_o=Baseline NO_X emissions in units of kg (lbs) per month for each emissions source at the facility. Baseline emissions shall be calculated in accordance with the requirements specified in paragraph (b)(1)(iii)(A)*(2)* of this section.

i=Subscript denoting a specific emissions source, and

n=Total number of emissions sources at the facility.

(iv) *Reporting.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(1)(ii) (A) or (B) of this section, shall submit to the Administrator by March 1 of each calendar year, beginning in 2002, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the facility is in compliance with all of the requirements of this section, and

(2) Documentation of methods used to achieve the NO_X emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section shall comply with the following:

(1) By January 1, 2000, the owner or operator shall certify to the Administrator that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. This certification shall include:

(i) A declaration that the facility is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraph (b)(1)(ii)(C) of this section, and

(ii) Calculations which demonstrate that total baseline NO_X emissions from all emissions sources at the facility are and will remain less than 6.8 kg (15 lbs) during any one day. Baseline emissions shall be calculated in accordance with

[28] This information shall include, for example, test or demonstration methods used to demonstrate achievement of the NO_X emissions reductions required in paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section. The methods may include but are not limited to: (1) the test methods and procedures specified in paragraph (e)(4) of this section, and (2) data and engineering calculations approved by EPA documenting process modifications that were made to reduce NO_X emissions.

[29] The range 0.06 to 0.09 reflects the 6% to 9% cumulative annual rate of emission reductions currently under consideration. In the first year, emissions would be reduced by 6% to 9% off of baseline levels; in the second year, emissions would be reduced by 12% to 18% off of baseline levels, and so on until the minimum 30% NO_X reduction is made. As discussed in the preamble to the regulations this range of annual reductions is based on EPA's preliminary rate of reduction analysis and may change as the analysis continues prior to final promulgation of this FIP. In addition, EPA plans to review this value every three years after final rule promulgation.

the procedures specified in paragraphs (b)(1)(iii)(A) *(1)* and *(2)* of this section.

(2) On and after January 1, 2000, the owner or operator shall notify the Administrator of any record showing that actual emissions of NO_X from the facility exceeded 6.8 kg (15 lbs) during any one day by sending a copy of such record to the Administrator within 30 calendar days after the exceedance occurs.

(v) *Recordkeeping.*

(A) Each owner or operator of a facility which is subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraphs (b)(1) (ii)(A) or (ii)(B) of this section shall collect and record all information necessary to demonstrate compliance with the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section for each emissions source and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(B) Each owner or operator of a facility which is exempt from the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section, as described under paragraph (b)(1)(ii)(C) of this section shall collect and record all information necessary to demonstrate that actual emissions of NO_X from all emissions sources are less than 6.8 kg (15 lbs) during each day and maintain the information at the facility for a period of five (5) years. The information shall be collected and recorded each day of each calendar year beginning in 2001 and ending with 2005.

(vi) *Testing and Monitoring.*

(A) The Administrator may require, at any time, any owner or operator of a facility subject to the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section because of paragraphs (b)(1)(ii) (A) or (B) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section and/or to install monitoring equipment to demonstrate compliance with the limitations of paragraphs (b)(1)(iii)(B) *(1)* through *(5)* of this section.

(B) The Administrator may require, at any time, any owner or operator of a facility which is exempt from the limitations of paragraph (b)(1)(iii)(B) of this section because of paragraph (b)(1)(ii)(C) of this section to perform tests using the applicable test methods and procedures specified in paragraph (a)(4) of this section to demonstrate that the facility is exempt from the limitations of paragraph (b)(1)(iii)(B) of this section.

§ 52.2956 Stationary and area source NO_X cap rules (South Coast) [Reserved].

§ 52.2957 Consumer product rules.

(a) *Consumer products.*

(1) *Applicability.* The requirements of paragraphs (a)(1) through (a)(9) of this section shall apply to any person who sells, supplies, offers for sale, or manufactures consumer products for use in California.

(2) *Definitions.* For the purposes of paragraphs (a)(1) through (a)(9) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Aerosol cooking spray means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be applied on food, or both.

Aerosol product means a pressurized spray system that dispenses product ingredients by means of a propellant or mechanically induced force. Aerosol Product does not include pump sprays.

Agricultural use means the use of any pesticide or method or device for the control of pests in connection with the commercial production, storage or processing of any animal or plant crop. Agricultural Use does not include the sale or use of pesticides in properly labeled packages or containers which are intended for: Home use; Use in structural pest control; or Industrial or Institutional use. For the purposes of this definition only: Home use means use in a household or its immediate environment. Structural pest control means a use requiring a license under Chapter 14 (commencing with Section 8500), Division 3, of the Business and Professions Code. Industrial use means use for or in a manufacturing, mining, or chemical process or use in the operation of factories, processing plants, and similar sites. Institutional use means use within the confines of, or on property necessary for the operation of buildings such as hospitals, schools, libraries, auditoriums, and office complexes.

Air freshener means any consumer product including, but not limited to, sprays, wicks, powders, and crystals, designed for the purpose of masking odors, or freshening, cleaning, scenting, or deodorizing the air. Air Freshener includes dual/purpose air freshener/disinfectant products. Air Freshener does not include products that are used on the human body, or products that function primarily as cleaning products as indicated on a product label or advertisement.

All other carbon-containing compounds means all other compounds which contain at least one carbon atom and are not a Table B or a LVP compound.

All other forms means all consumer product forms for which no form-specific VOC standard is specified. Unless specified otherwise by the applicable VOC standard, all other forms include, but are not limited to, solids, liquids, wicks, powders, crystals, and cloth or paper wipes (towelettes).

Architectural coating means a coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs.

ASTM means the American Society for Testing and Materials.

Automotive brake cleaner means a cleaning product designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.

Automotive windshield washer fluid means any liquid designed for use in a motor vehicle windshield washer fluid system either as an anti-freeze or for the purpose of cleaning, washing, or wetting the windshield(s). Automotive Windshield Washer Fluid does not include any fluid which is placed in a new motor vehicle at the time the vehicle is manufactured.

Bathroom and tile cleaner means a product designed to clean tile or surfaces in bathrooms. Bathroom and Tile Cleaner does not include products specifically designed to clean toilet bowls or toilet tanks.

California sales means the sales (net pounds of product, less packaging and container, per year) in California for either the calendar year immediately prior to the year that the registration is due or, if that data is not available, any consecutive 12 month period commencing no earlier than 2 years prior to the due date of the registration. If direct sales data for California is not available, sales may be estimated by prorating national or regional sales data by population.

Carburetor-choke cleaner means a product designed to remove dirt and other contaminants from a carburetor. Carburetor-Choke Cleaner does not include products designed to be introduced directly into the fuel lines or fuel storage tank prior to introduction into the carburetor.

Charcoal lighter material means any combustible material designed to be applied on, incorporated in, added to, or used with charcoal to enhance ignition. Charcoal Lighter Material does not include any of the following: electrical starters and probes; metallic cylinders

using paper tinder; natural gas; and propane.

Colorant means any pigment or coloring material used in a consumer product for an aesthetic effect, or to dramatize an ingredient.

Construction and panel adhesive means any one-component household adhesive having gap filling capabilities, and which distributes stress uniformily throughout the bonded area resulting in a reduction or elimination of mechanical fasteners. These materials are applied from 1/10 gallon or 11 fluid ounce caulking cartridges.

Consumer means any person who seeks, purchases, or acquires any consumer product for personal, family, household, or institutional use. Persons acquiring a consumer product for resale are not consumers for that product.

Consumer product means a chemically formulated product used by household and institutional consumers including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; and automotive specialty products but do not include paint, furniture coatings, or architectural coatings.

Contact adhesive means any household adhesive that: is nitrile-based, or contains polychlorobutadiene (neoprene, chloroprene, bayprene), or latex; when applied to two substrates forms an instantaneous, non-repositionable bond; when dried to touch, exhibits a minimum 30 minute bonding range; and bonds only to itself without the need for reactivation by solvents or heat.

Container/packaging means the part or parts of the consumer or institutional product which serve only to contain, enclose, incorporate, deliver, dispense, wrap or store the chemically formulated substance or mixture of substances which is solely responsible for accomplishing the purposes for which the product was designed or intended. Container/Packaging includes any article onto or into which the principal display panel and other accompanying literature or graphics are incorporated, etched, printed or attached.

Crawling bug insecticide means any insecticide product that is designed for use against ants, cockroaches, or other household crawling arthropods, including, but not limited to, mites, silverfish or spiders. Crawling Bug Insecticide does not include products designed to be used exclusively on humans or animals.

Device means any instrument or contrivance (other than a firearm) which is designed for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than man and other than bacteria, virus, or other microorganism on or in living man or other living animals); but not including equipment used for the application of pesticides when sold separately therefrom.

Disinfectant means any product intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects and whose label is registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) 7 U.S.C. 136 *et seq*. Disinfectant does not include any of the following: products designed solely for use on human or animals; products designed for agricultural use; products designed solely for use in swimming pools, therapeutic tubs, or hot tubs; products which, as indicated on the principal display panel or label, are designed primarily for use as bathroom and tile cleaners, glass cleaners, general purpose cleaners, toilet bowl cleaners, or metal polishes.

Distributor means any person to whom a consumer product is sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers, and consumers are not distributors.

Double phase aerosol air freshener means an aerosol air freshener with the liquid contents in two or more distinct phases that requires the product container be shaken before use to mix the phases, producing an emulsion.

Dual purpose air freshener/ disinfectant means an aerosol product that is represented on the product container for use as both a disinfectant and an air freshener, or is so represented on any sticker, label, packaging, or literature attached to the product container.

Dusting aid means a product designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone based coating. Dusting Aid does not include products which consist entirely of compressed gases for use in electronic or other specialty areas.

Engine degreaser means a cleaning product designed to remove grease, grime, oil and other contaminants from the external surfaces of engines and other mechanical parts.

Exempt compounds means any of the following compounds: methane; chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); dichlorotrifluoroethane (HCFC-123); tetrafluoroethane (HFC-134a); dichlorofluoroethane (HCFC-141b); chlorodifluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); methylene chloride; 1,1,1-trichloroethane (methyl chloroform); trichlorotrifluoroethane (CFC-113); dichlorodifluoromethane (CFC-12); trichlorofluoromethane (CFC-11); dichlorotetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); or perfluorocarbon compounds which fall into these classes: Cyclic, branched, or linear, completely fluorinated alkanes; Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; or Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Existing product means any formulation of the same product category and form sold, supplied, manufactured, or offered for sale in California prior to the effective date of this article or any subsequently introduced identical formulation.

Fabric protectant means a product designed to be applied to fabric substrates to protect the surface from soiling from dirt and other impurities or to reduce absorption of water into the fabric's fibers. Fabric Protectant does not include silicone-based products whose function is to provide water repellency, or products designed for use solely on fabrics which are labeled "for dry clean only" and sold in containers of 10 fluid ounces or less.

Flea and tick insecticide means any insecticide product that is designed for use against fleas, ticks, their larvae, or their eggs. Flea and Tick Insecticide does not include products that are designed to be used exclusively on humans or animals and their bedding.

Flexible flooring material means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl and vinyl composite flooring.

Floor polish or wax means a wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished. Floor Polish or Wax does not include spray buff products, products designed solely for the purpose of cleaning floors, floor finish strippers, products designed for unfinished wood floors, and coatings subject to architectural coatings regulations.

Flying bug insecticide means any insecticide product that is designed for

use against flying insects or other flying arthropods, including but not limited to flies, mosquitoes, moths, or gnats. Flying Bug Insecticide does not include wasp and hornet insecticide, or products that are designed to be used exclusively on humans or animals.

Fragrance means a substance or complex mixture of aroma chemicals, natural essential oils, and other functional components with a combined vapor pressure not in excess of 2 mm of Hg at 20 C, the sole purpose of which is to impart an odor or scent, or to counteract a malodor.

Furniture maintenance product means a wax, polish, conditioner, or any other product designed for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors. Furniture Maintenance Product does not include dusting aids, products designed solely for the purpose of cleaning, and products designed to leave a permanent finish such as stains, sanding sealers and lacquers.

Furniture coating means any paint designed for application to room furnishings including, but not limited to, cabinets (kitchen, bath and vanity), tables, chairs, beds, and sofas.

Gel means a colloid in which the disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.

General purpose adhesive means any non-aerosol household adhesive designed for use on a variety of substrates. General Purpose Adhesive does not include contact adhesives or construction and panel adhesives.

General purpose cleaner means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. General Purpose Cleaner includes products designed for general floor cleaning, kitchen or countertop cleaning, and cleaners designed to be used on a variety of hard surfaces.

Glass cleaner means a cleaning product designed primarily for cleaning surfaces made of glass. Glass cleaner does not include products designed solely for the purpose of cleaning optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines.

Hair mousse means a hairstyling foam designed to facilitate styling of a coiffure and provide limited holding power.

Hair styling gel means a high viscosity, often gelatinous, product that contains a resin and is designed for the application to hair to aid in styling and sculpting of the hair coiffure.

Hairspray means a consumer product designed primarily for the purpose of dispensing droplets of a resin on and into a hair coiffure which will impart sufficient rigidity to the coiffure to establish or retain the style for a period of time.

Household adhesive means any household product that is used to bond one surface to another by attachment. Household Adhesive does not include products used on humans and animals, adhesive tape, contact paper, wallpaper, shelf liners, or any other product with an adhesive incorporated onto or in an inert substrate. Household Adhesive also does not include units of product, less packaging, which weigh more than one pound or consist of more than 16 fluid ounces.

Household product means any consumer product that is primarily designed to be used inside or outside of living quarters or residences that are occupied or intended for occupation by individuals, including the immediate surroundings.

Household sealants and caulking compounds means any product designed to fill in cracks, close or secure an object, or to prevent seepage of moisture or air.

Insect repellent means a pesticide product that is designed to be applied on human skin, hair or attire worn on humans in order to prevent contact with or repel biting insects or arthropods.

Insecticide means a pesticide product that is designed for use against insects or other arthropods, but excluding products that are: for agricultural use; for a use which requires a structural pest control license under Chapter 14 (commencing with Section 8500) of the Business and Professions Code; or restricted materials that require a permit for use and possession.

Insecticide fogger means any insecticide product designed to release all or most of its content, as a fog or mist, into indoor areas during a single application.

Institutional product or industrial and institutional (I&I) Product means a consumer product that is designed for use in the maintenance or operation of an establishment that: manufactures, transports, or sells goods or commodities, or provides services for profit; or is engaged in the nonprofit promotion of a particular public, educational, or charitable cause. Establishments include, but are not limited to, government agencies, factories, schools, hospitals, sanitariums, prisons, restaurants, hotels, stores, automobile service and parts centers, health clubs, theaters, or transportation companies. Institutional Product does not include household products and products that are incorporated into or used exclusively in the manufacture or construction of the goods or commodities at the site of the establishment.

Label means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any consumer product or consumer product package, for purposes of branding, identifying, or giving information with respect to the product or to the contents of the package.

Laundry prewash means a product that is designed for application to a fabric prior to laundering and that supplements and contributes to the effectiveness of laundry detergents and/or provides specialized performance.

Laundry starch product means a product that is designed for application to a fabric, either during or after laundering, to impart and prolong a crisp, fresh look and may also act to help ease ironing of the fabric. Laundry Starch Product includes, but is not limited to, fabric finish, sizing, and starch.

Lawn and garden insecticide means an insecticide product designed primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods.

Liquid means a substance or mixture of substances which is capable of a visually detectable flow as determined under ASTM D–4359–90. Liquid does not include powders or other materials that are composed entirely of solid particles.

LVP compound means any compound which contains at least one carbon atom and has either of the following: a vapor pressure less than 0.1 mm Hg at 20 C; or more than 12 carbon atoms, if the vapor pressure is unknown.

Manufacturer means any person who imports, manufactures, assembles, produces, packages, repackages, or relabels a consumer product.

Nail polish means any clear or colored coating designed for application to the fingernails or toenails and including but not limited to, lacquers, enamels, acrylics, base coats and top coats.

Nail polish remover means a product designed to remove nail polish and coatings from fingernails or toenails.

Non-carbon containing compound means any compound which does not contain any carbon atoms.

Nonresilient flooring means flooring of a mineral content which is not flexible. Nonresilient Flooring includes terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.

Oven cleaner means any cleaning product designed to clean and to remove dried food deposits from oven walls.

Paint means any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate in a thin layer which is converted to an opaque solid film after application and is used for protection, decoration or identification, or to serve some functional purpose such as the filling or concealing of surface irregularities or the modification of light and heat radiation characteristics.

Paint stripper means any product designed to strip or remove paint from a substrate without markedly affecting the substrate itself.

Person means any individual, corporation, partnership, association, State, municipality, political subdivision of a state; any agency, department, or instrumentality of the United States; and any officer, agent, or employee thereof.

Personal fragrance product means any product which is applied to the human body or clothing for the primary purpose of adding a scent or masking a malodor, including cologne, perfume, aftershave, and toilet water. Personal Fragrance Product does not include: products exclusively for human axillae; medicated products designed primarily to alleviate fungal or bacterial growth on feet or other areas of the body; mouthwashes, breath fresheners and deodorizers; lotions, moisturizers, powders or other skin care products used primarily to alleviate skin conditions such as dryness and irritations; products designed exclusively for use on human genitalia; soaps, shampoos, and products primarily used to clean the human body; and fragrance products designed to be used exclusively on non-human animals.

Percent-by-weight means the total weight of VOC except those VOCs exempted under paragraph (a)(4) of this section, expressed as a percentage of the total net weight of the product exclusive of the container or package as calculated according to the following equation:

$$\text{Percent-By-Weight} = \frac{B-C}{A} \times 100$$

where,

A=net weight of unit (excluding container and packaging);

B=weight of VOCs, as defined in paragraph (a)(2) of this section, per unit; and

C=weight of VOCs, exempted under paragraph (a)(4) of this section, per unit.

Pesticide means and includes any substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling or mitigating any pest, or any substance or mixture of substances labeled, designed, or intended for use as a defoliant, desiccant, or plant regulator, provided that the term pesticide will not include any substance, mixture of substances, or device which the Environmental Protection Agency does not consider to be a pesticide.

Principal display panel or panels means that part, or those parts of a label that are so designed as to most likely be displayed, presented, shown or examined under normal and customary conditions of display or purchase. Whenever a principal display panel appears more than once, all requirements pertaining to the principal display panel shall pertain to all such principal display panels.

Product brand name means the name of the product exactly as it appears on the principal display panel of the product.

Product category means the applicable category which best describes the product as listed in paragraph (a)(2) of this section. *Product Form* for the purpose of complying with paragraph (a)(7) of this section only, means the applicable form which most accurately describes the product's dispensing form as follows: A=Aerosol Product; S=Solid; P=Pump Spray; L=Liquid; G=Gel; O=Other.

Propellent means a liquefied or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.

Pump spray means a packaging system in which the product ingredients within the container are not under pressure and in which the product is expelled only while a pumping action is applied to a button, trigger or other actuator.

Responsible party means the company, firm or establishment which is listed on the product's label. If the label lists two companies, firms or establishments, the responsible party is the party which the product was manufactured for or distributed by, as noted on the label.

Restricted materials means pesticides established as restricted materials under Title 3, California Code of Regulations, section 6400.

Retail outlet means any establishment at which consumer products are sold, supplied, or offered for sale directly to consumers.

Retailer means any person who sells, supplies, or offers consumer products for sale directly to consumers.

Shaving cream means an aerosol product which dispenses a foam lather intended to be used with a blade or cartridge razor, or other wet-shaving system, in the removal of facial or other bodily hair.

Single phase aerosol air freshener means an aerosol air freshener with the liquid contents in a single homogeneous phase and which does not require that the product container be shaken before use.

Solid means a substance or mixture of substances which, either whole or subdivided (such as the particles comprising a powder), is not capable of visually detectable flow as determined under ASTM D–4359–90.

Spray buff product means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.

Table B compound means any carbon-containing compound listed as an exception to the definition of VOC in paragraph (a)(2) of this section.

Type A propellent means a compressed gas such as CO_2, N_2, N_2O, or compressed air which is used as a propellent, and is either incorporated with the product or contained in a separate chamber within the product's packaging.

Type B propellent means any halocarbon which is used as a propellent including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs).

Type C propellent means any propellent which is not a Type A or Type B propellent, including propane, isobutane, n-butane, and dimethyl ether (also known as dimethyl oxide).

Volatile organic compound (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions other than those defined as exempt compounds. These exempt compounds have been determined to have negligible photochemical reactivity. For purposes of determining compliance with emission limits, VOC will be measured by test methods given in this section. Where such a method also measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emission standard. However, the U.S. EPA may require such owner or operator, as a

precondition to excluding these compounds for purposes of determining compliance, to provide monitoring methods and monitoring results demonstrating, to the satisfaction of the U.S. EPA, the amount of negligibly reactive compounds in the source's emissions.

Usage directions means the text or graphics on the product's principal display panel, label, or accompanying literature which describes to the end user how and in what quantity the product is to be used.

Wasp and hornet insecticide means any insecticide product that is designed for use against wasps, hornets, yellow jackets or bees by allowing the user to spray a high volume directed stream or burst from a safe distance at the intended pest or its hiding place.

Wax means a material or synthetic thermoplastic substance generally of high molecular weight hydrocarbons or high molecular weight esters of fatty acids or alcohols, except glycerol and high polymers (plastics). Wax includes, but is not limited to, substances derived from the secretions of plants and animals such as carnuba wax and beeswax, substances of a mineral origin such as ozocerite and paraffin, and synthetic polymers such as polyethylene.

Wood floor wax means wax-based products for use solely on wood floors.

(3) *Standards.*

(i) Except as provided in paragraphs (a) (4), (5), and (7) of this section, no person shall sell, supply, offer for sale, or manufacture for sale in California any consumer product which, at the time of sale or manufacture, contains volatile organic compounds in excess of the limits specified in the following Table of Standards after the specified effective dates.

TABLE OF STANDARDS

[Percent Volatile Organic Compounds by Weight]

Product category	Effective dates	
	1/1/96	1/1/97
Aerosol Cooking Sprays	18	
Air Fresheners:		
Single Phase Aerosols	30	
Double Phase Aerosols	30	
Liquid/Pump Sprays	18	
Solids/Gels	.....	3
Dual Purpose Air Freshener/Disinfectant Aerosols	60	
Automotive Brake Cleaners	.....	50
Automotive Windshield Washer Fluids:		
Type A Areas*	35	
All Other Areas	10	

TABLE OF STANDARDS—Continued

[Percent Volatile Organic Compounds by Weight]

Product category	Effective dates	
	1/1/96	1/1/97
Carburetor-Choke Cleaners	75	
Charcoal Lighter Material (see paragraph (a)(3)(viii) of this section)		
Dusting Aids:		
Aerosol	35	25
All Other Forms	7	
Engine Degreasers	50	
Fabric Protectants	75	60
Floor Polishes/Waxes:		
Products for Flexible Flooring Materials	7	
Products for Nonresilient Flooring	10	
Wood Floor Wax	90	
Furniture Maintenance Products Aerosols	25	
All Other Forms except Solid or Paste Forms	7	
General Purpose Cleaners	10	
Glass Cleaners Aerosols	12	
All other forms	6	
Hairsprays	80	55 (1/98)
Hair Mousses	16	
Hair Styling Gels	6	
Household Adhesives:		
Aerosols	75	25
Contact	80	
Construction and Panel	40	
General Purpose	10	
Insecticides:		
Crawling Bug	40	20 (1/98)
Flea and Tick	25	
Flying Bug	35	
Foggers	45	
Lawn and Garden	20	
Laundry Prewash:		
Aerosols/Solids	22	
All Other Forms	5	
Laundry Starch Products	5	
Nail Polish Removers	75	
Oven Cleaners:		
Aerosols/Pump Sprays	8	
Liquids	5	
Personal Fragrance Products Products with 20% or less fragrance	80	75 (1/99)
Products with more than 20% fragrance	70	65 (1/99)
Insect Repellents:		
Aerosols	65	
Shaving Creams	5	

*Type A Areas include only the following: Del Norte, Shasta and Trinity Counties; the Great Basin Valley, Lake Tahoe, Mountain Counties, and the Northeast Plateau Air Basins, as defined in title 17, California Code of Regulations, Sections 60105, 60108, 60111, and 60113.

(ii) For consumer products for which the label, packaging, or accompanying literature specifically states that the product should be diluted prior to use, the limits specified in paragraph (a)(3)(i) of this section shall apply to the product only after the minimum recommended dilution has taken place. For purposes of this paragraph, minimum recommended dilution shall not include recommendations for incidental use of a concentrated product to deal with limited special applications such as hard-to-remove soils or stains.

(iii) Notwithstanding the provisions of paragraph (a)(3)(i) of this section, a consumer product manufactured prior to each of the effective dates specified for that product in the Table of Standards may be sold, supplied, or offered for sale for up to eighteen months after each of the specified effective dates. This paragraph does not apply to any consumer product which does not display on the product container or package the date on which the product was manufactured, or a code indicating such date.

(iv) For those consumer products that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA; 7 U.S.C. Section 136 *et seq.*), the effective date of the VOC standards specified in paragraph (a)(3)(i) of this section is one year after the date specified in the Table of Standards. For those consumer products that are registered under FIFRA, the eighteen month period provided in paragraph (a)(3)(iii) of this section shall also begin one year after the date specified in the Table of Standards.

(v) Effective January 1, 1993, for any consumer product for which standards are specified under paragraph (a)(3)(i) of this section, no person shall sell, supply, offer for sale, or manufacture for sale in California any consumer product which contains any of the following ozone-depleting compounds: CFC–11 (trichlorofluoromethane), CFC–12 (dichlorodifluoromethane), CFC–113 (1,1,1-trichloro-2,2,2- trifluoroethane), CFC–114 (1-chloro-1,1-difluoro-2-chloro-2,2- difluoroethane), CFC–115 (chloropentafluoroethane), halon 1211 (bromochlorodifluoromethane), halon 1301 (bromotrifluoromethane), halon 2402 (dibromotetrafluoroethane), HCFC–22 (chlorodifluoromethane), HCFC–123 (2,2-dichloro-1,1,1-trifluoroethane), HCFC–124 (2-chloro-1,1,1,2-tetrafluoroethane), HCFC–141b (1,1-dichloro-1-fluoroethane), HCFC–142b (1-chloro-1,1-difluoroethane), 1,1,1-trichloroethane, and carbon tetrachloride.

(vi) The requirements of paragraph (a)(3)(v) of this section shall not apply to any existing product formulation that complies with the Table of Standards which is sold, supplied, offered for sale

in California prior to the effective date of this article, or any product formulation that is sold, supplied, or offered for sale in California prior to the effective date of this article that is reformulated to meet the Table of Standards, as long as the ozone depleting compound content of the reformulated product does not increase.

(vii) The requirements of paragraph (a)(3)(v) of this section shall not apply to any ozone depleting compounds that may be present as impurities in a consumer product in an amount equal to or less than 0.01% by weight of the product.

(viii) After January 1, 1996, no person shall sell, supply, or offer for sale charcoal lighter material unless the applicant demonstrates to the Administrator's satisfaction that the VOC emissions from the ignition of charcoal with the charcoal lighter material are less than or equal to 0.020 pound of VOC per start, using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol, dated February 27, 1991 ("SCAQMD Rule 1174 Testing Protocol").

(4) *Exemptions.*

(i) This article shall not apply to any consumer product manufactured in California for shipment and use outside of California.

(ii) The provisions of this article shall not apply to a manufacturer or distributor who sells, supplies, or offers for sale in California a consumer product that does not comply with the VOC standards specified in paragraphs (a)(3)(i) or (a)(3)(viii) of this section, as long as the manufacturer or distributor can demonstrate both that the consumer product is intended for shipment and use outside of California, and that the manufacturer or distributor has taken reasonable prudent precautions to assure that the consumer product is not distributed to California. This paragraph does not apply to consumer products that are sold, supplied, or offered for sale by any person to retail outlets in California.

(iii) The requirements of paragraph (a)(3)(i) of this section shall not apply to fragrances up to a combined level of 2 percent by weight contained in any consumer product.

(iv) The requirements of paragraph (a)(3)(i) of this section shall not apply to any VOC which:

(A) Has a vapor pressure of less than 0.1 mm Hg at 20 degrees Centigrade, or

(B) Consists of more than 12 carbon atoms, if the vapor pressure is unknown.

(v) The requirements of paragraph (a)(6)(ii) of this section shall not apply to consumer products registered under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA; 7 U.S.C. 136 *et seq.*)

(vi) The requirements of paragraph (a)(3)(i) of this section shall not apply to air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs under paragraph (a)(2) of this section or exempted under paragraph (a)(4)(iv) of this section.

(vii) The requirements of paragraph (a)(3)(i) of this section shall not apply to air fresheners and insecticides containing at least 98% paradichlorobenzene.

(viii) The requirements of paragraph (a)(3)(i) of this section shall not apply to:

(A) Existing personal fragrance products or personal fragrance products in development on or before April 1, 1992, provided that both:

(*1*) The registration data specified in paragraph (a)(7) of this section is submitted for every such product by the date specified in paragraph (a)(7)(i) of this section, or prior to July 1, 1993, whichever date occurs later, and

(*2*) Such product is sold in California prior to January 1, 1994. For the purposes of this subsection, a product in development means:

(*i*) A product which a fragrance materials manufacturer is designing at the request of a personal fragrance product manufacturer, or

(*ii*) A product which is the subject of a written marketing profile or other documentation authorizing the creation and marketing of the product.

(B) Personal fragrance products in development may be registered to qualify for this exemption under hypothetical trade names or pseudonyms, provided that the actual trade name is supplied to the Administrator within 30 days of marketing such products, or January 1, 1994, whichever occurs first.

(ix) The requirements of paragraph (a)(3)(i) of this section shall not apply to adhesives sold in containers of 1 fluid ounce or less.

(x) The requirements of paragraph (a)(3)(i) of this section shall not apply to any VOC which is a fragrance in a personal fragrance product.

(xi) The requirements of paragraph (a)(3)(i) of this section shall not apply to bait station insecticides. For the purpose of this paragraph, bait station insecticides are containers enclosing an insecticidal bait that is not more than 0.5 ounce by weight, where the bait is designed to be ingested by insects and is composed of solid material feeding stimulants with less than 5 percent active ingredients.

(xii) The January 1, 1999 VOC limits specified in paragraph (a)(3)(i) of this section for personal fragrance products shall not apply to such products which have been sold in California prior to January 1, 1999.

(5) *Innovative Products.*

(i) The Administrator shall exempt a consumer product from the requirements of paragraph (a)(3)(i) of this section if a manufacturer demonstrates by clear and convincing evidence that, due to some characteristic of the product formulation, design, delivery systems or other factors, the use of the product will result in less VOC emissions as compared to:

(A) The VOC emissions from a representative consumer product which complies with the VOC standards specified in paragraph (a)(3)(i) of this section, or

(B) The calculated VOC emissions from a noncomplying representative product, if the product had been reformulated to comply with the VOC standards specified in paragraph (a)(3)(i) of this section. VOC emissions shall be calculated using the following equation:

$$E_R = E_{NC} \times VOC_{STD} + VOC_{NC}$$

Where:

E_R=the VOC emissions from the noncomplying representative product, had it been reformulated.

E_{NC}=the VOC emissions from the noncomplying representative product in its current formulation.

VOC_{STD}=the VOC standard specified in paragraph (a)(3)(i) of this section.

VOC_{NC}=the VOC content of the noncomplying product in its current formulation.

If a manufacturer demonstrates that this equation yields inaccurate results due to some characteristic of the product formulation or other factors, an alternative method which accurately calculates emissions may be used upon approval of the Administrator.

(ii) For the purposes of this section, representative consumer product means a consumer product which meets all of the following criteria:

(A) The representative product shall be subject to the same VOC limit in paragraph (a)(3)(i) of this section as the innovative product.

(B) The representative product shall be of the same product form as the innovative product, unless the innovative product uses a new form which does not exist in the product category at the time the application is made.

(C) The representative product shall have at least similar efficacy as other

consumer products in the same product category based on tests generally accepted for that product category by the consumer products industry.

(iii) A manufacturer shall apply in writing to the Administrator for any exemption claimed under paragraph (a)(5)(i) of this section. The application shall include the supporting documentation that demonstrates the emissions from the innovative product, including the actual physical test methods used to generate the data and, if necessary, the consumer testing undertaken to document product usage. In addition, the applicant must provide any information necessary to enable the Administrator to establish enforceable conditions for granting the exemption including the VOC content for the innovative product and test methods for determining the VOC content.

(iv) Within 30 days of receipt of the exemption application the Administrator shall determine whether an application is complete.

(v) Within 90 days after an application has been deemed complete, the Administrator shall determine whether, under what conditions, and to what extent, an exemption from the requirements of paragraph (a)(3)(i) of this section will be permitted. The applicant and the Administrator may mutually agree to a longer time period for reaching a decision, and additional supporting documentation may be submitted by the applicant before a decision has been reached. The Administrator shall notify the applicant of the decision in writing and specify such terms and conditions that are necessary to insure that emissions from the product will meet the emissions reductions specified in paragraph (a)(5)(i) of this section, and that such emissions reductions can be enforced.

(vi) In granting an exemption for a product the Administrator shall establish conditions that are enforceable. These conditions shall include the VOC content of the innovative product, dispensing rates, application rates and any other parameters determined by the Administrator to be necessary. The Administrator shall also specify the test methods for determining conformance to the conditions established. The test methods shall include criteria for reproducibility, accuracy, sampling and laboratory procedures.

(vii) For any product for which an exemption has been granted pursuant to this section, the manufacturer shall notify the Administrator in writing within 30 days of any change in the product formulation or recommended product usage directions, and shall also notify the Administrator within 30 days if the manufacturer learns of any information which would alter the emissions estimates submitted to the Administrator in support of the exemption application.

(viii) If VOC standards are lowered for a product category through any subsequent rulemaking, all innovative product exemptions granted for products in the product category, except as provided in this paragraph, shall have no force and effect as of the effective date of the modified VOC standard. This paragraph shall not apply to those innovative products which have VOC emissions less than the appropriate lowered VOC standard and for which a written notification of the product's emissions status versus the lowered VOC standard has been submitted to and approved by the Administrator at least 60 days before the effective date of such standard.

(ix) If the Administrator believes that a consumer product for which an exemption has been granted no longer meets the criteria for an innovative product specified in paragraph (a)(5)(i) of this section, the Administrator may modify or revoke the exemption as necessary to assure that the product will meet these criteria.

(6) *Administrative Requirements.*

(i) Most Restrictive Limit. Notwithstanding the definition of product category in paragraph (a)(2) of this section, if anywhere on the principal display panel of any consumer product, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC standard is specified in paragraph (a)(3)(i) of this section, then the lowest VOC standard shall apply. This requirement does not apply to general purpose cleaners.

(ii) Code-Dating. Each manufacturer of a consumer product subject to paragraph (a)(3)(i) or (a)(3)(viii) of this section shall clearly display on each consumer product container or package, the day, month, and year on which the product was manufactured, or a code indicating such date. This date or code shall be displayed on each consumer product container or package no later than twelve months prior to the effective date of the applicable standard specified in paragraph (a)(3)(i) of this section. The requirements of this provision shall not apply to personal fragrance products of 2 milliliters or less, which are offered to consumers free of charge for the purpose of sampling the product.

(iii) If a manufacturer uses a code indicating the date of manufacture, for any consumer product subject to paragraph (a)(3)(i) or (a)(3)(viii) of this section an explanation of the code must be filed with the Administrator no later than twelve months prior to the effective date of the applicable standard specified in paragraph (a)(3)(i) of this section.

(7) *Registration.*

(i) No later than 90 days after the effective date of this paragraph, all responsible parties for the following household and I&I products must register products that are sold in California during the calendar year prior to the year the registration is due: products for which a VOC standard is specified in paragraph (a)(3)(i) of this section; products approved as an innovative product under paragraph (a)(5) of this section; and products claiming exemptions under paragraphs (a)(4)(vi), (a)(4)(vii), (a)(4)(viii) of this section. All registrations shall include the following information:

(A) The name of the responsible party and the party's address, telephone number, and designated contact person;

(B) Any claim of confidentiality made pursuant to 40 CFR part 2, subpart B;

(C) The product brand name for each consumer product subject to registration and upon request by the Administrator, the product label;

(D) The product category to which the consumer product belongs;

(E) The applicable product form(s) listed separately;

(F) An identification of each product brand name and form as a Household Product, I&I Product, or both;

(G) Separate California sales in pounds per year, to the nearest pound, and the method used to calculate California sales for each product form;

(H) For registrations submitted by two companies, an identification of the company which is submitting relevant data separate from that submitted by the responsible party. All registration information from both companies shall be submitted by the date specified in paragraph (a)(7)(i) of this section;

(I) For each product brand name and form, the net percent by weight of the total product, less container and packaging, comprised of the following, rounded to the nearest one-tenth of a percent (0.1%):

(*1*) Total Table B compounds,

(*2*) Total LVP compounds that are not fragrances,

(*3*) Total all other carbon-containing compounds that are not fragrances,

(*4*) Total all non-carbon-containing compounds,

(*5*) Total fragrance,

(*6*) For products containing greater than two percent by weight fragrance, but excluding personal fragrance products:

(*i*) The percent of fragrance that are LVP compounds, and

(*ii*) The percent of fragrance that are all other carbon-containing compounds,

(*7*) For "personal fragrance products", the density of the fragrance, and

(*8*) Total Paradichlorobenzene.

(J) For each product brand name and form, the identity, including the specific chemical name and associated Chemical Abstract Services (CAS) number, of the following:

(*1*) Each Table B Compound,

(*2*) Each LVP Compound that is not a fragrance.

(K) If applicable, the weight percent comprised of propellent for each product;

(L) if applicable, an identification of the type of propellent (Type A, Type B, Type C, or a blend of the different types);

(ii) In addition to the requirements of paragraph (a)(7)(i)(J) of this section, the responsible party shall report or shall arrange to have reported to the Administrator the net percent by weight of each ozone-depleting compound which is listed in paragraph (a)(3)(v) of this section and contained in a product subject to registration under paragraph (a)(7)(i) of this section in any amount greater than 0.1 percent by weight.

(iii) Upon 90 days written notice, the Administrator may also require any manufacturer to supply all or part of the registration data listed in paragraph (a)(7)(i) of this section for any consumer product or products that the Administrator may specify.

(8) *Test Methods.*

(i) Testing to determine compliance with the requirements of this article, shall be performed using one or more of the following analytical methods which are incorporated by reference herein:

(A) Method 24–24A, 40 CFR part 60, appendix A;

(B) Method 18, 40 CFR part 60, appendix A;

(C) Method 1400, NIOSH Manual of Analytical Methods, Volume 1, February 1984;

(D) Environmental Protection Agency Method 8240 "GC/MS Method for Volatile Organics," September 1986;

(E) Alternative methods which are shown to accurately determine the concentration of VOCs in a subject product or its emissions may be used upon approval of the Administrator.

(ii) Testing to determine compliance with the requirements of this article may also be demonstrated through calculation of the volatile organic compound content from records of the amounts of constituents used to make the product. Compliance determination based on these records may not be used unless the manufacturer of a consumer product keeps accurate records for each day of production of the amount and chemical composition of the individual product constituents. These records must be kept for at least three years.

(iii) Testing to determine whether a product is a liquid or solid shall be performed using ASTM D4359–90 (May 25, 1990), which is incorporated by reference herein.

(iv) Testing to determine compliance with the certification requirements for charcoal lighter material shall be performed using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (February 28, 1991), which is incorporated by reference herein.

(v) Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM D86–90 (Sept. 28, 1990), which is incorporated by reference herein.

(vi) Testing to determine the percent by weight of fragrance in personal fragrance products shall be performed according to the Association of Official Analytical Chemists (AOAC) Official Method of Analysis No. 932.11, 1990, "Essential Oil in Flavor Extracts and Toilet Preparations, Babcock Method" (AOAC Official Methods of Analysis, 15th Edition, 1990), which is incorporated by reference herein.

(9) *Severability.* Each part of this article shall be deemed severable, and in the event that any part of this article is held to be invalid, the remainder of this article shall continue in full force and effect.

(b) *Antiperspirants and deodorants.*

(1) *Applicability.* Paragraphs (b)(1) through (b)(7) of this section shall apply to any person who sells, supplies, offers for sale, or manufactures antiperspirants or deodorants in the state of California.

(2) *Definitions.* For the purposes paragraphs (b)(1) through (b)(7) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Administrator means the Adminstrator of the USEPA or that person's designee.

Aerosol product means a pressurized spray system that dispenses antiperspirant or deodorant ingredients.

Antiperspirant means any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that is intended by the manufacturer to be used to reduce perspiration in the human axilla by at least 20 percent in at least 50 percent of a target population.

Colorant means any substance or mixture of substances, the primary purpose of which is to color or modify the color of something else.

Deodorant means any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that is intended by the manufacturer to be used to minimize odor in the human axilla by retarding the growth of bacteria which cause the decomposition of perspiration.

Exempt compounds means any of the following compounds: methane; chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); dichlorotrifluoroethane (HCFC-123); tetrafluoroethane (HFC-134a); dichlorofluoroethane (HCFC-141b); chlorodifluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); methylene chloride; 1,1,1-trichloroethane (methyl chloroform); trichlorotrifluoroethane (CFC-113); dichlorodifluoromethane (CFC-12); trichlorofluoromethane (CFC-11); dichlorotetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); or perfluorocarbon compounds which fall into these classes: Cyclic, branched, or linear, completely fluorinated alkanes; Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; or Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Existing product means any antiperspirant or deodorant formulation which was sold, supplied, offered for sale, or manufactured in California prior to January 1, 1996, or any identical antiperspirant or deodorant formulation which is sold, supplied, offered for sale, or manufactured in California by any person after January 1, 1996.

Fragrance means any substance or mixture of substances, the primary purpose of which is to impart an odor or scent.

High volatility organic compound (HVOC) means any organic compound that exerts a vapor pressure greater than 80 millimeters of Mercury (mm Hg) when measured at 20 C.

Manufacturer means any person or business entity that produces an antiperspirant or deodorant for sale in California.

Medium volatility organic compound (MVOC) means any organic compound that exerts a vapor pressure greater than

2 mm Hg and less than or equal to 80 mm Hg when measured at 20 C.

Non-aerosol product means any antiperspirant or deodorant that is not dispensed by a pressurized spray system.

Roll-on product means any antiperspirant or deodorant that dispenses active ingredients by rolling a wetted ball or wetted cylinder on the affected area.

Stick product means any antiperspirant or deodorant that contains active ingredients in a solid matrix form, and that dispenses the active ingredients by frictional action on the affected area.

Volatile organic compound (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions other than those defined as exempt compounds. These exempt compounds have been determined to have negligible photochemical reactivity. For purposes of determining compliance with emission limits, VOC will be measured by test methods given in this section. Where such a method also measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emission standard. However, the U.S. EPA may require such owner or operator, as a precondition to excluding these compounds for purposes of determining compliance, to provide monitoring methods and monitoring results demonstrating, to the satisfaction of the U.S. EPA, the amount of negligibly reactive compounds in the source's emissions.

(3) *Standards.*

(i) Except as provided in paragraph (b)(4) of this section, no person shall sell, supply, offer for sale, or manufacture in California any antiperspirant or deodorant which, at the time of sale or manufacture, contains volatile organic compounds in excess of the limits specified in the following Table of Standards, after the specified effective date.

TABLE OF STANDARDS

[Percent volatile organic compounds by weight]

Product form	Effective date			
	2/15/95		1/1/99	
	HVOC[a]	MVOC[b]	HVOC	MVOC
Aerosol product:				
Antiperspirant	60	20	0	10
Deodorant	20	20	0	10
Non-aerosol product	0	0	0	0

[a] High volatility organic compounds, i.e., any organic compound that exerts a vapor pressure greater than 80 mm Hg when measured at 20 C.
[b] Medium volatility organic compounds, i.e., any organic compound that exerts a vapor pressure greater than 2 mm Hg and less than or equal to 80 mm Hg when measured at 20 C.

(ii) No existing product may be reformulated to increase either the product's total VOC content or total ethanol content. An existing product may be reformulated to reduce the product's total ethanol content or total VOC content, as long as the reformulation does not increase the product's total HVOC content.

(iii) No person shall sell, supply, offer for sale, or manufacture in California any antiperspirant or deodorant which contains any of the following ozone-depleting compounds: CFC-11 (trichlorofluoromethane), CFC-12 (dichlorodifluoromethane), CFC-113 (1,1,1-trichloro-2,2,2-trifluoroethane), CFC-114 (1-chloro-1,1- difluoro-2-chloro-2,2-difluoroethane), CFC-115 (chloropentafluoroethane), halon 1211 (bromochlorodifluoromethane), halon 1301 (bromotrifluoromethane), halon 2404 (dibromotetrafluoroethane), HCFC-22 (chlorodifluoromethane), HCFC-123 (2,2-dichloro-1,1,1-trifluoroethane), HCFC-124 (2-chloro- 1,1,1,2-tetrafluoroethane), HCFC-141b (1,1-dichloro-1-fluoroethane), HCFC-142b (1-chloro 1,1-difluoroethane), 1,1,1-trichloroethane, and carbon tetrachloride.

(4) *Exemptions.*

(i) This article shall not apply to any person who manufactures antiperspirants or deodorants in California for shipment and use outside of California.

(ii) The requirements of paragraph (b)(3)(i) of this section shall not apply to fragrances and colorants up to a combined level of 2 percent by weight contained in any antiperspirant or deodorant.

(iii) The requirements of paragraphs (b)(3)(i) and (b)(3)(ii) of this section shall not apply to those volatile organic compounds that contain more than 10 carbon atoms per molecule and for which the vapor pressure is unknown, or that have a vapor pressure of 2 mm Hg or less at 20 C.

(iv) The medium volatility organic compound (MVOC) content standards specified in paragraph (b)(3)(i) of this section, shall not apply to ethanol contained in existing products.

(5) *Innovative Products.*

(i) The Administrator shall exempt a consumer product from the requirements of paragraph (b)(3)(i) or (b)(3)(ii) of this section if a manufacturer demonstrates by clear and convincing evidence that, due to some characteristic of the product formulation, design, delivery systems or other factors, the use of the product will result in less VOC emissions as compared to:

(A) the VOC emissions from a representative consumer product which complies with the VOC Standards specified in paragraphs (b)(3)(i) and (b)(3)(ii) of this section, or

(B) the calculated VOC emissions from a noncomplying representative product, if the product had been reformulated to comply with the VOC standards specified in paragraph (b)(3)(i) and (b)(3)(ii) of this section. VOC emissions shall be calculated using the following equation:

$$E_R = E_{NC} \times VOC_{STD} + VOC_{NC}$$

Where:

E_R=The VOC emissions from the noncomplying representative product, had it been reformulated.

E_{NC}=The VOC emissions from the noncomplying representative product in its current formulation.

VOC_{STD}=The VOC standard specified in paragraph (b)(3) of this section.

VOC_{NC}=The VOC content of the noncomplying product in its current formulation.

If a manufacturer demonstrates that this equation yields inaccurate results due to some characteristic of the product formulation or other factors, an alternative method which accurately calculates emissions may be used upon approval of the Administrator.

(ii) For the purposes of this section, representative consumer product means a consumer product which meets all of the following criteria:

(A) The representative product shall be subject to the same VOC limit in paragraphs (b)(3)(i) and (b)(3)(ii) of this section as the innovative product,

(B) The representative product shall be of the same product form as the innovative product, unless the innovative product uses a new form which does not exist in the product category at the time the application is made.

(C) The representative product shall have at least similar efficacy as other consumer products in the same product category based on tests generally accepted for that product category by the consumer products industry.

(iii) A manufacturer shall apply in writing to the Administrator for any exemption claimed under paragraph (b)(5)(i) of this section. The application shall include the supporting documentation that demonstrates the emissions from the innovative product, including the actual physical test methods used to generate the data and, if necessary, the consumer testing undertaken to document product usage. In addition, the applicant must provide any information necessary to enable the Administrator to establish enforceable conditions for granting the exemption including the VOC content for the innovative product and test methods for determining the VOC content.

(iv) Within 30 days of receipt of the exemption application the Administrator shall determine whether an application is complete.

(v) Within 90 days after an application has been deemed complete, the Administrator shall determine whether, under what conditions, and to what extent, an exemption from the requirements of paragraphs (b)(3)(i) and (b)(3)(ii) of this section will be permitted. The applicant and the Administrator may mutually agree to a longer time period for reaching a decision, and additional supporting documentation may be submitted by the applicant before a decision has been reached. The Administrator shall notify the applicant of the decision in writing and specify such terms and conditions that are necessary to insure that emissions from the product will meet the emissions reductions specified in paragraph (b)(5)(i) of this section, and that such emissions reductions can be enforced.

(vi) In granting an exemption for a product the Administrator shall establish conditions that are enforceable. These conditions shall include the VOC content of the innovative product, dispensing rates, application rates and any other parameters determined by the Administrator to be necessary. The Administrator shall also specify the test methods for determining conformance to the conditions established. The test methods shall include criteria for reproducibility, accuracy, and sampling and laboratory procedures.

(vii) For any product for which an exemption has been granted pursuant to this section, the manufacturer shall notify the Administrator in writing within 30 days of any change in the product formulation or recommended product usage directions, and shall also notify the Administrator within 30 days if the manufacturer learns of any information which would alter the emissions estimates submitted to the Administrator in support of the exemption application.

(viii) If VOC standards are lowered for a product category through any subsequent rulemaking, all innovative product exemptions granted for products in the product category, except as provided in this paragraph, shall have no force and effect as of the effective date of the modified VOC standard. This paragraph shall not apply to those innovative products which have VOC emissions less than the appropriate lowered VOC standard and for which a written notification of the product's emissions status versus the lowered VOC standard has been submitted to and approved by the Administrator at least 60 days before the effective date of such standard.

(ix) If the Administrator believes that a consumer product for which an exemption has been granted no longer meets the criteria for an innovative product specified in paragraph (b)(5)(i) of this section, the Administrator may modify or revoke the exemption as necessary to assure that the product will meet these criteria.

(6) *Administrative Requirements.* No later than three months after the effective date of this section, each manufacturer of an antiperspirant or deodorant subject to this article shall clearly display on each container of antiperspirant or deodorant, the date on which the product was manufactured, or a code indicating such date. If a manufacturer uses a code indicating the date of manufacture, an explanation of the code must be filed with the Administrator in advance of the code's use by the manufacturer.

(7) *Test Methods.*

(i) Testing to determine the volatile organic compound content of an antiperspirant or deodorant, or to determine compliance with the requirements of this article, shall be performed using one or more of the following methods which are incorporated by reference herein:

(A) Method 24–24A, 40 CFR part 60, appendix A;

(B) Method 18, 40 CFR part 60, appendix A;

(C) Method 1400, NIOSH Manual of Analytical Methods, Volume 1, February 1984; or

(D) Environmental Protection Agency Method 8240 "GC/MS Method for Volatile Organics," September 1986.

(E) Alternative methods which are shown to accurately determine the concentration of VOCs in a subject product or its emissions may be used upon written approval by the Administrator.

(ii) Testing to determine compliance with the requirements of this article may also be demonstrated through calculation of the volatile organic compound content from records of the amounts of constituents used to make the product. Compliance determination based on these records may not be used unless the manufacturer of a consumer product keeps accurate records for each day of production of the amount and chemical composition of the individual product constituents. These records must be kept for at least five years. In the event of a conflict between EPA and a manufacturer over the results of compliance testing, EPA's results shall be used as the determinant result.

§ 52.2958 Aerosol coating products.

(a) *Applicability.* The provisions of paragraphs (a) through (f) of this section shall apply to any person who sells, supplies, offers for sale, applies, or manufactures aerosol coating products for use in the state of California.

(b) *Definitions.* For the purposes of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Adhesive means a product used to bond one surface to another.

Aerosol coating product means a pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized

equipment for ground traffic/marking applications.

Anti-static spray means a product used to prevent or inhibit the accumulation of static electricity.

Art fixative or sealant means a clear coating, including art varnish, workable art fixative, and ceramic coating, which is designed and labeled exclusively for application to paintings, pencil, chalk, or pastel drawings, ceramic art pieces, or other closely related art uses, in order to provide a final protective coating or to fix preliminary stages of artwork while providing a workable surface for subsequent revisions.

ASTM means the American Society for Testing and Materials.

Auto body primer means a heavily pigmented automotive primer or primer surfacer coating labeled exclusively as such and applied directly to an uncoated vehicle body substrate or on top of a precoat for the purposes of corrosion resistance and building a repair area to a condition in which, after drying, it can be sanded to a smooth surface.

Automotive bumper and trim products means products, including adhesion promoters and chip sealants, formulated and labeled exclusively as such which are used to repair and refinish automotive bumpers and plastic trim parts.

Automotive underbody coating means a flexible coating which contains asphalt or rubber and is labeled exclusively for use on the underbody of motor vehicles to resist rust, abrasion and vibration, and to deaden sound.

Aviation or marine zinc primer means a zinc chromate or zinc oxide coating labeled exclusively as such and formulated to meet federal specification TT–P–1757.

Aviation propeller coating means a coating formulated and labeled exclusively as such which provides abrasion resistance and corrosion protection for aircraft propellers.

Belt dressing means a product applied on auto fan belts, water pump belting, power transmission belting, and industrial and farm machinery belting to prevent slipping, and to extend belt life.

Clear coating means a coating which is colorless, containing binders but no pigment, except flatting agents, and which is formulated to form a transparent or translucent solid film.

Coating solids means the nonvolatile portion of an aerosol coating product, consisting of the film forming ingredients, including pigments and resins.

Commercial use means the use of aerosol coating products in the production of goods, or the providing of services for profit, including touch-up and repair.

Corrosion resistant brass, bronze, or copper coating means a clear coating formulated and labeled exclusively as such to prevent tarnish and corrosion of uncoated brass, bronze, or copper metal surfaces.

Distributor means any person to whom an aerosol coating product is sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers, and consumers are not distributors.

Dye means a product containing no resins which is used to color a surface or object without building a film.

Electrical coating means a coating labeled exclusively as such, which is used exclusively to coat electrical components such as wire windings on electric motors to provide insulation and protection from corrosion.

Enamel means a coating which cures by chemical cross-linking of its base resin. Enamels can be readily distinguished from lacquers because enamels are not resoluble in their original solvent.

Exact match finish, automotive means a topcoat which meets all of the following criteria: the product is designed and labeled exclusively to exactly match the color of an original, factory-applied automotive coating during the touch-up of automobile finishes; the product is labeled with the manufacturer's name for which they were formulated; and the product is labeled with either the original equipment manufacturer's (O.E.M.) color code number; the color name; or other designation identifying the specific O.E.M. color to the purchaser.

Exact match finish, engine paint means a coating which meets all of the following criteria: the product is designed and labeled exclusively to exactly match the color of an original, factory-applied engine paint; the product is labeled with the manufacturer's name for which they were formulated; and the product is labeled with either the original equipment manufacturer's (O.E.M.) color code number, the color name, or other designation identifying the specific O.E.M. color to the purchaser.

Exact match finish, industrial means a coating which meets all of the following criteria: the product is designed and labeled exclusively to exactly match the color of an original, factory-applied industrial coating during the touch-up of manufactured products; the product is labeled with the manufacturer's name for which they were formulated; and the product is labeled with either the original equipment manufacturer's (O.E.M.) color code number; the color name; or other designation identifying the specific O.E.M. color to the purchaser.

Executive officer means the Executive Officer of the Air Resources Board, or his or her delegate.

Exempt compounds means any of the following compounds: methane; chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); dichlorotrifluoroethane (HCFC-123); tetrafluoroethane (HFC-134a); dichlorofluoroethane (HCFC-141b); chlorodifluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); methylene chloride; 1,1,1-trichloroethane (methyl chloroform); trichlorotrifluoroethane (CFC-113); dichlorodifluoromethane (CFC-12); trichlorofluoromethane (CFC-11); dichlorotetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); or perfluorocarbon compounds which fall into these classes: Cyclic, branched, or linear, completely fluorinated alkanes; Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; or Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Flat paint products means a coating which, when fully dry, registers gloss less than or equal to 15 on an 85 gloss meter, or less than or equal to 5 on a 60 gloss meter, or which is labeled as a flat coating.

Flatting agent means a compound added to a coating to reduce the gloss of the coating without adding color to the coating.

Floral spray means a coating labeled exclusively as such, which is sprayed on fresh flowers for the purposes of coloring, preserving or protecting their appearance.

Fluorescent coating means a coating labeled as such which converts absorbed incident light energy into emitted light of a different hue.

Glass coating means a coating labeled exclusively as such, which is applied to glass to tint or darken the color of the glass while retaining transparency.

Ground traffic/marking coating means a coating labeled exclusively as such, which is formulated for and applied to dirt, gravel, grass, concrete, asphalt, warehouse floors, or parking lots. Such coatings must be in a container equipped with a valve and sprayhead designed to direct the spray toward the

surface when the can is held in an inverted vertical position.

High temperature coating means a coating labeled exclusively as such, which is formulated for and applied to substrates which will, in normal use, be subjected to temperatures in excess of 400 °F.

Hobby/model/craft coating means a coating which is designed and labeled exclusively for hobby applications and is sold in aerosol containers of 6 ounces or less.

Ink means a fluid or viscous substance used in the printing industry to produce letters, symbols or illustrations, but not to coat an entire surface.

Lacquer means a thermoplastic film-forming material dissolved in organic solvent, which dries primarily by solvent evaporation, and hence is resoluble in its original solvent.

Layout fluid (or toolmaker's ink) means a coating labeled exclusively as such, which is sprayed on metal, glass or plastic, to provide a glare-free surface on which to scribe designs, patterns or engineering guide lines prior to shaping the piece.

Lubricant means a substance such as oil, petroleum distillates, grease, graphite, silicone, lithium, etc. that is used to reduce friction, heat, or wear when applied between surfaces.

Manufacturer means any person who imports, manufactures, assembles, produces, packages, repackages, or relabels a consumer product.

Marine spar varnish means a coating labeled exclusively as such which provides a protective sealant for marine wood products.

Maskant means a coating applied directly to a component to protect surface areas when chemical milling, anodizing, aging, bonding, plating etching, or performing other chemical operations on the surface of the component.

Metallic coating means a topcoat which contains at least 1 percent elemental metallic pigment and is labeled as "metallic".

Mold release means a coating applied to molds to prevent products from sticking to the surfaces of the mold.

Multi-component kits means aerosol spray paint systems which require the application of more than one component (e.g. foundation coat and top coat), where both components are sold together in one package.

Non-flat paint product means a coating which, when fully dry, registers a gloss greater than 15 on an 85 gloss meter or greater then five on a 60 gloss meter.

Percent VOC by weight means the ratio of the weight of VOC to the total weight of the product contents expressed as follows: Percent VOC By Weight=$(W_{voc}/W_{total})\times100$, where: for products not containing water and exempt compounds, W_{voc}=the weight of VOC; for products containing water or exempt compounds W_{voc}=the weight of VOC, less water and exempt compounds as defined in paragraph (b) of this section; and W_{total}=the total weight of the product contents.

Photograph coating means a coating formulated and labeled exclusively as such, applied to finished photographs to allow corrective retouching, protection of the image, changes in gloss level, or to cover fingerprints.

Pleasure craft means privately owned vessels used for noncommercial purposes.

Pleasure craft finish primer/surfacer/undercoat means any coating labeled exclusively as such which is formulated to be applied prior to the application of a pleasure craft topcoat for the purpose of corrosion resistance, adhesion of the topcoat and which promotes a uniform surface by filling in surface imperfections.

Pleasure craft topcoat means any coating labeled exclusively as such which is formulated to be applied to a pleasure craft as a final coat above the waterline and below the waterline when stored out of water.

Primer means a coating formulated and labeled as such to be applied to a surface to provide a bond between that surface and subsequent coats.

Propellant means a liquefied or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.

Retailer means any person who sells, supplies, or offers aerosol coating products for sale directly to consumers.

Rust converter means a product designed and labeled exclusively to convert rust to an inert material and which contains a minimum acid content of 0.5 percent by weight, a maximum resin content of 0.5 percent by weight, and contains no pigments.

Shellac sealer means a clear or pigmented coating formulated solely with the resinous secretion of the lac beetle (Laccifer lacca), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.

Slip-resistant coating means a coating labeled exclusively as such which is formulated with synthetic grit, and used as a safety coating.

Spatter coating/multicolor coating means a coating labeled exclusively as such wherein spots, globules, or spatters of contrasting colors appear on or within the surface of a contrasting or similar background.

Stain means a coating which is formulated to change the color of a surface but not conceal the surface.

Vinyl/fabric/polycarbonate coating means a coating labeled exclusively as such, which is used to coat vinyl, fabric, or polycarbonate substrates.

Volatile organic compound (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions other than those defined as exempt compounds. These exempt compounds have been determined to have negligible photochemical reactivity. For purposes of determining compliance with emission limits, VOC will be measured by test methods given in this section. Where such a method also measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with an emission standard. However, the U.S. EPA may require such owner or operator, as a precondition to excluding these compounds for purposes of determining compliance, to provide monitoring methods and monitoring results demonstrating, to the satisfaction of the U.S. EPA, the amount of negligibly reactive compounds in the source's emissions.

Webbing/veiling coating means a coating labeled exclusively as such, which is formulated to give a stranded to spider webbed appearance when applied.

Weld-through primer means a coating formulated and labeled exclusively as such which provides a bridging or conducting effect to provide corrosion protection following welding.

Wood stain means a coating which is formulated to change the color of a wood surface but not conceal the surface.

Wood touch-up/repair/restoration means a coating formulated and labeled exclusively as such which provides an exact color or sheen match on finished wood products.

(c) *Standards.*

(1) Except as provided in paragraphs (d) and (g) of this section, no person shall sell, supply, offer for sale, apply, or manufacture for sale in California, any aerosol coating product which, at the time of sale, use, or manufacture,

contains volatile organic compounds in excess of the limits specified in the following Table of Standards after the specified effective dates.

TABLE OF STANDARDS

Percent Volatile Organic Compounds by Weight

Aerosol coating category	01/01/96	12/31/99
General Coatings:		
Clear Coating	67	40
Flat Paint Products	60	30
Fluorescent Coatings	75	45
Metallic Coatings	80	50
Non-Flat Paint Products	65	30
Primer	60	30
Speciality Coatings:		
Art Fixative or Sealant	95	70
Auto Body Primer	80	50
Automotive Bumper and Trim Products	95	75
Aviation Propeller Coating	84	75
Aviation/Marine Zinc Primer	80	70
Corrosion Resistant Brass, Bronze, or Copper Coatings	92	70
Pleasure Craft Topcoat	80	55
Exact Match Finish:		
Engine enamel	80	60
Automotive	88	60
Industrial	88	60
Floral Spray	95	85
Glass Coating	95	80
Ground Traffic Marking Coating	66	40
High Temperature Coating	80	55
Hobby/Model/Craft Coating:		
Enamel	80	70
Lacquer	88	70
Clear or Metallic	95	75
Marine Spar Varnish	92	70
Photograph Coating	95	70
Pleasure Craft Finish Primer Surfacer or Undercoater	75	55
Shellac Sealer:		
Clear	88	70
Pigmented	75	60
Slip-Resistant Coating	85	70
Spatter Coating	80	60
Vinyl/Fabric/Polycarbonate	95	70
Webbing/Veil Coating	95	70
Weld-Through Primer	75	60
Wood Stain	95	75
Wood Touch-Up, Repair or Restoration	95	95

(2) Notwithstanding the provisions of paragraph (c)(1) of this section, an aerosol coating product manufactured prior to each of the effective dates specified for that product in the Table of Standards may be sold, supplied, offered for sale, or applied for up to eighteen months after each of the specified effective dates. Paragraph (c)(2) of this section does not apply to any product which:

(i) Is subject to the provisions of Bay Area Air Quality Management District Rule 8–49 and is sold, supplied, offered for sale, or applied within the Bay Area Air Quality Management District; or

(ii) Does not display on the product container or package the date on which the product was manufactured, or a code indicating such date.

(3) After [Insert date of publication of the final rule], for any aerosol coating product for which standards are specified under paragraph (c)(1) of this section, no person shall sell, supply, offer for sale, apply, or manufacture for sale in California any aerosol coating product which contains methylene chloride, perchloroethylene, or an ozone depleting substance identified by EPA.[30] The requirements of this paragraph shall not apply to any existing product formulation that complies with the Table of Standards which was sold, supplied, or offered for sale in California prior to January 1, 1993, or any product formulation that was sold, supplied, or offered for sale in California prior to January 1, 1993, that is reformulated to meet the Table of Standards, as long as the content of methylene chloride, perchloroethylene, or ozone depleting substances as identified in this paragraph in the reformulated product does not increase.

(4) The requirements of paragraph (c)(3) of this section shall not apply to any aerosol coating product containing methylene chloride, perchloroethylene, or an ozone depleting substance as identified in paragraph (c)(3) of this section that are present as impurities in a combined amount equal to or less than 0.01% by weight of the product.

(5) No person shall sell, supply, offer for sale, apply, or manufacture for sale in California:

(i) Any multi-component kit as defined in paragraph (b) of this section, unless the total VOC emitted from the use of that multi-component kit does not exceed the VOC which would be allowed from a single-component product in the same product category listed in the Table of Standards; or

(ii) Any aerosol coating product assembled by adding bulk paint to aerosol containers of propellant and solvent, unless such products comply with the standards specified in paragraph (c)(1) of this section.

(6) Any manufacturer of an aerosol coating product subject to this article shall submit the following information by March 31, 1998 to EPA:

(i) The information required under paragraphs (e)(3)(ii) (A) through (G) and (e)(c)(3) of this section for the 1997 calendar year;

(ii) The information required under paragraphs (e)(3)(ii) (A) through (D), (e)(3)(ii) (F) and (G), and (e)(3)(iii) of this section for the products marketed after January 1, 1998; and

(iii) A written report describing the research and development efforts undertaken to achieve the December 31, 1999 VOC limits.

(d) *Exemptions.*

(1) This article shall not apply to aerosol lubricants, mold releases, automotive underbody coating, electrical coatings, cleaners, belt dressings, anti-static sprays, layout fluids and removers, adhesives, maskants, rust converters, dyes or inks.

(2) This article shall not apply to any aerosol coating product manufactured in California for shipment and use outside of California.

(3) The provisions of this article shall not apply to a manufacturer or distributor who sells, supplies, or offers for sale in California an aerosol coating product that does not comply with the VOC standards specified in paragraph (c)(1) of this section, as long as the manufacturer or distributor can demonstrate both that the aerosol coating product is intended for shipment and use outside of California, and that the manufacturer or distributor has taken reasonable prudent precautions to assure that the aerosol coating product is not distributed to California. This paragraph (3) does not apply to aerosol coating products that are sold, supplied, or offered for sale by any person to retail outlets in California.

(4) The requirement in paragraph (c)(1) of this section prohibiting the application of aerosol coating products containing volatile organic compounds in excess of the limits specified in the Table of Standards shall not apply to any noncommercial application of aerosol coating products purchased prior to June 30, 1996.

(e) *Administrative requirements.*

(1) *Most restrictive limit.* If anywhere on the container of any aerosol coating product listed in the Table of Standards, or on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the product may be used as, or is suitable for use as a product for which a lower VOC standard is specified, then the

[30] See 40 CFR part 81, subpart A, appendixes A and B.

lowest applicable VOC standard shall apply. However, notwithstanding the provisions of this paragraph, if an aerosol coating product is subject to both a general coating limit and a specialty coating limit, as listed in paragraph (c)(1) of this section, and the product meets all the criteria of the applicable specialty coating category as specified in paragraph (b) of this section, then the specialty coating limit shall take precedence over the general coating limit.

(2) *Labeling Requirements.* Each manufacturer of an aerosol coating product subject to paragraph (c)(1) of this section shall clearly display the following information on each product manufactured 90 days or more after the effective date of this article:

(i) The maximum VOC content of the product as specified in paragraph (c)(1) of this section, expressed as a percentage by weight;

(ii) The aerosol coating category as defined in paragraph (b) of this section, or an abbreviation of the coating category; and

(iii) The day, month, and year on which the product was manufactured, or a code indicating such date. If a manufacturer uses a code indicating the date of manufacture or an abbreviation of the coating category as defined in paragraph (b)(1) of this section, on any aerosol coating product subject to paragraph (c)(1) of this section, an explanation of the code or abbreviation must be filed with USEPA prior to the use of the code or abbreviation. The VOC content displayed may be calculated using product formulation data, or may be determined using the test method specified in paragraph (f) of this section. For cases where a new product subject to paragraph (c)(1) of this section is sold, supplied, or offered for sale more than 90 days after the effective date of this article, the labeling requirements specified in paragraph (e)(2) of this section shall immediately apply.

(3) *Reporting Requirements.*

(i) Any manufacturer of an aerosol coating product subject to this section which is sold, supplied, or offered for sale in California must supply the USEPA with the following information within 90 days: the company name, mail address, contact person, and the telephone number of the contact person. The manufacturer must also notify the USEPA within 90 days of any change in the information supplied to the USEPA pursuant to this paragraph.

(ii) Upon 90 days written notice, each manufacturer subject to this section shall submit to the USEPA a written report with all or part of the following information for each product they manufacture under their name or another company's name:

(A) The brand name of the product;

(B) Upon request, a copy of the product label;

(C) The owner of the trademark or brand names;

(D) The product category as defined in paragraph (b) of this section;

(E) The annual California sales in pounds per year and the method used to calculate California annual sales;

(F) The percent by weight VOC, water, solids, propellant, and any compounds exempt from the definition of VOC as specified in paragraph (b) of this section;

(G) An identification of each product brand name as a "household" or "industrial" product; and

(H) Any other information necessary to determine the emissions from aerosol coating products.

(iii) The information requested in paragraph (e)(3)(ii) of this section may be supplied as an average for a group of aerosol coating products within the same coating category when either of the following conditions are met:

(A) The products do not vary in VOC content by more than two percent (by weight), and the coatings are based on the same resin type; or

(B) The products are color variations of the same product (even if the coatings vary by more than 2 percent in VOC content).

(f) *Test Methods.*

(1) The VOC content of aerosol coating products subject to the provisions of this section shall be determined by the procedures set forth in ASTM D 5200–92, Standard Test Method for Determination of Weight Percent Volatile Content of Solvent-Borne Paints in Aerosol Cans, May 15, 1992, and, for water-containing aerosol coating products, by ASTM D 5325–92, Standard Test Method for Determination of Weight Percent Volatile Content of Water-Borne Aerosol Paints, November 15, 1992.

(2) Compounds exempt from the definition of VOC shall be analyzed according to the test methods listed below:

(i) The content of dichloromethane (methylene chloride) and 1,1,1-trichloroethane shall be determined by ASTM D 4457–85.

(ii) The following classes of compounds will be analyzed as exempt compounds only if manufacturers specify which individual compounds are used in the product formulations and identify the test methods, which, prior to such analysis, have been approved by the USEPA, and can be used to quantify the amounts of each exempt compound: cyclic, branched, or linear completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(3) The metal content of metallic aerosol coating products shall be determined by South Coast Air Quality Management District Test Method 311 (SCAQMD Laboratory Methods of Analysis for Enforcement Samples manual), June 1, 1991.

(4) Specular gloss of flat and nonflat coatings shall be determined by ASTM Method D 523–89, March 31, 1989.

§ 52.2959 Architectural coatings.

(a) *Applicability.* This section applies to any person who supplies, sells, offers for sale, applies, solicits the application of, or manufactures for use any architectural coating used in California.

(b) *Definitions.* For the purposes of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Antenna coatings are coatings applied to equipment and associated structural appurtenances which are used to receive or transmit electromagnetic signals.

Anti-fouling coatings are coatings registered with USEPA, Office of Pesticide Programs and which are applied to the underwater portion of a structure to prevent or reduce the attachment of biological organisms.

Appurtenances are accessories to an architectural structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, (heating and air conditioning) equipment, other mechanical equipment, large fixed stationary tools and concrete forms.

Architectural coatings are any coatings applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs.

Below-ground wood preservatives are coatings formulated to protect below-ground wood from decay or insect attack and registered with USEPA, Office of Pesticide Programs.

Bituminous coatings materials are black or brownish coating materials, soluble in carbon disulfide, consisting mainly of hydrocarbons and which are obtained from natural deposits, or as residues from the distillation of crude petroleum oils, or of low grades of coal.

Bond breakers are coatings applied between layers of concrete to prevent the freshly poured top layer of concrete from bonding to the substrate over which it is poured.

Clear wood finishes are clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.

Colorants are solutions of dyes or suspensions of pigments.

Concrete-curing compounds are coatings applied to freshly poured concrete to retard the evaporation of water.

Dry-fog coatings are coatings which are formulated only for spray application so that when sprayed, overspray droplets dry before falling on floors and other surfaces.

Fire retardant coatings are coatings which have a flame spread index of less than 25 when tested in accordance with ASTM Designation E–84–87, "Standard Test Method for Surface Burning Characteristics of Building Material," after application to Douglas fir according to the manufacturer's recommendations.

Flat coatings are coatings which register gloss less than 15 on an 85° meter or less than five on a 60° meter, or which is labeled as a flat coating.

Form-release compounds are coatings applied to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.

Grams of VOC per liter of coating, less water and less exempt compounds is the weight of VOC per combined volume of VOC and coating solids and can be calculated by the following equation:

$$\text{Grams VOC per 1 coating less water} \wedge \text{exempt compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Grams of VOC per Liter of Coating Less Water and Less Exempt

Where: W_s=weight of volatile compounds in grams

W_w=weight of water in grams

W_{es}=weight of exempt compounds in grams

V_m=volume of material in liters

V_w=volume of water in liters

V_{es}=volume of exempt compounds in liters

Graphic arts coatings (Sign Paints) are coatings formulated for and hand-applied by artists using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals, including lettering enamels, poster colors, copy blockers, and bulletin enamels.

High-temperature industrial maintenance coatings are industrial maintenance coatings formulated for and applied to substrates exposed continuously or intermittently to temperatures above 400 degrees Fahrenheit.

Impact immersion coatings are an industrial maintenance, vinyl chloride based multicoat system formulated and recommended for application to submerged surfaces of locks, dams and other steel structures subjected to frequent severe abrasion.

Industrial maintenance anti-graffiti coatings are two-component clear industrial maintenance coatings formulated for and applied to exterior walls and murals to resist repeated scrubbing and exposure to harsh solvents.

Industrial maintenance coatings are high performance coatings formulated for and applied to substrates in industrial, commercial, or institutional situations that are exposed to one or more of the following extreme environmental conditions:

(1) immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;

(2) acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, chemical mixtures, or solutions;

(3) repeated exposure to temperatures in excess of 250 degrees Fahrenheit;

(4) repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial solvents, cleaners, or scouring agents; or

(5) exterior exposure of metal structures. Industrial maintenance coatings are not for residential use or for use in areas of industrial, commercial, or institutional facilities such as office space and meeting rooms.

Lacquers are clear wood finishes, including clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by evaporation without chemical reaction.

Low-solids stain means a wood stain containing 1 pound or less of solids per gallon of material.

Magnesite cement coatings are coatings formulated for and applied to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

Mastic coatings are coatings formulated to cover holes and minor cracks and to conceal surface irregularities, and applied in a thickness of at least 10 mils (dry, single coat).

Metallic pigmented coatings are coatings containing at least 0.4 pound of elemental metallic pigment per gallon (50 grams/liter of coating as applied) or non-bituminous coatings which are formulated with metalic pigment.

Multi-colored coatings are coatings which exhibit more than one color when applied and which are packaged in a single container and applied in a single coat.

Non-flat coatings are coatings which register gloss of 15 or greater on an 85° meter or five or greater on a 60° meter, and which are identified on the label as a gloss, semigloss, or eggshell enamel coating.

Non-flat high gloss coatings are coatings which register gloss of 70 or greater on a 60° meter, and which are identified on the label as a high gloss enamel coating.

NOS means not otherwise specified.

Nuclear power plant coatings are industrial maintenance coatings formulated and certified by the US Department of Energy for application to Level 1 containment structures at nuclear power facilities.

Opaque stains are all stains that are not classified as semitransparent stains.

Opaque wood preservatives are all wood preservatives not classified as clear or semitransparent wood preservatives or as below-ground wood preservatives.

Pre-treatment wash primers are coatings which contain a minimum of ½ percent acid by weight, applied directly to bare metal surfaces to provide necessary surface etching.

Primers are coatings applied to a surface to provide a firm bond between the substrate and subsequent coats.

Residential use is use in areas where people reside or lodge including, but not limited to single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.

Roof coatings are coatings formulated for application to exterior roofs and for the primary purpose of preventing penetration of the substrate by water, or reflecting heat and reflecting ultraviolet

radiation. Metallic pigmented roof coatings which qualify as metallic pigmented coatings shall not be considered to be in this category, but shall be considered to be in the metallic pigmented coatings category.

Sanding sealers are clear wood coatings formulated for and applied to bare wood for sanding and to seal the wood for subsequent application of varnish. To be considered a sanding sealer a coating must be clearly labelled as such.

Sealers are coatings applied to substrates to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.

Semitransparent stains are coatings which are formulated to change the color of a surface but not conceal the surface.

Semitransparent wood preservative are wood preservative stains formulated to protect exposed wood from decay or insect attack by the addition of a wood preservative registered with the USEPA, Office of Pesticide Programs, and which change the color of a surface but do not conceal the surface, including clear wood preservatives.

Shellacs are clear or pigmented coatings formulated solely with the resinous secretions of the lac beetle (laccifer lacca), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.

Solicit is to require for use or to specify, by written or oral contract.

Solventborne means a coating that contains only organic solvents. If water is present, the coating must contain less than or equal to five percent water by weight in its volatile fraction.

Specialty primers, sealers, and undercoaters means primers, sealers, and undercoaters used only to perform one of the following functions: repair fire, smoke or water damage; neutralize odor; block strains; block efflorescence; condition chalky surfaces; or coat accoustical materials without affecting their accoustical abilities.

Swimming pool coatings are coatings specifically formulated to coat the interior of swimming pools and to resist swimming pool chemicals.

Swimming pool repair coatings are chlorinated rubber based coatings used for the repair and maintenance of swimming pools over existing chlorinated rubber based coatings.

Tint base is an architectural coating to which colorants are added.

Traffic coatings are coatings formulated for and applied to public streets, highways, and other surfaces including, but not limited to curbs, berms, driveways, and parking lots.

Undercoaters are coatings formulated and applied to substrates to provide a smooth surface for subsequent coats.

Varnishes are clear wood finishes formulated with various resins to dry by chemical reaction on exposure to air.

Waterborne coating means a coating that contains more than five percent water by weight in its volatile fraction.

Waterproofing sealers are colorless coatings which are formulated for the sole purpose of preventing penetration of porous substrates by water and which do not alter surface appearance or texture.

(c) *Requirements.*

(1) Except as provided in paragraphs (c)(2), (c)(3), (c)(4) and (c)(5) of this section, no person shall manufacture, supply, sell, offer for sale, blend, repackage, apply, or solicit the application for use within California any architectural coating which contains more than 250 grams of volatile organic compounds per liter of coating (excluding water and exempt solvents, and any colorant added to tint bases).

(2) Except as provided in paragraphs (c)(3), (c)(4) and (c)(5) of this section, no person shall manufacture, supply, sell, offer for sale, blend, repackage, apply, or solicit the application for use within California any architectural coating listed in the Table of Standards which contains volatile organic compounds (less water and exempt solvents, and excluding any colorant added to tint bases) in excess of the corresponding limit and date specified in the table.

VOC LIMIT TABLE OF STANDARDS

[Grams of VOC Per Liter less Water And Exempt Compounds]

Coating category	Effective date January 1		
	1996	2000	2003
Bond Breakers	350		
Clear Wood Finishes:			
Varnish	350	.....	250
Sanding Sealers	350		
Lacquer Sanding Sealers	500	350	
Lacquer	650	350	
Concrete-Curing	350	250	
Dry-Fog Coatings	400	.....	250
Fire Retardant Coatings:			
Clear	350		
Pigmented	350		
Flats	250	150	50
Form Release Compounds	250		
Graphic Arts Coatings	500	425	

VOC LIMIT TABLE OF STANDARDS—Continued

[Grams of VOC Per Liter less Water And Exempt Compounds]

Coating category	Effective date January 1		
	1996	2000	2003
Industrial Maintenance Coatings:			
NOS	340	.....	275
Anti-Graffiti	340	275	
High Temperature	550	420	
Nuclear Power Plant	380	340	
Impact Immersion	420	340	
Antenna	420	340	
Anti-fouling	400	340	
Magnesite Cement	600	500	
Mastic Coatings	300		
Metallic Pigmented	500	450	340
Multi-Color Coatings	420		
Non-Flats NOS	250	.....	150
Non-Flats-High Gloss	250		
Pretreat Wash Primers	780	420	
Primers, Sealers, and Undercoaters	350	.....	150
Specialty Primers, Sealers, and Undercoaters	350		
Roof Coatings	250		
Traffic Paints	150	125	50
Shellac:			
Clear	650	600	
Pigmented	550	500	
Stains and Wood Preservatives:			
Semi-Transparent	350		
Opaque	250	200	150
Clear	350		
Below-Ground Wood	350		
Low-solids	120		
Swimming Pool Coatings	340		
Swimming Pool Repair and Maintenance Coatings	650	340	
Waterproof Sealers	400		

(3) If anywhere on the container of any coating listed in the Table of Standards, on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the coating may be used as, or is suitable for use as a coating for which a lower VOC standard is specified in the Table of Standards or in paragraph (c)(1) of this section, then the lowest VOC standard shall apply. This requirement does not apply to the representation of the following coatings in the manner specified:

(i) High-temperature industrial maintenance coatings, which may be represented as metallic pigmented

coatings for use consistent with the definition of high temperature industrial maintenance coatings;

(ii) Metallic pigmented coatings, which may be recommended for use as primers, sealers, undercoaters, roof coatings, or industrial maintenance coatings; and

(iii) Shellacs.

(4) Sale or application of a coating manufactured prior to the effective date of the corresponding standard in the Table of Standards, and not complying with that standard, shall not constitute a violation of paragraph (c)(2) of this section until eighteen months after the effective date of the standard.

(5) Sale or application of a coating in a container of one quart capacity or less shall not constitute a violation of paragraph (c)(1) or (c)(2) of this section until January 1, 2003.

(6) All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, or repaired.

(d) *Administrative Requirements.*

(1) Containers for all coatings subject to this section shall display the date of manufacture of the contents or a code indicating the date of manufacture. The manufacturers of such coatings shall file with the EPA an explanation of each code.

(2) Containers for all coatings subject to the requirements of this section shall carry a statement of the manufacturer's recommendation regarding thinning of the coating. This recommendation shall not apply to the thinning of architectural coatings with water. The recommendation shall specify that the coating, is to be employed without thinning or diluting under normal environmental and application conditions, unless any thinning recommended on the label for normal environmental and application conditions does not cause a coating to exceed its applicable standard.

(3) Each container of any coating subject to this section shall display the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall also be displayed as grams of VOC per liter of coating (less water and exempt solvent, and excluding any colorant added to tint bases). VOC content displayed may be calculated using product formulation data, or may be determined using the test method in paragraph (e) of this section.

(4) The labels of all industrial maintenance coatings shall include the statement "Not for Residential Use," or "Not for Residential Use in California," prominently displayed.

(e) *Test Method.* The VOC content of a coating subject to the provisions of this section shall be determined using the following procedures:

(1) Method 24 of 40 CFR part 60, appendix A, shall be used in the determination of volatile matter content, water content, and density, volume solids, and weight solids of paint, varnish, lacquer or related surface coatings.

(2) To determine the volatile matter content, water content, and density, volume solids, and weight solids of paint, varnish, lacquer or related surface coatings which are multi-component coatings, the following procedures shall be used in addition to Method 24 of 40 CFR part 60, appendix A:

(i) The components shall be mixed in a storage container in proportions the same as those in the coating, as applied. The mixing shall be accomplished by weighing the components in the proper proportion into a container which is closed between additions and during mixing. About 100 ml of coating shall be prepared in a container just large enough to hold the mixture prior to withdrawing a sample.

(ii) A sample shall be withdrawn from the mixed coating, and then transferred to a dish where the sample shall stand for at least 1 hour, but no more than 24 hours prior to being oven dried at 100° C for 1 hour.

(3) The measurement of exempt solvents shall be determined using ASTM Test Method 4457–85 (re-approved 1992).

(4) Calculation of volatile organic compound content of coatings less water and exempt solvents shall be performed in accordance with ASTM Test Method D 3960–92.

(f) *Exemptions.*

(1) The provisions of this section shall not apply to:

(i) Until January 1, 2003, architectural coatings in containers having capacities of one quart; or

(ii) Architectural coatings sold in California for shipment outside of the state or for shipment to other manufacturers for repackaging; or

(iii) Emulsion type bituminous pavement sealers.

(2) Coatings subject to the requirements of the Federal Insecticide, Fungicide, and Rodenticide Act are exempt from the labeling requirements listed under paragraph (d) of this section.

§ 52.2960 Pesticides.

(a) *Applicability.*

(1) The requirements of this section shall apply to all persons located inside or outside of the affected area who produce agricultural and/or structural pesticides that are registered in the State of California.

(2) The requirements of this section shall apply to all persons who distribute and/or store agricultural and/or structural pesticides within the affected area, unless such person can demonstrate both that the pesticide is intended only for shipment and use outside of the affected area, and that the person has taken reasonable prudent precautions to assure that the pesticide is not distributed within the affected area. Activities which shall not qualify as such reasonable prudent precaution include but are not limited to:

(i) Distribution to a retail distributor within the affected area; or

(ii) Failure to clearly identify pesticides as not for sale or use within California.

(3) The requirements of this section shall apply to all persons who apply agricultural and/or structural pesticides within the affected area.

(4) For the purposes of this section, the affected area is the State of California. For the purposes of this section, unless otherwise specified, the effective date is April 1, 1995.

(b) *Definitions.* For the purposes of this section, the following definitions will apply. All terms not defined herein shall have the meaning given them in the Clean Air Act (42 U.S.C. 7401–7671q) or the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. 136 *et seq.*

Agricultural pesticide means a pesticide intended for:

(1) Use in the commercial production, transportation or storage of agricultural commodities, including but not limited to food, feed and fiber crops, farm animals, forest and timber commodities, ornamentals, flowers and turf;

(2) Use in, on or around agricultural premises or buildings, including but not limited to barns, silos, animal enclosures, greenhouses and similar agricultural structures; or

(3) Use on terrestrial, aquatic or forestry sites not directly related to the production of agricultural commodities, including but not limited to rights-of-way, golf courses, parks, mosquito control use, farm ponds, pasture and rangeland. A pesticide is not an agricultural pesticide if it is intended solely for: residential, institutional, industrial or structural pest control; consumer or personal use, including use on pets; non-commercial production of agricultural commodities (e.g., home gardens); or research or experimental pest control.

Applicator means any person who uses or supervises the use of any pesticide.

Distributor means any person who distributes, sells, offers for sale, holds for distribution, holds for sale, holds for shipment, ships, delivers for shipment, releases for shipment, or receives and (having so received) delivers or offers to deliver. The term does not include the holding or application of registered pesticides or use dilutions thereof by any applicator who provides a service of controlling pests without delivering any unapplied pesticide to any person so served. The term "distribute" means to distribute, sell, offer for sale, hold for distribution, hold for sale, hold for shipment, ship, deliver for shipment, release for shipment, or receive and (having so received) deliver or offer to deliver any pesticide. This includes persons who distribute pesticides to applicators or to other dealers or distributors.

EPA means the United States Environmental Protection Agency. Reports submitted to EPA shall be addressed in care of U.S. EPA, Region IX (A–1–1), 75 Hawthorne Street, San Francisco, CA 94105.

Exempt compounds means any of the following compounds: methane; ethane; 1,1,1-trichloroethane (methyl chloroform); trichlorotrifluoroethane (CFC-113); methylene chloride; trichlorofluoromethane (CFC–11); dichlorodifluoromethane (CFC–12); chlorodifluoromethane (HCFC–22); trifluoromethane (HFC–23); dichlorotetrafluoroethane (CFC–114); chloropentafluoroethane (CFC–115); dichlorotrifluoroethane (HCFC–123); tetrafluoroethane (HFC–134a); dichlorofluoroethane (HCFC–141b); chlorodifluoroethane (HCFC–142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC–124); pentafluoroethane (HFC–125); 1,1,2,2-tetrafluoroethane (HFC–134); 1,1,1-trifluoroethane (HFC–143a); 1,1-difluoroethane (HFC–152a); and perfluorocarbon compounds which fall into these classes— cyclic, branched, or linear, completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; or sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Person means any firm, business establishment, association, partnership, corporation or individual, whether acting as principal, agent, employee, or other capacity including any governmental entity or charitable organization.

Pesticide means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest; and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

Producer means the person who manufacturers, prepares, compounds, propagates, or processes any pesticide or active ingredient used in producing a pesticide. The term "produce" means to manufacture, prepare, compound, propagate, or process any pesticide or active ingredient used in producing a pesticide. The dilution by individuals of formulated pesticides for their own use and according to the directions on registered labels shall not itself result in such individuals being included in the definition of "producer" for the purposes of this section.

Registered, with respect to a pesticide product, means that the product has been approved for sale and distribution within the State of California pursuant to the California Food and Agricultural Code (Division 7, Chapter 2, Article 4, § 12811).

Structural pesticide means a pesticide intended for use in the protection of structures, buildings or building materials, including but not limited to fumigants, termiticides, and wood preservatives.

Volatile organic vompound (VOC) means any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions other than those defined as exempt compounds. These exempt compounds have been determined to have negligible photochemical reactivity. For purposes of determining compliance with this section, VOC will be measured by test methods given in this section.

(c) *Specific provisions.*

(1) *Required submission of data.*

(i) By June 1, 1996 or 120 (one hundred and twenty) days after the effective date of this section, whichever is later, all persons who produce agricultural and/or structural pesticides that are registered in California must submit reports in accordance with paragraph (d) of this section that identify the VOC content of each pesticide. The VOC content will be determined according to the methodology provided in paragraph (f) of this section.

(ii) If EPA determines that a report does not affirmatively demonstrate compliance with the methodology in paragraph (f) of this section, EPA may assign the pesticide a VOC content value equal to the highest VOC content reported for any pesticide.

(2) *Establish VOC limit.* Upon compilation of the data received pursuant to paragraph (c)(1) of this section, EPA will determine a pesticide VOC limit based on the following criteria:

(i) EPA will establish a base-year inventory for each registered pesticide. This inventory will be based on the amount of each pesticide used in the affected area. These amounts will be based on data from the 1990 pesticide use report (PUR) and the inerts database, which are both maintained by the California Department of Pesticide Regulation (DPR), unless EPA determines that another year or years of PUR data or other information provides a more appropriate basis for the inventory.

(ii) EPA will rank all registered pesticides according to their VOC content as determined by the data submitted pursuant to paragraph (c)(1) of this section. The pesticide with the largest VOC content will be ranked "1".

(iii) EPA will multiply the VOC contents (as determined by paragraph (c)(1) of this section) by the inventory (as determined in paragraph (c)(2)(i) of this section) to determine "individual base-year VOC emissions" for each individual pesticide.

(iv) EPA will add the individual base-year VOC emissions for all pesticides to determine the "total base-year VOC emissions" from all pesticides combined.

(v) Starting with the pesticide or pesticides ranked "1" according to paragraph (c)(2)(ii) of this section, EPA will add the individual base-year VOC emissions for pesticides ranked 2, 3, 4 * * * etc, until the sum equals forty to seventy percent (40%–70%) [31] of the total base-year VOC emissions. The VOC content of the last pesticide needed to achieve 40%–70% of the total base-year VOC emissions becomes the "VOC limit."

(vi) EPA will promulgate the VOC limit with a summary of the assumptions and results from paragraphs (c)(2) (i) through (v) of this section.

(3) *Restrictions on pesticides.*

[31] As discussed further in the preamble to the proposed regulations, the range of 40% to 70% reflects the target range of 20%–45% reductions in emissions from pesticide application. This range was selected for consistency with the VOC cap rules proposed as 40 CFR 52.2952 through 52.2954. Based on planned modeling and inventory analysis and comments received during the comment period, EPA hopes to select a specific reduction target from within this range for use in the final rule.

(i) On and after 1 (one) year after EPA publishes the VOC limit, all persons are prohibited from distribution within the affected area of pesticides with VOC contents in excess of the VOC limit.

(ii) On and after 2 (two) years after EPA publishes the VOC limit, all persons are prohibited from application and/or storage within the affected area of pesticides with VOC contents in excess of the VOC limit.

(4) *Revisions to the VOC limit.*

(i) EPA may, at any time, require producer(s) to reanalyze their pesticides according to the methodology described in paragraph (f) of this section and to submit the new data according to paragraph (d) of this section.

(ii) EPA may, at any time, revise the VOC limit consistent with the methodology described in paragraph (c)(2) of this section and based on information submitted pursuant to paragraph (c)(4)(i) of this section or elsewhere.

(d) *Reporting.*

(1) *Producers.* Reports submitted pursuant to paragraphs (c)(1)(i) and (c)(4)(i) of this section must include:

(i) Name, address, name of contact person, and telephone number of producer.

(ii) Name and description of pesticide product, including a copy of the pesticide product label.

(iii) Name, address and telephone number of the laboratory performing analysis; name of analyst; and date and time of analysis.

(iv) All raw data collected during analysis performed pursuant to paragraph (f) of this section. If, for example, TGA analysis is performed as described in paragraph (f)(1)(i) of this section, all thermograms produced must be submitted, as well as justification for rejecting any unacceptable thermogram.

(v) Summary and results of analysis performed pursuant to paragraph (f) of this section. If, for example, TGA analysis is performed, the summary of analysis shall include uncorrected weight percent VOC content (i.e., kg VOC per kg pesticide), weight percent water content, weight percent exempt solvents content, and weight percent VOC content corrected for water and exempt solvents, as applied.

(vi) Certification signed and dated by a responsible official of the producer stating the following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(2) *Distributors.* Any person who distributes pesticides within the affected area must report the following information to EPA:

(i) *Distributor notification.* The distributor notification shall include the name, address, and telephone number of the distributor, and the name of a responsible official of the distributor. The report shall be postmarked not later than the date the VOC limit becomes effective (see paragraph (c)(3)(i) of this section) or 30 days after the distributor first begins distribution of pesticides, whichever is later.

(ii) *Annual report.* The annual report shall specify the type and amount of each pesticide sold, shipped, or otherwise distributed in the affected area. The annual report shall be submitted by January 30 of each year for the preceding year's data beginning with the year in which the effective date specified in paragraph (c)(3)(i) of this section occurs.

(3) *Applicators.* All applicators within the affected areas shall submit a copy of all PURs to EPA at the same time the PUR is submitted to DPR once the effective date specified in paragraph (c)(4)(ii) of this section occurs.

(e) *Recordkeeping.* All producers, distributors, and applicators must maintain all information necessary to demonstrate compliance with this section for a period of five (5) years. This information includes, but is not limited to, copies of all reports required in paragraph (d) of this section, and any technical support to those reports. Copies of this information must be provided to EPA upon request.

(f) *Test methods.*

(1) For the purposes of this section, the VOC content in pesticides shall be determined by the methods described in paragraphs (f)(1) (i) or (ii) of this section or by methods as stringent in accuracy, reliability, reproducibility, and frequency and approved by EPA.

(i) Thermogravimetric Analysis (TGA). The "American Standard Test Method (ASTM) for Compositional Analysis by Thermogravimetry" (ASTM E–1131–86) as modified in EPA's alternative control technology document (ACT) for pesticides ("Alternative Control Technology Document; Control of VOC Emissions from the Application of Agricultural Pesticides," EPA–453/R–92–011, March 1993, appendix C); or

(ii) Volatile Organics in Pesticides (VOP). The purge and trap procedure as described in EPA's ACT (EPA–453/R–92–011, appendix C).

(2) The exempt compound content of a pesticide may be determined by the statement of formulation required pursuant to FIFRA (7 U.S.C. 136a(c)(1)(E)).

(3) Pesticides that are diluted with VOC-containing material (e.g., gasoline, xylene, toluene, and other solvents), at any point before application, are to be tested diluted with said material at the average dilution used during application. Pesticides that are diluted with non-VOC-containing materials (e.g., water) are to be tested as sold rather than as applied.

§ 52.2961 Stationary and area source rules.

(a) *Solvent Cleaning Operations.*

(1) *Purpose and Applicability.* The purpose of this section is to reduce emissions of volatile organic compounds (VOC) from solvent cleaning operations, and from the storage and disposal of materials used in solvent cleaning operations. This section applies to any facility located in the affected area that uses VOC-containing materials in the production, repair, maintenance, or servicing of parts, products, tools, machinery, equipment, or general work areas, or that stores and/or disposes of VOC-containing materials used in solvent cleaning operations. For the purposes of this section, the affected area includes the Ventura County Area for ozone and the Sacramento Metro Area for ozone as described in 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraph (a) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Aerosol product means a hand-held, nonrefillable container which expels pressurized product ingredients by means of a propellant-induced force.

Application line means that portion of a motor vehicle assembly production line which applies surface and other coatings to motor vehicle bodies, hoods, fenders, cargo boxes, doors, and grill opening panels.

Appurtenances means accessories to an architectural structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, and large fixed stationary tools and concrete forms.

Architectural coatings means any coatings applied to stationary structures

and their appurtenances, to mobile homes, to pavements, or to curbs.

Closed container means a container that encloses greater than 90% of the liquid surface area, except when depositing and removing objects to be cleaned or for maintenance and repair to the container itself.

Cured coatings, cured inks, and cured adhesives means coatings, inks, and adhesives which are dry to the touch.

Electronic components means circuit card assemblies, printed wire assemblies, printing wiring boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the actual cabinet in which the components are housed.

Flexographic printing means a printing method utilizing flexible rubber or other elastomeric plate which employs rapid-drying liquid inks.

Grams of VOC per liter of material means the weight of VOC per volume of material and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where:

W_s=weight of volatile compounds in grams;

W_w=weight of water in grams;

W_{es}=weight of exempt compounds in grams; and

V_m=volume of material in liters.

Graphic arts means all screen, gravure, letterpress, flexographic, and lithographic printing processes.

Gravure printing means an intaglio process in which the ink is carried in minute etched or engraved wells on a roll or cylinder. The excess ink is removed from the surface by a doctor blade.

Institutions mean, but are not limited to, schools, hospitals, sanitariums, prisons, health clubs, and theaters.

Janitorial cleaning means the cleaning of building or facility components, such as the floor, ceiling, walls, windows, doors, stairs, bathrooms, etc.

Letterpress printing means the method in which the image area is raised relative to the nonimage area and the ink is transferred to the paper directly from the image surface.

Lithographic printing means a plane-o-graphic method in which the image and nonimage areas are on the same plane.

Liquid leak means a visible liquid solvent leak from a container at a rate of more than three drops per minute, or a visible liquid mist.

Maintenance cleaning means a solvent cleaning operation carried out to keep parts, products, tools, machinery, equipment, or general work areas in clean and good operational condition.

Manufacturing process means the process of making goods or articles by hand or by machinery.

Medical equipment means equipment used by physicians to cure diseases or conditions requiring surgical procedures that are implanted in the body or used during invasive medical procedures. Medical equipment includes, but is not limited to, heart valves, catheters, oxygenenators, pressure monitors, pharmaceutical and dental equipment.

Non-absorbent containers mean containers made of nonporous material which do not allow the migration of the liquid solvent through them.

Non-atomized solvent flow means the use of a solvent to remove uncured adhesives, uncured inks, uncured coatings, and contaminants from an article in the form of a liquid stream without atomization.

Non-leaking containers mean containers without liquid leaks.

Printing means any operation that imparts color, design, alphabet, or numerals on a substrate.

Remote reservoir cold cleaner means a cleaning device in which liquid solvent is pumped from a solvent container to a sink-like work area and the solvent from the sink-like area drains into an enclosed solvent container while parts are being cleaned.

Repair cleaning means a solvent cleaning operation carried out during a repair process.

Repair process means the process of returning a damaged object or an object not operating properly to good condition.

Screen printing means a process in which the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.

Solvent means a VOC-containing liquid used to perform solvent cleaning operations.

Solvent cleaning operation means the removal of loosely held uncured adhesives, uncured inks, uncured coatings, and contaminants which include, but are not limited to, dirt, soil, and grease from parts, products, tools, machinery, equipment, and general work areas. Each distinct method of cleaning in a cleaning process which consists of a series of cleaning methods shall constitute a separate solvent cleaning operation.

Solvent container means that part of a cleaning device that holds the solvent.

Solvent flushing means the use of a solvent to remove uncured adhesives, uncured inks, uncured coatings, or contaminants from the internal surfaces and passages of the equipment by flushing solvent through the equipment.

Stripping means the removal of cured coatings, cured inks, and cured adhesives.

Surface preparation means the removal of contaminants such as dust, soil, oil, grease, etc., prior to coating, adhesive, or ink applications.

Ultraviolet inks mean inks which dry by polymerization reaction induced by ultraviolet energy.

VOC composite partial pressure means the following:

PP_c=A/B

Where:

$$A = \sum_{i=1}^{n} (W_i)(VP_i) / MW_i$$

$$B = \frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}$$

and:

W_i=weight of the "i"th VOC compound, in grams;

W_w=weight of water, in grams;

W_e=weight of exempt compound, in grams;

MW_i=molecular weight of the "i"th VOC compound, in g/(g-mole);

MW_w=molecular weight of water, in g/(g-mole);

MW_e=molecular weight of exempt compound, in g/(g-mole);

PP_c=VOC composite partial pressure at 20 C, in mm Hg; and

VP_i=vapor pressure of the "i"th VOC compound at 20 C, in mm Hg.

Wipe cleaning means the method of cleaning a surface by physically rubbing it with a material such as a rag, paper, or a cotton swab moistened with a solvent.

(3) *Standards.*

(i) *Solvent requirements.* On and after January 1, 1996, a person shall not use

a solvent to perform solvent cleaning operations, including the use of cleaning devices or methods, unless the solvent complies with the applicable requirements set forth below.

(A) *Substrate cleaning during manufacturing processes, and surface preparation for coating, adhesive, or ink applications.* The solvents used on substrates for cleaning during the manufacturing process or for surface preparation prior to coating, adhesive, or ink applications shall have a VOC content of 70 grams or less of VOC per liter of material.

(B) *Repair and maintenance cleaning.* The solvents used for repair or maintenance cleaning shall have a VOC content of 900 grams or less of VOC per liter of material and a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F).

(C) *Cleaning of coatings and adhesives application equipment.* The solvents used for cleaning coatings or adhesives application equipment shall have a VOC content of 950 grams or less of VOC per liter of material and a VOC composite partial pressure of 35 mm Hg or less at 20 °C (68 °F).

(D) *Cleaning of polyester resin application equipment.* The solvents used for cleaning polyester resin application equipment shall comply with one of the limits specified below:

(*1*) The solvent shall have a VOC content of 200 grams or less of VOC per liter of material; or

(*2*) The solvent shall have a VOC content of 1,100 grams or less of VOC per liter of material and a VOC composite partial pressure of 1.0 mm Hg or less at 20 °C (68 °F).

(E) *Cleaning of ink application equipment.* The solvents used for cleaning of ink application equipment in graphic arts shall meet the limits specified below.

(*1*) The solvents used in screen printing shall have a VOC content of 1,070 grams or less of VOC per liter of material and a VOC composite partial pressure of 5 mm Hg or less at 20 °C (68 °F).

(*2*) The solvents used in lithographic and letterpress printing not subject to provisions of paragraph (a)(3)(i)(E)(*4*) of this section shall have a VOC content of 800 grams or less of VOC per liter of material and a VOC composite partial pressure of 25 mm Hg or less at 20 °C (68 °F).

(*3*) The solvents used in gravure printing, flexographic printing, and printing operations not subject to provisions of paragraphs (a)(3)(i)(E)(*1*), (*2*), or (*4*) of this section shall have a VOC content of 100 grams or less of VOC per liter of material and a VOC composite partial pressure of 3 mm Hg at 20 °C (68 °F).

(*4*) The solvents used to remove ultraviolet inks from application equipment in graphic arts printing operations, except screen printing, shall have a VOC content of 800 grams or less of VOC per liter of material and a VOC composite partial pressure of 33 mm Hg or less at 20 °C (68 °F).

(F) *Cleaning of electronic components and medical equipment.* The solvents used for manufacturing or maintenance cleaning of electronic components or medical equipment shall have a VOC content of 900 grams or less of VOC per liter of material and a VOC composite partial pressure of 33 mm Hg or less at 20 °C (68 °F).

(ii) *Cleaning devices and methods requirements.* On and after January 1, 1996, a person shall not perform solvent cleaning operations unless one of the following cleaning devices or methods is used:

(A) Wipe cleaning;

(B) Spray bottles or closed containers from which solvents are applied without a propellant-induced force;

(C) Cleaning equipment using solvent within a closed container, except when depositing and removing objects to be cleaned, or for maintenance and repair to the cleaning equipment itself. This includes but is not limited to:

(*1*) Any cleaning device or mechanism which has been determined by EPA to result in equivalent or lower emissions; or

(*2*) Any remote reservoir cold cleaner used pursuant to the provisions of paragraph (a)(3)(iii) of this section;

(D) Non-atomized solvent flow method where the cleaning solvent is collected in a closed container; or

(E) Solvent flushing method where the cleaning solvent is discharged into a container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping.

(iii) *Remote reservoir cold cleaners.* On and after January 1, 1996, any person owning or operating a remote reservoir cold cleaner shall comply with all of the following requirements:

(A) Prevent solvent vapors from escaping from the solvent container by using such devices as a cover or a valve when the remote reservoir is not being used, cleaned, or repaired;

(B) Direct solvent flow in a manner that will prevent liquid solvent from splashing outside of the remote reservoir cold cleaner;

(C) Not degrease porous or absorbent materials, such as cloth, leather, wood, or rope; and

(D) Use only solvent containers free of all liquid leaks. Auxiliary equipment, such as pumps, pipelines, or flanges, shall not have any liquid leaks, visible tears, or cracks. Any liquid leak, visible tear, or crack detected shall be repaired within one calendar day, or the leaking section of the remote reservoir cold cleaner shall be drained of all solvent and shut down until it is replaced or repaired.

(iv) *Storage and disposal.*

(A) All VOC-containing solvents shall be stored in non-absorbent, non-leaking containers which shall be kept closed at all times except when filling or emptying.

(B) All waste solvent and waste solvent residues shall be disposed of by at least one of the following methods:

(*1*) Disposal through a commercial reclamation service;

(*2*) Disposal at a facility that is federally or state licensed to treat, store or dispose of such waste; or

(*3*) Disposal by recycling in conformance with § 25143.2 of the California Health and Safety Code.

(v) *Emission control system.* In lieu of complying with the requirements in paragraphs (a)(3)(i), (a)(3)(ii), (a)(3)(v)(A) of this section, a person may comply by using an emission control system in association with the solvent cleaning operation regulated by this section provided:

(A) The emission control system maintains a capture efficiency of at least 90%, by weight, of the emissions generated by the solvent cleaning operation and a destruction or removal efficiency of at least 95% by weight; or

(B) The emission control system maintains a capture efficiency of at least 90%, by weight, of the emissions generated by the solvent cleaning operation and the output of the control system is less than 50 parts per million (ppm) calculated as carbon with no dilution; or

(C) The emission control system meets the requirements of an applicable source-specific section of the Federal or federally approved State Implementation Plan.

(vi) *General prohibitions.*

(A) On and after January 1, 1996, a person shall not atomize any solvent into open air.

(B) On and after January 1, 1996, a person shall not specify or require any person to use solvent or equipment subject to the provisions of this section that do not meet the requirements of this section.

(4) *Exemptions.*

(i) The following solvent cleaning operations are not subject to any provision of paragraph (a)(3) of this section.

(A) Cleaning performed in batch-loaded cold cleaners, open-top vapor degreasers, conveyorized degreasers, or film cleaning machines which are regulated under an equivalent (i.e., equally stringent) source-specific section contained in the Federal or federally approved State Implementation Plan.

(B) Cleaning operations performed at solvent dry cleaners and perchloroethylene dry cleaning systems which are regulated under an equivalent (i.e., equally stringent) source-specific section contained in the Federal or federally approved State Implementation Plan.

(C) Cleaning operations performed at semiconductor manufacturing facilities which are regulated under an equivalent (i.e., equally stringent) source-specific section contained in the Federal or federally approved State Implementation Plan.

(D) Cleaning operations performed at aerospace assembly and component manufacturing facilities which are regulated under an equivalent (i.e., equally stringent) source-specific section contained in the Federal or federally approved State Implementation Plan, except coating application equipment cleaning, and storage and disposal of VOC-containing materials used in solvent cleaning operations.

(E) Cleaning operations performed at remote reservoir cold cleaners which are regulated under an equivalent (i.e., equally stringent) source-specific section contained in the Federal or federally approved State Implementation Plan.

(F) Janitorial cleaning.

(G) Stripping of cured coatings, cured adhesives, and cured inks.

(H) Cleaning operations using solvents with a water content of 98% or more by weight.

(I) Cleaning operations using solvents for clean up of polyester resin application equipment provided they do not exceed 4 gallons a day.

(ii) Wipe cleaning is not subject to the provisions of paragraph (a)(3)(i) of this section when carried out for any of the following applications.

(A) Cleaning of solar cells, laser hardware, and high-precision optics.

(B) Cleaning for conducting performance laboratory tests on coatings, adhesives, or inks; research and development programs; and laboratory tests in quality assurance laboratories.

(C) Cleaning of polycarbonate plastics.

(iii) Internal cleaning of the tips of automated spray equipment systems, except for robotic systems, and cleaning with spray bottles or containers described in paragraph (a)(3)(ii)(B) of this section, are not subject to the provisions of paragraph (a)(3)(vi)(A) of this section.

(iv) Cleaning with aerosol products shall not be subject to the provisions of paragraphs (a)(3)(i) and (a)(3)(v)(A) of this section if 160 fluid ounces or less per day per facility of aerosol products are used.

(v) Cleaning of cotton swabs to remove cottonseed oil before cleaning of high-precision optics shall not be subject to paragraph (a)(3)(i) of this section.

(vi) A facility which uses non-compliant solvents in quantities less than 1 gallon a week shall not be subject to paragraphs (a)(3)(i)(A) and (B) of this section for those solvents.

(vii) Maintenance cleaning conducted at institutions and residential dwellings shall not be subject to paragraph (a)(3)(i)(B) of this section.

(5) *Reporting and Recordkeeping.*

(i) Records shall be maintained pursuant to paragraph (a)(5)(ii) of this section for all applications subject to this section, including those exempted under paragraph (a)(4) of this section, except for cleaning operations performed with a solvent which has a water content of 98% or more, by weight, or a VOC composite partial pressure of 0.1 mm Hg or less at 20 °C (68 °F).

(ii) Any source within the affected area that uses greater than 20 gallons per year of VOC-containing materials used in solvent cleaning operations shall comply with the following requirements:

(A) Maintain a current file of each VOC-containing material in use and in storage for solvent cleaning operations. The file shall provide all of the data necessary to evaluate compliance and shall include, but not be limited to, the following information, as applicable:

(*1*) A data sheet or material list giving material name, manufacturer identification and material application;

(*2*) Any thinners or other components used and the mix ratio; and

(*3*) The VOC content limit or vapor pressure limit from paragraph (a)(3) of this section and the actual VOC content, as applied, or vapor pressure of the solvent used for cleaning operations.

(B) Maintain records of the monthly volume of each solvent used.

(C) When compliance is achieved through the use of add-on control equipment pursuant to paragraph (a)(3)(v) of this section, maintain records on a daily basis of key operating parameters for the emission control equipment, including, but not limited to:

(*1*) Hours of operation;

(*2*) Routine and nonroutine maintenance;

(*3*) All information needed to demonstrate continuous compliance with paragraph (a)(3)(v) of this section, such as temperatures, pressures, and flowrates; and

(*4*) Maintain records of the daily volume of each VOC-containing solvent subject to abatement by add-on control equipment.

(D) Maintain records sufficient to demonstrate compliance with paragraph (a)(3)(iv)(B) of this section including, but not limited to:

(*1*) Date;

(*2*) Source of waste (e.g., "waste solvent from cold cleaner");

(*3*) Description of waste (e.g., "rags in two 55 gallon drums with 5–10% liquid");

(*4*) Amount of solvent in waste shipment; and

(*5*) Destination of each shipment of waste solvent and/or waste solvent residues off-site.

(E) All records shall be maintained for at least five years and shall be provided to EPA upon request.

(6) *Test Methods.* For the purpose of this section, the following test methods shall be used. VOC emissions or other parameters determined to exceed any limits established by this section through the use of any of the following test methods shall constitute a violation of the section.

(i) The VOC content of materials subject to the provisions of this section shall be determined by EPA Method 24 (40 CFR part 60, appendix A).

(ii) The efficiency of the collection device of the emissions control system, as specified in paragraph (b)(3)(v)(A) of this section, shall be determined by the EPA method described at § 52.741(a)(4)(iii).

(iii) The efficiency of the control device of the emission control system, as specified in paragraph (b)(3)(v)(B) of this section, shall be determined by the EPA method described at § 52.741(a)(4)(iv). The VOC content measured and calculated as carbon in the control device exhaust gases shall be determined by EPA Method 25 or 25A (40 CFR part 60, appendix A).

(iv) The identity of components in solvents shall be determined by EPA Method 18 (40 CFR part 60, appendix A).

(v) Vapor pressure of a VOC shall be determined by ASTM Method D2879–86

or may be obtained from a published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973); Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984); CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986–87); and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

(b) *Wood Products Coatings.*

(1) *Applicability.* This section applies to all persons applying coating, inks, stains, and/or strippers in wood product coating operations for the purpose of manufacture of wood products, including furniture and other coated objects made of solid wood and/or wood composition, and/or simulated wood material. This section shall not apply to residential noncommercial operations. For the purposes of this section, the affected area is the Sacramento Metro Area for ozone and the Ventura County Area for ozone as described in § 81.305.

(2) *Definitions.* For the purposes of paragraph (b) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Aerosol-spray coating means a coating which is sold in a hand-held, pressurized, non-refillable container of sixteen ounces or less and which is expelled from the container in a finely divided spray when a valve on the container is depressed.

Binders means non-volatile polymeric organic materials (resins) which form the surface film in coating applications.

Clean topcoat means a final coating which contains binders, but not opaque pigments, and is specifically formulated to form a transparent or translucent solid protective film.

Coating means a material which is applied to a surface and which forms a film in order to beautify and/or protect such surface.

Dip coat means to dip an object into a vat of coating material and drain off any excess coating.

Electrostatic application means charging of atomized paint droplets for deposition by electrostatic attraction.

Filler means a preparation used to fill in cracks, grains, etc., of wood before applying a coating.

Flow coat means to coat an object by flowing a stream of coating over an object and draining off any excess coating.

Grams of VOC per liter of material means the weight of VOC per volume of material and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where:

Ws=weight of volatile compounds in grams

Ww=weight of water in grams

Wes=weight of exempt compounds in grams

Vm= volume of material in liters

High-solids stains means stains containing more than 1 pound of solids per gallon, by weight, and can include wiping stains, glazes, and opaque stains.

High-volume, low-pressure (HVLP) spray means to spray a coating by means of a gun that operates between 0.1 and 10.0 pounds per square inch gauge (psig) air pressure.

Ink means a fluid that contains dyes and/or colorants and is used to make markings, but not to protect surfaces.

Low-solids stains means stains containing 1 pound of solids per gallon, or less, by weight.

Mold-seal coating means the initial coating applied to a new mold or repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.

Multi-colored coating means a coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.

Pigmented coatings means opaque coatings which contain binders and colored pigments which are formulated to hide the wood surface, either as an undercoat or topcoat.

Rate per calendar year means the amount applied between 12 a.m. January 1 and 11:59 p.m. December 31.

Rate per day means the amount applied between 12 a.m. and 11:59 p.m. on the same calendar day.

Repair coating means a coating used to recoat portions of a product which has sustained mechanical damage to the coating following normal painting operations.

Roll coater means a series of mechanical rollers that forms a thin coating film on the surface of the roller, which is applied to a substrate by moving the substrate underneath the roller.

Sealer means a coating, containing binders, which seals the wood prior to application of the subsequent coatings.

Simulated wood materials means materials, such as plastic, glass, metal, etc., that are made to give a wood-like appearance or are processed like a wood product.

Stencil coating means an ink or a pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to wood products.

Stripper means a liquid used to remove cured coatings, cured inks, and/or cured adhesives.

Toner means a wash coat which contains binders and dyes or pigments to add tint to a coated surface.

Touch-up coating means a coating used to cover minor coating imperfections appearing after the main coating operation.

Wash coat means a coating that contains no more than 1.0 pound of solids per gallon, by weight, which is used to seal wood surfaces, prevent undesired staining, and control penetration.

Wood product coating application operations means a combination of coating application steps which may include use of spray guns, flash-off areas, spray booths, ovens, conveyors, and/or other equipment operated for the purpose of applying coating materials.

Wood products means those surface-coated room furnishings which include cabinets (kitchen, bath, and vanity), tables, chairs, beds, sofas, shutters, art objects, and any other coated objects made of solid wood, and/or wood composition, and/or made of simulated wood material used in combination with solid wood or wood composition.

(3) *Standards.*

(i) *VOC Content of Coatings and Strippers.*

(A) A person or facility shall not apply any coating to a wood product which has a VOC content, including any VOC-containing material added to the original coating supplied by the manufacturer, which exceeds the applicable limit specified below:

Coating	VOC limits—Grams per liter of material less water and less exempt compounds			
	On and after 1/1/96		On and after 7/1/96	
	(g/L)	(lb/gal)	(g/L)	(lb/gal)
Clear topcoats	275	(2.3)	275	(2.3)
Filler	500	(4.2)	275	(2.3)
High-solid stains:				
Non-glaze	700	(5.8)	240	(2.0)
Glaze	700	(5.8)	240	(2.0)
Inks	500	(4.2)	500	(4.2)
Mold-seal coating	750	(6.3)	750	(6.3)
Multi-colored coating	275	(2.3)	275	(2.3)
Pigmented coating	275	(2.3)	275	(2.3)
Sealer	550	(4.6)	240	(2.0)
Strippers	350	(2.9)	350	(2.9)
Low-solids stains, toner, or washcoat	480	(4.0)	120	(1.0)

(B) *Emission control system.* A person or facility may comply with the provisions of paragraph (b)(3)(i)(A) of this section by using an emission control system, provided that this system maintains a control efficiency (capture efficiency times destruction or removal efficiency) of the VOC emissions of at least 85 (eighty-five) percent by weight.

(ii) *Transfer Efficiency.* A person or facility shall not apply a coating subject to this section except by means of the following application methods:

(A) Electrostatic spray application;

(B) Flow coat application;

(C) Dip coat application;

(D) Hand application methods;

(E) High-volume low-pressure (HVLP) spray application; or

(F) Other coating application methods that are demonstrated to have a transfer efficiency at least equal to HVLP in the application, and which are used in such a manner that parameters under which they were tested are permanent features of the method. Such coating application methods shall be approved in writing by EPA.

(iii) *Solvent cleaning operations; storage and disposal of VOC-containing materials.* Cleanup solvents used for surface preparation, equipment cleanup, and thinning operations, including storage and disposal of VOC-containing materials, shall be subject to the provisions and requirements of § 52.2961(a), Solvent cleaning operations.

(iv) *Prohibition of specifications.* A person shall not specify the use in the affected area of any coating to be applied to any wood products subject to the provisions of this section that does not meet the limits and requirements of this section.

The requirements of this paragraph shall apply to all written or oral contracts.

(4) Exemptions.

(i) The provisions of paragraphs (b)(3)(i) and (ii) of this section shall not apply to:

(A) Aerosol-spray coatings for touch up and repair; or

(B) Facilities that use less than 1 gallon per day of coating subject to this section.

(ii) The provisions of this section shall not apply to coating operations for the purpose of manufacturing a finished wood panel intended for attachment to the inside walls of buildings, including, but not limited to, homes and office buildings, mobile homes, trailers, prefabricated buildings and similar structures, boats, and ships; or a finished exterior wood siding intended for use in construction.

(5) *Reporting and Recordkeeping.* Any source within the affected area that uses greater than 1 gallon of wood product coating materials (coatings, inks, fillers, stains, strippers, toners, washcoats, or solvents) per day shall comply with the following requirements:

(i) Maintain a current file of each wood product coating material in use and storage. This file shall provide all of the data necessary to evaluate compliance and shall include, but not be limited to, the following information, as applicable:

(A) A data sheet or material list giving material name, manufacturer identification, and material application;

(B) Any catalysts, reducers, or other components used and the mix ratio; and

(C) The VOC content limit from paragraph (b)(3) of this section and the actual VOC content, as applied, or vapor pressure of the wood product coating material.

(ii) Maintain records of the monthly volume (e.g., gallons) of each wood product coating material.

(iii) Control equipment records. Any person using an emission control system as a means of complying with this section shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities. Key system operating parameters are those necessary to ensure compliance with the requirements of paragraph (b)(3)(i)(B) of this section such as temperatures, pressures, and flowrates.

(iv) All records shall be maintained for at least five years and shall be made available to EPA upon request.

(6) *Test Methods.*

(i) *Determination of VOC content.*

(A) The VOC content of coatings and strippers shall be determined by using EPA Method 24 (40 CFR part 60, appendix A).

(B) The exempt compound content of coatings and strippers shall be determined by ASTM Method D–4457–85, which is limited to the measurement of dichloromethane and 1,1,1-trichloroethane only.

(C) The VOC content of emissions shall be determined by EPA Method 18 (40 CFR part 60, appendix A).

(ii) *Equipment test methods.*

(A) *Capture efficiency.* The efficiency of the collection device of the emission control system, as specified in paragraph (b)(3)(i)(B) of this section, shall be determined by the EPA method described at § 52.741(a)(4)(iii).

(B) *Destruction or removal efficiency.* The efficiency of the control device of the emission control system, as specified in paragraph (b)(3)(i)(B) of this section, shall be determined by the EPA method described at § 52.741(a)(4)(iv). The VOC content measured and calculated as carbon in the control device exhaust gases shall be determined by EPA Method 25 or Method 25A (40 CFR part 60, appendix A).

(C) *Transfer efficiency.* The transfer efficiency for other coating application

methods, as defined in paragraph (b)(3)(ii)(6) of this section, shall be determined in accordance with South Coast Air Quality Management District (SCAQMD) method "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989." This transfer efficiency (TE) test method is approved only for the limited purpose of comparing alternative application technologies under controlled conditions. The results of these tests are not transferable to a production setting. The test method is not acceptable for determining TE to establish VOC emission reduction credits to allow the use of higher VOC coatings, or to establish VOC credits for trading or offset purposes.

(c) *Automotive refinishing operations.*

(1) *Applicability.* This section applies to all coating operations of Group I vehicles and Group II vehicles and equipment, as described in paragraph (c)(2) of this section, or their existing parts and components, for the purpose of on-site refinishing and modification except Original Equipment Manufacturer (OEM) coatings applied at manufacturing plants. Facilities with coating operations considered within the scope of this section include: autobody repair/paint shops, production autobody paint shops, new car dealer repair/paint shops, fleet operator repair/paint shops, custom-made car fabrication facilities, and truck body-builders. For the purposes of this section, the affected area is the Sacramento Metro Area for ozone as described in 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraph (c) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Acrylic enamel means an enamel coating derived from an acrylic polymer containing hydroxyl functionality.

Adhesion promoter means a coating applied over both an existing non-sanded topcoat and the coated area immediately adjacent to the non-sanded topcoat, to promote the adhesion of a subsequent topcoat. No topcoat, primer, primer sealer, or primer surfacer shall be classified as an adhesion promoter.

Alkyd enamel means an enamel coating derived from any of several different synthetic resins made by heating together a polybasic acid, such as phthalic or maleic acid, and a polyhydric alcohol, such as glycerin or a glycol.

Anti-glare safety coating means a coating formulated to eliminate glare for safety purposes on interior surfaces of a vehicle and which shows a reflectance of 25 or less on a 60° gloss meter.

Basecoat means a pigmented topcoat which is the first topcoat applied as part of a multistage topcoat system.

Basecoat/clearcoat topcoat system means a topcoat system composed of a basecoat portion and a clearcoat portion. The VOC content of a basecoat/clearcoat topcoat system shall be calculated according to the following formula:

$$VOC_{ms} = \frac{VOC_{bc} + 2\ VOC_{cc}}{3}$$

Where:

VOC_{ms}=the composite VOC content, less water and less exempt compounds to be used for compliance determination under the multistage topcoat system coating category.

VOC_{bc}=the VOC content, less water and less exempt compounds as applied, of any given basecoat.

2 VOC_{cc}=two times the VOC content, less water and less exempt compounds as applied, of any given clearcoat.

Bright metal trim repair coating means a coating applied directly to chrome-plated metal surfaces for the purpose of appearance.

Bus means any motor vehicle having a manufacturer's gross vehicle weight of more than 8,600 pounds, which is designed primarily for the transportation of persons and has a design capacity of over 12 persons.

Clearcoat means a topcoat which contains no pigments or only transparent pigments and which is the final topcoat applied as a part of a multistage topcoat system.

Coating means a material which is applied to a surface and which forms a film in order to beautify and/or protect such surface.

Elastomeric materials mean coatings which are specifically formulated and applied over coated or uncoated flexible plastic substrates for the purpose of adhesion.

Electrostatic application means charging of atomized paint droplets for deposition by electrostatic attraction.

Enamel means a coating that cures by chemical cross-linking of its base resin. Enamels can be readily distinguished from lacquers because enamels are not resoluble in their original solvent.

Extreme-performance topcoat means a topcoat used on the surface of Group II vehicles and mobile equipment, and which qualifies under the provisions of paragraph (c)(6)(vii) of this section.

General topcoat means any type of topcoat except extreme-performance topcoat, metallic topcoat, and any topcoat applied as part of a multistage topcoat system.

Grams of VOC per liter of material means the weight of VOC per volume of material and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where:

W_s=weight of volatile compounds in grams;

W_w=weight of water in grams;

W_{es}=weight of exempt compounds in grams; and

V_m=volume of material in liters.

Group I vehicles mean passenger cars, small-sized trucks and vans, medium-sized trucks and vans, motor homes, and motorcycles.

Group II vehicles and equipment mean large-sized trucks, buses, street and mobile equipment.

High-volume, low-pressure (HVLP) spray means equipment used to spray a coating by means of a gun that operates between 0.1 and 10 pounds per square inch gauge (psig) air pressure.

Highway means a way or place of whatever nature, publicly maintained and open to the public for purposes of vehicular travel. Highway includes street.

Impact-resistant coating means any coating applied to a rocker panel for the purpose of chip resistance to road debris.

Lacquer means a coating which dries primarily by solvent evaporation and, hence, is resoluble in its original solvent.

Metallic/iridescent topcoat means a topcoat which contains iridescent particles, composed of either metal as metallic particles or silicon as mica particles, in excess of 5 g/L (0.042 lb/gal) as applied, where such particles are visible in the dried film.

Midcoat means a semi-transparent topcoat which is the middle topcoat

applied as part of a three-stage topcoat system.

Mobile equipment means self-propelled equipment which is physically capable of being driven on a highway. Mobile equipment includes, but is not limited to, the following: truck bodies, truck trailers, utility bodies, camper shells, and miscellaneous hauling equipment.

Motor home means any motor vehicle originally designed, or permanently altered, and equipped for human habitation as defined in Section 362 of the California Vehicle Code.

Motor vehicle means a vehicle which is self-propelled and which is physically capable of being driven on a highway.

Motorcycle means any motor vehicle other than a tractor having a seat or saddle for the use of the rider, which is designed to travel on not more than three wheels in contact with the ground and weighs less than 1,500 pounds. Four wheels may be in contact with the ground when two of the wheels are a functional part of a sidecar.

Multistage topcoat system means any basecoat/clearcoat topcoat system or any three-stage topcoat system, manufactured as a system, and used as specified by the manufacturer.

Passenger car means any motor vehicle designed primarily for transportation of persons and having a design capacity of 12 persons or less.

Polyurethane enamel means an enamel coating derived from a thermosetting polymer produced by the condensation reaction of a polyisocyanate and an hydroxyl-containing material.

Precoat coating means a coating applied to bare metal primarily to deactivate the metal surface for corrosion resistance to a subsequent water-base primer.

Pretreatment coating means a coating which contains no more than 12 percent solids, by weight, and at least ½-percent acid, by weight, which is used to provide surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.

Primer means a coating applied for purposes of corrosion resistance or adhesion of subsequent coatings.

Primer sealer means a coating applied prior to the application of a topcoat for the purpose of color uniformity, or to promote the ability of an underlying coating to resist penetration by the topcoat.

Primer surfacer means a coating applied for the purpose of corrosion resistance or adhesion, and which promotes a uniform surface by filling in surface imperfections.

Rocker panel means the panel area of a motor vehicle which is no more than 10 inches from the bottom of a door, quarter panel, or fender.

Rubberized asphaltic underbody coating means a coating applied to wheel wells, the inside of door panels or fenders, the underside of a trunk or hood, or the underside of the motor vehicle itself for the purpose of sound deadening or protection.

Specialty coating means any of the following coatings: adhesion promoters, uniform finish blenders, elastomeric materials, anti-glare safety coatings, impact-resistant coatings, rubberized asphaltic underbody coatings, water hold-out coatings, weld-thru coatings, and bright metal trim repair coatings.

Spot repairs mean repairs to motor vehicles in which the damaged area to be repaired is limited to only a portion of any given panel so that an entire panel need not be repaired.

Stencil coating means an ink or a pigmented coating which is rolled or brushed onto a template or a stamp in order to add identifying letters, symbols, and/or numbers to motor vehicles, mobile equipment, or their parts and components.

Three-stage topcoat system means a topcoat system composed of a basecoat portion, a midcoat portion and a transparent clearcoat portion. The VOC content of a three-stage topcoat system shall be calculated according to the following formula:

$$VOC_{ms} = \frac{VOC_{bc} + VOC_{mc} + 2\,VOC_{cc}}{4}$$

Where:

VOCms=the composite VOC content, less water and less exempt compounds to be used for compliance determination under the multistage topcoat system coating category.

VOCbc=the VOC content, less water and less exempt compounds as applied, of any given basecoat.

VOVmc=the VOC content, less water and less exempt compounds as applied, of any given midcoat.

2 VOCcc=two times the VOC content, less water and less exempt compounds as applied, of any given clearcoat.

Topcoat means a coating applied over any coating, for the purpose of appearance, identification, or protection.

Touch-up coating means a coating applied by brush or non-refillable aerosol can to cover minor surface damage and dispensed in containers of no more than 8 ounces.

Truck means a motor vehicle designed, used, or maintained primarily for the transportation of property.

(1) *Large-sized truck* means a truck having a manufacturer's gross vehicle weight rating of more than 8,600 pounds.

(2) *Medium-sized truck* means a truck having a manufacturer's gross vehicle weight of 6,001 to 8,600 pounds.

(3) *Small-sized truck* means any motor vehicle having a manufacturer's gross vehicle weight rating at 6,000 pounds or less and which is designed primarily for the purposes of transportation of property or is a derivative of such vehicle, or is available with special features enabling on-street or off-highway operation and use.

Uniform finish blenders mean coatings which are applied in spot repairs for the purpose of blending a paint overspray area of a repaired topcoat to match the appearance of an adjacent existing topcoat.

Van means a closed truck for carrying property or persons.

(1) *Medium-sized van* means a van having a manufacturer's gross vehicle weight rating of 6,001 to 8,600 pounds.

(2) *Small-sized van* means a van having a manufacturer's gross vehicle weight rating at 6,000 pounds or less and which is designed primarily for purposes of transportation of property and/or persons.

Vehicle means a device by which any person or property may be propelled, moved, or drawn upon a highway, excepting a device moved exclusively by human power or used exclusively upon stationary rails or tracks.

Water hold-out coating means a coating applied to the interior cavity areas of doors, quarterpanels, and rocker panels for the purpose of corrosion resistance to prolonged water exposure.

Weld-thru coating means a coating applied to metal immediately prior to welding to provide corrosion resistance.

(3) *Standards.*

(i) *VOC content of coatings.* On and after January 1, 1996, a person shall not apply a coating to Group I vehicles and Group II vehicles and equipment, or their existing parts and components, which has a VOC content which exceeds the limits contained in paragraphs (c)(3)(i) (A) and (B) of this section. Compliance with the VOC limits shall be based on VOC content, including any VOC material added to the original coating supplied by the manufacturer, less water and exempt solvent, as applied to the vehicle, mobile equipment, or parts and components.

(A) *Group I vehicles.* A person who refinishes Group I vehicles, or their existing parts or components, or replacement parts or components, shall not apply a coating which has a VOC content in excess of the limits in the table of group 1 vehicle VOC limits.

TABLE OF GROUP I VEHICLE VOC LIMITS

VOC limits—Grams per liter of coating, less water and exempt compounds	Coating	
	g/L	lb/gal
Pretreatment	780	6.5
Precoat	250	2.1
Primer/primer surfacer	250	2.1
Primer sealer	340	2.8
Topcoats	420	3.5
Acrylic enamel	420	3.5
Alkyd enamel	420	3.5
Polyurethane enamel	420	3.5
Lacquer	420	3.5
General	420	3.5
Metallic/iridescent	420	3.5
Multistage system	420	3.5
Specialty Coating	840	7.0

(B) *Group II vehicles and equipment.* A person who refinishes Group II vehicles and equipment, or their existing parts or components, or replacement parts or components, shall not apply a coating which has a VOC content in excess of the limits in the table of group II vehicle VOC limits.

TABLE OF GROUP II VEHICLE VOC LIMITS

VOC limits—grams per liter of coating, less water and exempt compounds	Coating	
	g/L	lb/gal
Pretreatment	780	6.5
Precoat	250	2.1
Pretreatment	780	6.5
Primer/Primer Surfacer/ Primer Sealer	250	2.1
Topcoats	340	2.8
General	340	2.8
Metallic/Iridescent	[a]340	[a]2.8
Multistage	[a]340	[a]2.8
Extreme-Performance	340	2.8
Specialty Coating	840	7.0

[a] Metallic topcoat and multistage topcoat system VOC content limits do not apply to spot repairs of Group II vehicles and mobile equipment. The use of metallic topcoats and multistage topcoat systems in spot repairs on Group II vehicles and mobile equipment shall be subject to the VOC content limits of paragraph (c)(3)(i)(A) of this section.

(ii) *Specialty coatings.* Use of all specialty coatings at a facility, as defined in paragraph (c)(2) of this section, shall not exceed 5.0% of all coatings applied, by volume, on a daily basis.

(iii) *Transfer efficiency.*

(A) A person shall not apply coatings subject to the provisions of this section except by the use of one of the following methods:

(*1*) Electrostatic application;

(*2*) High-volume, low-pressure (HVLP) spray;

(*3*) Flow coat;

(*4*) Roll coat;

(*5*) Dip coat;

(*6*) Hand application methods; or

(*7*) Other coating application methods that are demonstrated to have transfer efficiency at least equal to HVLP spray equipment in the application, and which are used in such a manner that the parameters under which they were tested are permanent features of the method. Such coating application methods shall be approved in writing by EPA.

(B) A person shall not apply coatings by any of the methods listed in paragraph (c)(3)(iii)(A) of this section unless the coating is applied with properly operating equipment and operated according to procedures recommended by the manufacturer.

(iv) *Cleanup solvent use.* Solvents used for surface preparation, equipment cleanup, and thinning operations, including storage and disposal of VOC-containing materials, shall be subject to the provisions and requirements of § 52.2961(a).

(v) *Emission control system.* A person may comply with the provisions of paragraph (c)(3)(i) of this section by using an emission control system, provided that this system maintains a control efficiency (capture efficiency times destruction or removal efficiency) of the VOC emissions of at least 85 (eighty-five) percent by weight.

(vi) *Prohibition of specifications.*

(A) A person shall not solicit from, or require any other person to use in the affected area, any VOC-containing material subject to the provisions of this section which, when applied as supplied or thinned or reduced according to the manufacturer's recommendation for application, does not meet the limits and requirements of this section. The prohibition against soliciting, or requiring the use of VOC-containing materials shall not apply with respect to solicitations from or requirements of persons operating pursuant to an approved emission control system, as provided for in paragraph (c)(3)(v) of this section.

(B) The requirements of this paragraph shall apply to all written or oral agreements executed and entered into.

(4) *Exemptions.*

(i) The provisions of paragraphs (c)(3)(i) and (iii) of this section shall not apply to:

(A) Touch-up coatings; or

(B) Stencil coatings.

(ii) The exemptions described in paragraphs (c)(4)(i) (A) and (B) of this section shall not apply to aerosol container applications.

(5) *Recordkeeping requirements.* Any person subject to this section shall comply with the following requirements:

(i) The person shall maintain and have available during an inspection the listed category of each of the coatings and the type of vehicle or equipment to which each coating was applied.

(ii) The person shall maintain and have available during an inspection a current list of coatings in use which provides all of the coating data necessary to evaluate compliance, including the following information, as applicable:

(A) Coating, catalyst, additives, and reducer used;

(B) Mix ratio of components used; and

(C) VOC content of coating as applied.

(iii) The person shall maintain records on a daily basis, including the following information:

(A) Coating and mix ratio of components in the coating used; and

(B) Quantity of each coating applied.

(iv) Any person using an emission control system as a means of complying with this section shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with VOC content of coating requirements such as temperatures, pressures, and flowrates.

(v) All records shall be retained at the facility for at least five years and shall be provided to EPA upon request.

(6) *Test methods.* For the purposes of this section, the following test methods shall be used:

(i) *VOC content.*

(A) The VOC content of coatings shall be determined by EPA Method 24 (40 CFR part 60, appendix A);

(B) The VOC content of emissions shall be determined by EPA Method 18 (40 CFR part 60, appendix A); and

(C) The exempt compound content of coatings shall be determined by ASTM Test Method D–4457–85.

(ii) *Determination of iridescent particles in metallic/iridescent topcoat.* The metal and silicon content of metallic/iridescent topcoat shall be determined by SCAQMD Method 26

(SCAQMD "Laboratory Method of Analysis for Enforcement Samples" manual).

(iii) *Acid content in pretreatment coatings.* The acid content of pretreatment coatings shall be determined by ASTM Test Method D–1613–85 (modified).

(iv) *Determination of efficiency of emission control systems.*

(A) *Capture efficiency.* The efficiency of the collection device of the emission control system, as specified in paragraph (c)(3)(v) of this section, shall be determined by the EPA method described at § 52.741(a)(4)(iii).

(B) *Destruction or removal efficiency.* The efficiency of the control device, as specified in paragraph (c)(3)(v) of this section, shall be determined by the EPA method described at § 52.741(a)(4)(iv). The VOC content measured and calculated as carbon in the control device exhaust gases shall be determined by EPA Method 25 or 25A (40 CFR part 60, appendix A).

(v) *Reflectance of anti-glare safety coatings.* The reflectance of anti-glare safety coatings shall be measured by ASTM Test Method D–523.

(vi) *Transfer efficiency.* The transfer efficiency for alternative coating application methods, as defined in paragraph (c)(3)(iii)(A)(*7*) of this section, shall be determined in accordance with the South Coast Air Quality Management District (SCAQMD) test method for determining transfer efficiency entitled, "Spray Equipment Transfer Efficiency (TE) Test Procedure for Equipment User, May 24, 1989." This transfer efficiency method is approved for the limited purpose of comparing alternative application technologies under controlled conditions. The results of these tests are not transferable to a production setting. The test method is not acceptable for determining transfer efficiency to establish VOC emission reduction credits to allow the use of higher VOC coatings, or to establish VOC credits for trading or offset purposes.

(vii) *Qualification and petition for classification as an extreme-performance topcoat.*

(A) *Extreme-performance topcoat qualification.* A topcoat is an extreme-performance topcoat if it is to be applied on Group II vehicles and equipment and will be repeatedly exposed to any of the following:

(*1*) Heavy abrasion, including mechanical wear and repeated scrubbing with industrial-grade detergents, cleaners, solvents, or abrasive scouring agents;

(*2*) Temperatures in excess of 250 F;

(*3*) Corrosive, caustic, or acidic agents, chemicals, chemical fumes, chemical mixtures or solutions; or

(*4*) Other similar environmental conditions as determined by EPA.

(B) *Extreme-performance coating petition.* Any person seeking to use an extreme-performance coating in any coating operation which is subject to the provisions of this section shall comply with the following requirements:

(*1*) A petition shall be submitted to EPA stating the performance requirements, volume of coating, and VOC level which is attainable.

(*2*) If EPA grants written approval, such petition will be repeated on an annual basis.

(*3*) If EPA grants written approval, such approval shall contain volume and VOC limit conditions.

(*4*) Records shall be maintained as in paragraph (c)(5) of this section.

(d) *Adhesives and sealants.*

(1) *Applicability.* This section applies to any person who supplies, sells, offers for sale, or uses adhesives, sealants, or adhesive primers in the affected area. This section does not apply to household adhesives which are subject to consumer products regulations in the California Code of Regulations (Title 17, Division 3, Subchapter 8.5—Consumer Products, §§ 94507–94517). For the purpose of this section, the affected area refers to the Sacramento Metro Area for ozone as described at 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraph (d) of this section, the following definitions apply. All terms not defined herein shall have the meaning given them in § 52.2950.

ABS adhesive means any substance that is intended for welding acrylonitrile butadiene styrene (ABS) plastic pipe.

Adhesive means any substance that is used to bond one surface to another surface by attachment.

Adhesive primer means a coating that is intended by the manufacturer to be applied to a substrate, prior to the application of an adhesive, to provide a bonding surface.

Aerosol adhesive means a mixture of rubber, resins, and liquid and gaseous solvents and propellants packaged in a disposable container for hand-held application.

Aerospace component means the fabricated part, assembly of parts, or completed unit of any aircraft or space vehicle excluding tires.

Aircraft means any machine designed to travel through the air without leaving the earth's atmosphere, whether heavier or lighter than air, including airplanes, balloons, dirigibles, helicopters, and missiles.

Automotive glass primer means any adhesive primer that is intended by the manufacturer to be applied to automotive glass prior to installation with an adhesive/sealant. This primer improves adhesion to the pinch weld and blocks ultraviolet light.

Ceramic tile installation means the installation of ceramic tile products using an adhesive formulated for that purpose.

Computer diskette manufacturing means the process where the fold-over flaps are glued to the body of a vinyl jacket.

Contact adhesive means any adhesive that is intended by the manufacturer to adhere to itself instantaneously upon contact. This adhesive is applied to both adherents and, when dry, develops a bond when the adherents are brought together without sustained pressure. For the purpose of this section, products that qualify as a contact adhesive using the above definition, and that are labelled exclusively for only one of the following applications, shall not be required to meet the VOC limit for "Contact adhesives" in paragraph (d)(3)(i)(A) of this section.

(1) Single-ply roofing material installation;

(2) Bonding of immersible products; or

(3) Bonding of flexible vinyl to flexible vinyl.

Cove base installation means the installation of cove base (or wall base), which is generally made of vinyl or rubber, on a wall or vertical surface at floor level using an adhesive formulated for that purpose.

Dry wall and panel installation means the installation of gypsum dry wall to studs or solid surfaces using an adhesive formulated for that purpose.

Fiberglass means fine filaments of glass.

Flexible vinyl means nonrigid polyvinyl chloride plastic with at least 5%, by weight, of plasticizer content. A plasticizer is a material, such as a high boiling-point organic solvent, that is incorporated into an adhesive to increase its flexibility, workability, or distensibility, and may be determined using ASTM Method E260–73 or from product formulation data.

Floor covering installation means the installation of wood flooring, indoor carpet, outdoor carpet, resilient tile, cove base, or artificial grass, using an adhesive formulated for that purpose. Ceramic tile is excluded from this category.

Foam means a rigid or spongy cellular mass with gas bubbles dispersed throughout.

Grams of VOC per liter of material means the weight of VOC per volume of material and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_e}{V_m}$$

Where:
W_s=weight of volatile compounds, in grams;
W_w=weight of water, in grams;
W_e=weight of exempt compounds, in grams; and
V_m=volume of material, in liters.

Household adhesive means any adhesive subject to the consumer products regulations in Title 17, Division 3, Subchapter 8.5, §§ 94507–94517, of the California Code of Regulations.

Multipurpose architectural adhesive means any adhesive that is intended by the manufacturer to be applied for the installation, manufacture, or repair of various construction materials to bond architectural structures or appurtenances, including but not limited to drywall, subfloor, panel deck and lumber, seams, fiberglass reinforced plastic, ceiling tile and acoustical tile. Adhesives used to bond uninstalled cabinets, counters and other architectural appurtenances are subject to this adhesive category.

Nonmembrane roof installation/maintenance means any product that is intended for the installation or repair of roofs and that is not intended for the installation of prefabricated single-ply flexible roofing membrane. This category includes plastic or asphalt roof cement, asphalt roof coatings, or cold application cement.

Organic compound means a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

Panel installation means the installation of plywood, pre-decorated hardboard (or tileboard), fiberglass, reinforced plastic, and similar pre-decorated or non-decorated panels to studs or solid surfaces using an adhesive formulated for that purpose.

Percent VOC by weight means the ratio of the weight of the VOC to the weight of the material, expressed as a percentage of VOC by weight. The percent VOC by weight can be calculated as follows:

$$\%\ \text{VOC weight} = \frac{W_v}{W} \times 100$$

Where:
W_v=weight of VOCs in grams; and
W=weight of material in grams.

Plastic cement welding means the use of adhesives made of resins and solvents which are formulated to dissolve the surfaces of plastic to form a bond between mating surfaces.

Plastic foam means a foam constructed of plastics.

Plastics means various synthetic materials chemically formed by the polymerization of organic (carbon-based) substances.

Porous material means a substance which has tiny openings, often microscopic, in which fluids may be absorbed or discharged. Such materials include but are not limited to paper and corrugated paperboard.

Propellant means a fluid under pressure which expels the contents of a container when a valve is opened.

PVC/CPVC welding adhesive means any adhesive intended by the manufacturer to weld polyvinyl chloride (PVC) or chlorinated polyvinyl chloride (CPVC) plastic pipe.

Rubber flooring installation means the installation of flooring material in which both the back and top surfaces are made of synthetic rubber, and may not be in sheet or tile form.

Sealant products mean any material with adhesive properties that is formulated to be used primarily to fill, seal, waterproof, or weatherproof gaps or joints between two surfaces. Sealant products include sealant, primers, and caulks.

Single-ply roof membrane installation/repair means the installing or fixing, mending and/or repairing of a single-ply membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and flashings to vents, pipes, and ducts that protrude through the roof. Repair includes gluing the edges of the tears together, attaching a patch over a hole, and applying flashings to vents, pipes or ducts installed through the membrane.

Structural glazing means the use of an adhesive/sealant to adhere glass, ceramic, metal, stone, or composite panels to exterior building frames.

Subfloor installation means the installation of subflooring material, typically plywood, over floor joists. Subflooring is covered by a finished surface material.

Thin metal laminating means a process of bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than .025 mils.

Tire repair means the expanding of a hole, tear, fissure, or blemish in a tire casing by grinding or grouping, applying adhesive, and filling the hole or crevice with rubber.

VCT means vinyl composition tile.

(3) *Standards.*

(i) *VOC limits.* On and after the dates specified below, a person shall not apply adhesives, adhesive bonding primers, adhesive primers, or sealants which have a VOC content (grams of VOC per liter of adhesive, less water and exempt compounds) in excess of the following limits. The sales prohibition in paragraph (d)(3)(v) of this section shall apply to the following adhesives, adhesive bonding primers, adhesive primers, or sealants except where exempted as indicated in paragraphs (d)(3)(v)(C)–(E) of this section.

TABLE OF VOC LIMITS

Grams VOC/liter adhesive, less water and exempt compounds	1/1/96	1/1/97	1/1/98
Adhesives products:			
Contact adhesives	200		
Floor covering, except ceramic tile installation	150		
Ceramic tile installation	150	130	

TABLE OF VOC LIMITS—Continued

Grams VOC/liter adhesive, less water and exempt compounds	1/1/96	1/1/97	1/1/98
Rubber floor installation	150		
VCT and asphalt tile installation	150		
Multipurpose architectural adhesive	200		
Cove base installation	200	150	
PVC and CPVC welding	850	480	
ABS welding	850	480	
Other plastic cement welding	650	480	
Computer diskette manufacturing	850	.....	550
Nonmembrane roof installation/maintenance	300		
Single-ply roof membrane repair/installation	650	250	
Structural glazing	100		
Other adhesive products	250		
Sealants:			
Architectural and roadways	250		
Single-ply roof membrane material	450		
Nonmembrane roof installation/maintenance	300		
Other sealants	420		
Primers:			
Plastic cement welding primer	850	480	
Adhesive primer	250		
Single-ply roof membrane primer	650	250	
Automotive-glass adhesive primer	700		
Adhesives application onto substrate:			
Wood	30		
Metal	30		
Porous material (except wood)	150	120	
Plastic foam	120		
Fiberglass	200		
Flexible vinyl to flexible vinyl	660	250	
Flexible vinyl to other substrate	250		
Other substrates	250		

If an adhesive is used to bond dissimilar substrates together, except for bonding flexible vinyl to any other substrate, the applicable substrate category with the highest VOC content shall be the limit for that operation. Where more than one limit from the table of VOC limits could apply to a product or application, the first three groups of limits (adhesive products, sealants, and primers) shall be applicable rather than the fourth group of limits (adhesives application onto substrate).

(ii) *Aerosol spray products.* A person shall not use any adhesive aerosol spray unless the VOC content, including the propellant, does not exceed 25 percent by weight.

(iii) *Cleanup solvents.* Solvents used for surface preparation, equipment cleanup, and thinning operations, including storage and disposal of VOC-containing materials, shall be subject to the provisions and requirements of § 52.2961(a).

(iv) *Emission control system.* A person may comply with the provisions of paragraph (d)(3)(i) of this section by using an emission control system, provided that this system maintains a control efficiency (capture efficiency times destruction or removal efficiency) of the VOC emissions of at least 85 (eighty- five) percent by weight.

(v) *Prohibition of sales.*

(A) Except as provided in paragraphs (d)(3)(v)(C) through (E) is this section, no person shall supply, sell, or offer for sale any non-complying adhesive, sealant, or adhesive primer which, at the time of sale, is defined under a product category in the table of VOC limits of this section after the specified effective dates. This provision only applies to products that are supplied to or sold within the affected area.

(B) Except as provided in paragraphs (d)(3)(v)(C) or (E) of this section, no person shall supply, sell, or offer for sale, any adhesive aerosol which, at the time of sale, exceed the VOC limits listed in paragraph (d)(3)(ii) of this section after the specified effective dates.

(C) The sales prohibition in paragraphs (d)(3)(v) (A) and (B) of this section shall not apply to any supplier or seller of any adhesive, sealant, or adhesive primer as follows:

(*1*) Any adhesive shipped outside of the affected area for use outside of the affected area.

(*2*) The sale of adhesives to a person controlling the emissions from use of those adhesives by using an emission control system pursuant to paragraph (d)(3)(iv) of this section.

(D) The sales prohibition in paragraphs (d)(3)(v) (A) and (B) of this section shall not apply to the sale of any adhesive, sealant, or adhesive primer, except plastic cement welding adhesives or primers, if the product is sold in any container(s) having a capacity of 16 ounces or less (net volume) or 1 pound or less (net weight). The total weight or volume of two or more containers packaged together must be less than 1 pound (16 ounces) to qualify for this exemption.

(E) The sales prohibitions in paragraphs (d)(3)(v) (A) and (B) of this section shall not apply to any manufacture of any adhesive, sealant, or primer if the manufacturer has provided an accurate compliance statement and if:

(*1*) The product was not sold directly to a user or a sales outlet located in the affected area, or

(*2*) The product was sold to an independent distributor that is not a subsidiary, or under the direct control of, the manufacturer.

(vi) *Compliance statement requirement.* The manufacturer of any adhesive, sealant, or adhesive primer subject to this determination shall include a designation of maximum VOC content as supplied, including adhesive components, expressed in grams per

liter of adhesive (or pounds per gallon) excluding water and exempt compounds (percent by weight for adhesive aerosols) from the appropriate test method, on labels or data sheets. This designation shall include recommendations regarding thinning, reducing, or mixing with any other VOC-containing material. This statement shall include the maximum VOC on an as-applied basis when used in accordance with the manufacturer's recommendations.

(vii) *Prohibition of specification.* No person shall solicit, require for use, or specify the application of any adhesive, primer, or sealant if such use or application results in a violation of the provisions of this section. This prohibition shall apply to all written or oral contracts.

(4) *Exemptions.*

(i) The provisions of paragraphs (d)(3)(i) and (ii) of this section shall not apply to the following:

(A) Adhesives used in tire repair, provided the label on the adhesive used states:

For Tire Repair Only

(B) Assembly and manufacturing of undersea-based weapon systems.

(C) Testing and evaluation of adhesive or sealant products in any research and development, quality assurance, or analytical laboratories, provided that:

(*1*) A record is kept of:

(*i*) The date when the adhesives, sealants, or adhesive primers are used, and the type of applications(s); and

(*ii*) The amount of adhesives, sealants, and adhesive primers used and the VOC content of such products; and

(*iii*) The amount of solvents used and the VOC content of such solvents.

(*2*) Such records shall be retained in accordance with the provisions of paragraph (d)(5) of this section.

(D) Solvent welding operations used in the manufacturing of medical devices.

(E) Plaque laminating operations where adhesives are used to bond a clear, polyester acetate laminate to wood with lamination equipment installed prior to July 1, 1992. Any person seeking to claim this exemption shall notify EPA in writing that a complying adhesive is not available.

(F) Manufacturing operations of the following products: diving suits, rubber bladders, inflatable boats, life preservers, or other products designed for immersion in water or fuels. The adhesive products used by these operations must be labelled:

For the Bonding of Immersible Products Only

(ii) The provision of this section shall not apply to aerospace components.

(iii) The provisions of this section shall not apply to any adhesive or sealant that contains less than 20 g/L of VOC per liter of adhesive or sealant, less water and less exempt compounds, as applied.

(iv) Paragraph (d)(5) of this section shall not apply to facilities with a combined use of adhesives, sealants, adhesive primers, and solvents used in a total volume of less than 20 gallons on a calendar year basis. Any facility claiming this exemption must have information available, such as purchase orders, that will allow for the verification of facility usage.

(v) Until January 1, 1997, the provisions of paragraphs (d)(3)(i) and (ii) of this section shall not apply to any facility using 3 gallons per day or less of adhesive used exclusively for thin metal laminating operations, provided that the adhesive contains less than 600 grams of VOC per liter of adhesive, less water and less exempt compounds, as applied.

(5) *Reporting and Recordkeeping.* Any source within the affected area that uses greater than 20 gallons of adhesive and/or sealant product per year subject to paragraphs (d)(3)(i)(A)–(C) of this section shall comply with the following requirements:

(i) Maintain a current file of each adhesive, sealant, adhesive primer, and solvent in use and in storage. The file shall provide all of the data necessary to evaluate compliance and shall include, but not be limited to, the following information, as applicable:

(A) A data sheet or material list giving material name, manufacturer identification, and material application;

(B) Any catalysts, reducers, or other components used and the mix ratio; and

(C) The VOC content limit or vapor pressure limit from paragraph (d)(3) of this section and the actual VOC content, as applied, or vapor pressure of the adhesive, sealant, primer, or solvent.

(ii) Maintain records of the monthly volume of each adhesive, sealant, primer, or solvent used.

(iii) Any person using an emission control system as a means of complying with this section shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with VOC content of coating requirements such as temperatures, pressures, and flowrates.

(iv) All records shall be maintained for at least five years and shall be available for inspection and provided to EPA upon request.

(6) *Test Methods.* For the purpose of this section, the following test methods shall be used:

(i) *VOC content.*

(A) The VOC content of aerosol adhesives and sealants shall be determined by EPA Method 24 (40 CFR part 60, appendix A);

(B) The VOC content of aerosol adhesives or aerosol adhesive primers shall be determined using South Coast Air Quality Management District (SCAQMD) Test Method 305 for Aerosol Coatings;

(C) The VOC content of emissions shall be determined by EPA Method 18 (40 CFR part 60, appendix A); and

(E) The exempt compound content of coatings shall be determined by ASTM Test Method D–4457–85.

(ii) *Determination of collection efficiency of emission control systems.*

(A) *Capture efficiency.* The efficiency of the collection device of an emission control system, as specified in paragraph (d)(3)(iv) of this section, shall be determined by the EPA method described at § 52.741(a)(4)(iii).

(B) *Destruction or removal efficiency.* The efficiency of the control device, as specified in paragraph (d)(3)(iv) of this section, shall be determined by the EPA method described at § 52.741(a)(4)(iv). The VOC content measured and calculated as carbon in the control device exhaust gases shall be determined by EPA Method 25 or 25A (40 CFR part 60, appendix A).

(iii) The active and passive solvent losses from spray gun cleaning systems shall be determined using SCAQMD's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems," dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm of Hg at 20 °C, and the minimum test temperature shall be 15 °C.

(iv) The test method used to determine plasticizer content and flexible vinyls shall be ASTM Method E260–73, "General Gas Chromatography Procedures."

(e) *Can and Coil Coating Operations.*

(1) *Applicability.* This section shall apply to all metal container, metal closure, and metal coil coating operations within the affected area except as specified in paragraph (e)(4) of this section. For the purposes of this

section, the affected area is the Sacramento Metro Area for ozone as described at 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraph (e) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Closure means any component which is used to close or seal a filled can, jar, or bottle.

Coating applicator means an apparatus used to apply a surface coating.

Coating line means an operation or process for applying, drying, or baking and/or curing surface coating, together with associated equipment, including a coating applicator, flash-off area, and oven.

Coil means any flat metal sheet or strip that is rolled or wound in concentric rings.

Container means any metal can, drum, pail, or tube.

Drum means any cylindrical metal shipping container larger than 12 gallons capacity but no larger than 110 gallons capacity.

End sealing compound means a compound which is coated onto can ends and which functions as a gasket when the end is assembled onto the can.

Exterior base coating means a coating applied to the exterior of a can body, end, or flat sheet to provide protection to the metal or to provide background for any lithographic or printing operations.

Exterior end coating means a coating applied to the exterior end of a can to provide protection to the metal.

Food/beverage can means a metal container in which food or beverages intended for human or animal consumption are packaged.

Hand application method means the application of coating by manually held, non-automatic equipment. Such equipment includes paint brush, hand roller, trowel, spatula, dauber, rag, and sponge.

High-volume, low-pressure (HVLP) spray means a coating application system which is designed to be operated at air and fluid supply pressures to the gun of between 0.1 and 10.0 pounds per square inch gauge (psig).

Ink means any coating used in any operation that imparts color, design, alphabet, or numerals on an exterior surface of a metal container, metal closure, or metal coil.

Interior base coating means a coating applied to the interior of a can body, end, or flat sheet to provide a protective lining between the product and the can.

Interior body spray means a coating sprayed on the interior of the can body to provide a protective film between the product and the can.

Metal container, metal closure, and metal coil coating means any coating containing organic materials and applied by spray, roller, or other means to the inside and/or outside surfaces of metal cans, drums, pails, lids, closures, or to the surface of flat metal sheets, strips, rolls, or coils for further industrial or commercial use.

Necker lubricant means any fluid or solid lubricant applied to a can forming tool to reduce friction while reducing the can diameter to form a neck.

Overvarnish means a coating applied directly over a design coating to reduce the coefficient of friction, to provide gloss, and to protect the finish against abrasion and corrosion.

Pail means any cylindrical metal shipping container of from 1-gallon to 12-gallon capacity and constructed of 29 gauge or heavier material.

Solvent cleaning operation means the removal of loosely held uncured adhesives, uncured inks, uncured coatings, and contaminants which include, but are not limited to, dirt, soil, and grease from parts, products, tools, machinery, equipment, and general work areas. Each distinct method of cleaning in a cleaning process which consists of a series of cleaning methods shall constitute a separate solvent cleaning operation.

Three-piece can side seam spray means a coating sprayed on the exterior and/or interior of a welded, cemented, or soldered seam to protect the exposed metal.

(3) *Standards.*

(i) *VOC limits.* On and after January 1, 1996, a person shall not use or apply any coating on any coating line of the type designated below which contains any volatile organic compound in excess of the following limits:

Coating	VOC limits—Grams per liter of coating, less water and exempt compounds	
	g/L	lb/gal
Can coating lines:		
Three-piece can sheet basecoat (exterior and interior and overvarnish)	180	1.5
Two-piece can exterior basecoat and overvarnish	250	2.1
Inks	300	2.5
Can interior body spray:		
Two-piece can	420	3.5
Three-piece can	310	2.6
Three-piece can side seam spray	660	5.5
End sealing compound:		
Food/beverage cans	440	3.7
Non-food cans	0	0
Drums, pails, and lids—		
New:		
Exterior	340	2.8
Interior	420	3.5
Reconditioned:		
Exterior	420	3.5
Interior	510	4.2
Necker Lubricants	100	0.8
Coil coating	200	1.7

(ii) *Emission control system.* Owners and/or operators may comply with paragraph (e)(3)(i) of this section by using an emission control system, provided that the VOC emissions from such operations and/or materials are reduced in accordance with the following provisions:

(A) The control device shall maintain a destruction or removal efficiency of the emissions from an emission collection system of at least 95 (ninety-five) percent, by weight; and

(B) The emission collection system which collects and transports emissions to the air pollution control device(s) shall maintain a capture efficiency of at least 90 (ninety) percent, by weight, of the emissions generated by the sources of emissions.

(iii) *Transfer Efficiency.* A person or facility shall not coat unless the coating is applied with properly operating equipment according to operating procedures specified by the equipment manufacturer or EPA, and by the use of one of the following application methods:

(A) Electrostatic application;

(B) Flow coat;

(C) Roll coat;

(D) Dip coat;

(E) High-volume, low-pressure (HVLP) spray;

(F) Hand application methods; or

(G) Other coating application methods that are demonstrated to have a transfer efficiency at least equal to HVLP spray equipment in the application, and which are used in such a manner that the parameters under which they were tested are permanent features of the method. Such coating application methods shall be approved in writing by EPA.

(iv) *Cleanup Solvent Use.* Solvents used for surface preparation, equipment cleanup, and thinning operations, including storage and disposal of VOC-containing materials, shall be subject to the provisions and requirements of § 52.2961(a), solvent cleaning operations.

(v) *Prohibition of sale.* A person shall not sell or offer for sale for use in the affected area any coating which contains VOCs in excess of the limits specified in this section for any application governed by this section unless the label on the product or the data sheets for the product clearly bear the warning that the coating shall not be used unless compliance with this section can be achieved.

(vi) *Prohibition of specification.*

(A) A person shall not solicit or require any other person to use, in the affected area, any coating or combination of coatings to be applied to any metal container, metal closure, or metal coil subject to the provisions of this section that does not meet the limits and requirements of this section.

(B) The requirements of paragraph (e)(3)(vi)(A) of this section shall apply to all written or oral agreements executed, entered into, or renewed.

(4) *Exemptions.* The provisions of this section shall not apply to the spray coating of 1 gallon per day or less of coatings at a single facility.

(5) *Reporting and recordkeeping requirements.* Any person subject to this section shall comply with the following requirements:

(i) Maintain and have available during an inspection, the listed category of each of the coatings and the type of metal container, metal closure, and/or metal coil to which each coating was applied.

(ii) Maintain and have available during an inspection, a current list of coatings in use which provides all of the coating data necessary to evaluate compliance, including the following information, as applicable:

(A) Coating, catalyst, additives, and reducer used;

(B) Mix ratio of components used; and

(C) VOC content of coating as applied.

(iii) Maintain records on a daily basis including the following information:

(A) Coating and mix ratio of components in the coating used; and

(B) Quantity of each coating applied.

(iv) Control equipment records. Any person using an emission control system as a means of complying with this section shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities. Key system operating parameters are those necessary to ensure compliance with paragraph (e)(3)(ii) of this section such as temperatures, pressures, and flowrates.

(v) All records shall be retained at the facility for at least five years and shall be made available to EPA upon request.

(6) *Test methods.* For the purpose of this section, the following test methods shall be used:

(i) VOC content.

(A) The VOC content of coatings subject to the provisions of this section shall be determined by EPA Method 24 (40 CFR part 60, appendix A).

(B) The VOC content of emissions shall be determined by EPA Method 18 (40 CFR part 60, appendix A).

(C) The exempt compound content shall be determined by ASTM Test Method D–4457–85.

(ii) Determination of efficiency of emission control systems.

(A) The efficiency of the collection device of the emission control system as specified in paragraph (e)(3)(ii)(B) of this section shall be determined by the EPA method described at § 52.741(a)(4)(iii).

(B) The efficiency of the control device, as specified in paragraph (e)(3)(ii)(A) of this section, shall be determined by the EPA method described at § 52.741(a)(4)(iv). The VOC content measured and calculated as carbon in the control device exhaust gases shall be determined by EPA Method 25 or 25A (40 CFR part 60, appendix A).

(iii) Transfer Efficiency. The transfer efficiency for other coating application methods as defined in paragraph (e)(3)(iii)(G) of this section, shall be determined in accordance with the South Coast Air Quality Management District (SCAQMD) test method for determining transfer efficiency entitled "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989." This transfer efficiency method is approved for the limited purpose of comparing alternative application technologies under controlled conditions. The results of these tests are not transferable to a production setting. The test method is not acceptable for determining transfer efficiency to establish VOC emission reduction credits to allow the use of higher VOC coatings, or to establish VOC credits for trading or offset purposes.

(f) *Commercial bakeries.*

(1) *Applicability.* Except as provided in paragraph (f)(4) of this section, this section is applicable to bakery ovens which bake yeast-leavened products. For the purposes of this section, the affected area is the Sacramento Metro Area for ozone as described at 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraph (f) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Bakery oven means a convection oven which bakes yeast-leavened products, including but not limited to breads, buns, and rolls.

Fermentation time means the elapsed time between adding yeast to dough or sponge and placing the dough or sponge into an oven, expressed in hours.

Yeast percentage means the pounds of yeast added to a hundred pounds of total flour in the recipe.

(3) *Standards.*

(i) On and after January 1, 1997, no person shall operate a bakery oven subject to this section, unless VOC emissions are controlled using an air pollution control system which:

(A) Has been installed in accordance with an Authority to Construct issued by the applicable local air pollution control district or air quality management district; and

(B) Includes an emission collection system(s) which ducts the exhaust gases from all stacks and/or vents on all ovens to a VOC emission control device(s). Such ducting shall be maintained so as to be free of visible holes, breaks, openings or separations between adjoining components from which fugitive VOCs would be emitted to the atmosphere; and

(C) Has one or more VOC emission control devices, each with a destruction or removal efficiency of at least 95 percent by weight.

(ii) For an oven which commences construction on or after January 1, 1995, owners and operators shall be in compliance with paragraph (f)(3)(i) of this section by the date of commencement of oven operation.

(4) *Exemptions.*

(i) The provisions of this section shall not apply to bakery ovens which are located at a facility where the combined rated heat input capacity of all ovens is less than 2 million British Thermal Units (BTUs) per hour.

(ii) The provisions of this section shall not apply to ovens used exclusively for the baking of products leavened chemically without yeast.

(iii) The provisions of paragraph (f)(3) of this section shall not apply to bakery ovens which are located at a facility where the uncontrolled actual emissions of VOCs from all ovens combined is less than 6.5 tons per year.

(5) *Reporting and Recordkeeping.* A person operating a bakery oven subject to this section shall maintain records in accordance with the following:

(i) Maintain current records necessary to determine emissions for each oven including, but not limited to, type of each yeast-leavened baked product, yeast percentage for each product, and fermentation time for each product;

(ii) Maintain monthly records of production rates, by weight, of finished baked product for each yeast-leavened product; and

(iii) For control equipment subject to paragraph (f)(3) of this section, maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities. Key system operating parameters are those necessary to ensure compliance with paragraphs (f)(3) (i) and (ii) of this section such as temperature, pressure, and flow rates.

These records shall be maintained on site for at least five years and shall be made available to EPA upon request.

(6) *Test Methods.*

(i) For the purposes of this section, VOC emission factors for each yeast-leavened bakery product shall be determined in accordance with the table of bakery emission factors in this section. Annual emission rates shall be calculated by using those emission factors and the annual production rate for each yeast-leavened finished bakery product. Alternatively, VOC emission factors for any yeast-leavened bakery product may be determined by the method(s) specified in paragraph (f)(6)(ii) of this section, together with exhaust flow rates and oven throughput.

(ii) Measurement of VOC emission control device efficiency subject to paragraph (f)(3)(i)(C) of this section shall be conducted in accordance with the EPA method described at § 52.741(a)(4)(iv). The VOC content measured and calculated as carbon in the control device exhaust gases shall be determined by EPA Method 25 or 25A (40 CFR part 60, appendix A).

TABLE OF BAKERY EMISSION FACTORS

Yt[a]	Emission factor[b]	Yt[a]	Emission factor[b]	Yt[a]	Emission factor[b]
1.0	0.8488	11.0	5.2947	21.0	9.7405
1.5	1.0711	11.5	5.5170	21.5	9.9628
2.0	1.2934	12.0	5.7393	22.0	10.1851
2.5	1.5157	12.5	5.9616	22.5	10.4074
3.0	1.7380	13.0	6.1839	23.0	10.6297
3.5	1.9603	13.5	6.4061	23.5	10.8520
4.0	2.1826	14.0	6.6284	24.0	11.0743
4.5	2.4049	14.5	6.8507	24.5	11.2966
5.0	2.6272	15.0	7.0730	25.0	11.5189
5.5	2.8495	15.5	7.2953	25.5	11.7412
6.0	3.0718	16.0	7.5176	26.0	11.9635
6.5	3.2941	16.5	7.7399	26.5	12.1857
7.0	3.5163	17.0	7.9622	27.0	12.4080
7.5	3.7386	17.5	8.1845	27.5	12.6303
8.0	3.9609	18.0	8.4068	28.0	12.8526
8.5	4.1832	18.5	8.6291	28.5	13.0749
9.0	4.4055	19.0	8.8514	29.0	13.2972
9.5	4.6278	19.5	9.0737	29.5	13.5195
10.0	4.8501	20.0	9.2959	30.0	13.7418
10.5	5.0724	20.5	9.5182		

[a] Yt=(Yeast Percentage) × (Fermentation Time)
If yeast is added in two steps:
Yt=(percentage of initial yeast addition) × (time from initial yeast addition to placement in oven)
+(percentage of second yeast addition) × (time from second yeast addition to placement in oven)
[b] Emission Factor=pounds of VOC per ton of finished baked product.

(g) *Municipal solid waste landfills.*

(1) *Applicability.* This section shall apply to all municipal solid waste (MSW) landfills with a maximum design capacity of greater than 111,000 tons of solid waste, although facilities that have received less than 500,000 tons of decomposable solid waste during their operational lifetime are only subject to the requirements of paragraph (g)(5)(i) of this section. The refuse density shall be assumed to be 1,300 pounds per cubic yard and the decomposable fraction shall be assumed to be 70% by weight unless other site-specific factors are submitted to and approved by EPA. For the purposes of this section, the affected area refers to the Sacramento Metro Area for ozone as described at 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraph (g) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Active landfill means any MSW landfill which received waste at any time during the past six months.

Baseline condition means there are no leaks existing at:

(1) Any location on the surface of the landfill covered by final cover;

(2) Any location on the surface of the landfill which has been covered by intermediate cover for over 6 months; and

(3) Any location along the gas transfer path of the gas collection system.

Control device means any device that disposes of the collected gas by one or more of the following means: combustion, gas treatment and subsequent sale, sale and processing off site, or other equivalent methods.

Decomposable solid waste means any material which is not non-decomposable inert solid waste.

Design capacity means the maximum amount of waste a landfill can accept, as specified in the construction permit issued by the county or State agency responsible for regulating the landfill.

Destruction/treatment efficiency means a measure of the ability of the control device to combust, transform, or otherwise prevent the emissions to the atmosphere of non-methane organic compounds in landfill gas, expressed as a percentage.

Energy recovery equipment means any equipment that uses landfill gas to produce useful energy.

Excavation means any movement of landfill cover that triggers notification requirements of any government agency.

Final cover means cover material that is applied on areas where additional cells are not to be constructed and, therefore, must be highly resistant to erosion.

Gas collection system means a series of collectors and associated piping and equipment which provides a gas transfer path to the control device.

Gas transfer path means the piping, pumps, and other equipment used to transfer evolved landfill gas from the point of gas evolution through the control device.

Household waste means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Industrial solid waste means solid waste generated by manufacturing or industrial processes, that is not a hazardous waste regulated under subtitle C of the Resource Conservation and Recovery Act (42 U.S.C. 6901–6992k). Such waste may include, but is not limited to, the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

Intermediate cover means cover material that is applied on areas where additional cells are not to be constructed for extended periods of time and, therefore, must resist erosion for a longer period of time than daily cover.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

Landfill gas means any gas derived through a natural process through the decomposition of organic waste deposited in a landfill or from the evolution of volatile organic species in the waste.

Leak means any point where the concentration of total organic compounds measured as methane exceeds 1000 ppm by volume except non-repeatable momentary readings.

Leak free means the absence of the evidence of "leaks."

Municipal solid waste (MSW) landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive commercial waste, sludges, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned.

Non-decomposable inert solid waste means materials which do not degrade biologically to form landfill gas. Examples include, but are not limited to: earth, rock, concrete, clay products, inert tailings, plaster board, glass, inert slag, asbestos, and demolition materials containing less than 10% by volume wood and metals.

Non-methane organic compounds (NMOC) means any compound in a gaseous state at standard temperature and pressure which contains at least one atom of carbon except: methane, carbon monoxide, carbon dioxide, metallic carbides, carbonates, and carbonic acid, as measured according to paragraph (g)(6) of this section.

Non-repeatable, momentary readings means indications of the presence of organic gases using a detector meeting the apparatus requirements of EPA Method 21 (40 CFR part 60, appendix A) which persist for less than 5 seconds and do not recur when the sampling probe is placed in the same location for at least twice the response time of the instrument.

Owner means the fee owner of a solid waste disposal site and the person who through lease, or other arrangement with the fee owner is responsible for complying with all applicable federal, state and local requirements for landfill gas emissions, provided that upon the expiration of such person's responsibility for landfill gas emissions under such lease or other arrangement the fee owner shall be deemed the owner. Where specific requirements of this section apply to equipment at the MSW landfill that is owned or operated by a second party other than the fee owner, the second party shall be deemed the owner for the purpose of such section requirements as they relate to such equipment.

Perimeter means the outer boundary of the MSW landfill property.

Quarter means the months that define a "quarter." These are: January, February and March (1st quarter ends on March 31); April, May and June (2nd quarter ends on June 30); July, August and September (3rd quarter ends on September 30); and October, November and December (4th quarter ends on December 31).

Sludge means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

Solid waste means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit requirements under 33 U.S.C. 1342, or sources of special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*)

(3) *Standards.*

(i) *Gas collection system.*

(A) The owner shall install and operate a gas collection system which prevents overdraw that can cause fires or damage to the collection system while collecting, in each quarter, at least 90% of the target volume established for that quarter.

(B) The owner shall use the procedures in paragraph (g)(6)(i) of this section to establish baseline conditions. The owner may re-establish baseline conditions using the procedures in paragraph (g)(6)(i) of this section at any time. Each time that baseline conditions are achieved, the owner shall measure and record:

(*1*) The baseline gas collection flowrate, in standard cubic feet per minute (SCFM) for the entire landfill; and

(*2*) The baseline oxygen concentration in the collected landfill gas stream at the inlet to the control device before adding combustion air.

The owner shall notify EPA at least five days prior to each establishment of baseline conditions so that EPA personnel may be on site to confirm that baseline conditions exist.

(C) The owner shall measure and record the oxygen concentration at the inlet to the control device on at least four days each week. Each sampling run shall last at least twice the response time of the analyzer. Each sampling run shall establish the oxygen concentration

for all preceding hours retroactive to the hour of the previous measurement.

(D) The owner shall monitor the total gas collection flowrate for the landfill at least once every 15 minutes and keep records at least once per hour. A chart recorder may be used for this purpose.

(E) Within two weeks after the end of each quarter the owner shall determine the overall effectiveness of the gas collection system for the past quarter. To make such a determination, the owner shall meet the following requirements.

(*1*) The owner shall establish a quarterly target for the volume of landfill gas to be collected. The target volume shall be the time-weighted average of all baseline collection flowrates (SCFM) established pursuant to paragraph (g)(3)(i)(B) of this section during the quarter, multiplied by the number of minutes in the quarter. The volume is calculated as follows:

Quarterly target volume=

$$\frac{\sum_{t=1}^{i} SCFM_i t_i \times \sum_{t=1}^{i} t_i}{\sum_{t=1}^{i} t_i}$$

or simply,

$$\sum_{t=1}^{i} SCFM_i t_i$$

(*2*) Each hourly flowrate record during which the measured oxygen concentration (established in paragraph (g)(3)(i)(C) of this section) exceeds the current baseline oxygen concentration (established in paragraph (g)(3)(i)(B)(*2*) of this section) by a measured value greater than 2% oxygen, shall be corrected using the following equation:

$$\text{Corrected Flow} = \text{Measured Flow} \times \left(\frac{20.9 - O_2 \text{ measured } (\%)}{20.9 - O_2 \text{ baseline } (\%)} \right)$$

(*3*) The owner shall use this corrected flowrate data to calculate the total volume of gas collected for the quarter.

(F) If the volume of gas collected in any quarter is less than 90% of the target volume established for that quarter, the owner shall be in violation of this section and shall re-establish baseline conditions pursuant to paragraph (g)(3)(i)(B) of this section within the first two weeks of the following quarter.

(G) Notwithstanding the requirements of paragraph (g)(3)(i)(F) of this section, the owner of any active landfill shall re-establish baseline conditions pursuant to paragraph (g)(3)(i)(B) of this section at least once every six months.

(H) The owner shall install and operate a gas collection system that effectively captures the gas that is generated within the landfill. The collection system shall:

(*1*) Be designed to handle the maximum expected gas flowrate over the lifetime of the gas control or treatment system equipment from the entire area of the landfill that warrants control. For the purposes of calculating the maximum expected gas generation flowrate from the landfill to determine compliance, the following equation shall be used:

$$Q_m = 2 L_o R \left(1 - e^{-kt}\right)$$

where

Q_m=maximum expected gas generation flow rate, m^3/yr;

L_o=refuse methane generation potential, m^3/Mg refuse;

R=average annual acceptance rate, Mg/yr;

k=methane generation rate constant, yr^{-1}; and

t=age of the landfill plus the gas mover equipment life or active life of the landfill, whichever is less, in years.

A value of 230 m^3/Mg shall be used for L_o. A value of 0.02 $year^{-1}$ shall be used for k. A value of 15 years shall be used for gas mover equipment life. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(*2*) Collect gas from each area, cell, or group of cells in the landfill in which refuse has been placed for a period of two years or more. For the purposes of calculating the area of influence of the gas collection system to determine compliance, the owner shall use the EPA method.[32]

(*3*) Collect gas at a sufficient extraction rate. For the purpose of demonstrating whether the gas collection system flowrate is sufficient to determine compliance, the owner shall measure gauge pressure in the gas collection header. If a positive pressure exists, the gas collection system flowrate shall be increased until a negative pressure is measured. If the gauge pressure at a wellhead is positive, the valve shall be opened to restore negative pressure. If negative pressure cannot be achieved, an additional well shall be added.

(I) The owner shall:

(*1*) Maintain, monitor, operate, and improve as necessary the gas collection system and landfill cover to prevent leaks from:

(*i*) All locations on the surface of the landfill covered by final cover·

(*ii*) All locations on the surface of the landfill which have been covered by intermediate cover for over six months; and

(*iii*) All locations along the gas transfer path of the gas collection system.

When a leak is identified, it shall be conspicuously tagged with a marker which displays the date of identification. The marker shall not be removed until the leak is repaired. (Markers placed by EPA personnel may be removed only by EPA personnel, except as necessary during the repair of leaks.) Within 15 calendar days of identification, each leak shall be repaired to a leak-free state unless such repair requires excavation. Where repair requires excavation, the owner shall submit an excavation plan for approval by EPA which shows that repairs will be made promptly and which specifies the expected date of completion. The owner is in violation of this section if the leak is not repaired within 15 calendar days of identification, or if an excavation plan is not submitted to EPA within 15 calendar days after the date of identification.

(*2*) Repair leaks to a leak-free state using at least one of the following methods:

(*i*) Increasing the collection rate of existing wells.

(*ii*) Repairing the landfill cover.

(*iii*) Installing additional collection wells.

(*iv*) Repairing the gas transfer path.

(J) Whenever previously buried waste is brought to the surface during installation or preparation of wells, trenches, piping, or other equipment, or when solid waste is to be excavated and moved, the owner shall cover the excavated waste using fresh soil, plastic sheeting, vapor retarding foam, or other

[32] Proposed rule published in the **Federal Register** of May 30, 1991 (56 FR 24511).

California Integrated Waste Management Board approved "Alternate Daily Cover," by the end of the working day or as necessary to prevent a public nuisance.

(ii) *Control equipment.* All landfill gases collected pursuant to this section shall be processed using control devices that meet the following requirements:

(A) All control devices shall meet either of the following requirements:

(*1*) Have a non-methane organic compound (NMOC) destruction/treatment efficiency of at least 98% by weight; or

(*2*) Reduce the NMOC concentration at the outlet of the control device to 30 ppm measured as methane and corrected to 3% oxygen.

(B) Open flares used as control devices shall be designed and operated in accordance with § 60.18.

(C) The owner shall demonstrate that each control device meets the requirements of this section using the source testing procedures in paragraphs (g)(6) (iv) and (vi) of this section. Source testing shall be performed when the device begins operation. Flares shall be source tested to demonstrate continuing compliance every two years thereafter. All other control devices shall be source tested annually to demonstrate continuing compliance.

(iii) *Violations.* Failure to comply with any provision of this section shall constitute a violation of the section.

(iv) *Compliance schedule.*

(A) The owner of any MSW landfill subject to the requirements of this section shall demonstrate compliance with this section no later than July 1, 1997.

(4) *Exemptions.*

(i) This section shall not apply to sites that have received only hazardous waste.

(ii) The provisions of paragraph (g)(3)(ii) of this section shall not apply to control devices for which a construction permit was issued by the applicable air pollution control district or air quality management district before March 1, 1995, provided that the control device has a NMOC destruction/treatment efficiency of at least 90% by weight or reduces the NMOC concentration at the outlet of the control device to 30 ppm or less measured as methane corrected to 3% oxygen, and annual source testing for NO_X, CO and NMOC is performed simultaneously using the procedures in paragraphs (g)(6)(iv) and (vi) of this section.

(5) *Reporting and Recordkeeping.* The following reporting requirements shall each apply independently:

(i) Each owner of an MSW landfill having a maximum design capacity greater than 100,000 megagrams (Mg) (111,000 tons) shall submit an initial design capacity report to EPA.

(A) The initial design capacity report shall contain the following information:

(*1*) A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where refuse may be landfilled according to the provisions of the state or county permit;

(*2*) The maximum design capacity of the landfill. Where the maximum design capacity is specified in the state or county construction or Resource Conservation and Recovery Act (RCRA) permit, a copy of the permit specifying the maximum design capacity may be submitted. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity must be calculated using good engineering principles. The calculations must be provided, along with such parameters as depth of refuse, refuse acceptance rate, and compaction practices. The state, county, or EPA may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.

(B) An amended design capacity report must be submitted to EPA providing notification of any increase in the size of the landfill, whether the increase results from an increase in the permitted area or depth of the landfill, a change in the operating procedures, or any other means which results in an increase in the maximum design capacity of the landfill. The amended design capacity report must be submitted within 90 days of the issuance of an amended construction or operating permit, or the actual use of additional land, or the change in operating procedures which will result in an increase in maximum design capacity, whichever comes first.

(ii) Each owner who installs a gas collection system and/or control system described in paragraph (g)(3) of this section, shall perform an initial performance test as described in § 60.8. The initial performance test report shall include, but not be limited to, the following:

(A) A diagram of the collection system showing vertical extraction well spacing, including the locations of any areas excluded from collection and the proposed sites for the future addition of wells;

(B) The documentation of the presence of asbestos for each area from which collection wells have been excluded based on the presence of asbestos;

(C) The sum of the gas generation rates for all areas from which collection wells have been excluded based on the presence of nondegradable materials and the calculations of the gas generation rate for each excluded area; and

(D) The provisions for increasing gas mover capacity with increased gas generation rate, if the present gas mover is inadequate to move the maximum flowrate expected over the life of the landfill.

(iii) Each owner of a controlled landfill shall, within 48 hours, report to EPA by telephone any malfunction, shutdown, or other event causing a reduction in the gas collection rate.

(iv) If any portion of the gas collection system is shut down which results in a gas collection flowrate of less than 80% of the target volume for longer than 24 hours due to scheduled or unscheduled maintenance activities, equipment breakdown, or any other reason, the owner shall notify EPA by telephone within 48 hours of the detection of such shutdown. A written follow-up report shall be forwarded to EPA within 15 calendar days describing the duration and reason for the shut down.

(v) Each owner of a controlled landfill shall submit a closure report to EPA. For the purposes of this section, closure means that refuse is no longer being placed in the landfill, and that no additional wastes will be placed into the landfill without filing a notification of modification. EPA may request such additional information as may be reasonably necessary to verify that permanent closure has taken place.

(vi) Each owner of a controlled landfill shall submit an equipment removal report to EPA prior to removal or cessation of operation of the control equipment.

(A) The equipment removal report shall contain the following items:

(*1*) A copy of the closure report submitted in accordance with paragraph (g)(5)(v) of this section;

(*2*) A copy of the initial performance test report demonstrating that the 15-year minimum control period has expired; and

(*3*) Dated copies of the three successive NMOC emission rate reports demonstrating that the landfill is no longer emitting above the level of the standard.

(B) EPA may request such additional information as may be reasonably necessary to verify that all of the conditions for removal have been met.

(vii) The following records shall be maintained in written form at the MSW landfill for a period of five years from

the date of each entry and shall be made available to EPA upon request:

(A) Records of the gas collection flowrate, in SCFM, and the oxygen concentration, for each time that baseline conditions are established.

(B) Records of continuous measurements (at least hourly records or a chart record) of the total gas collection flowrate, in SCFM, including notes describing the reasons for down-time.

(C) Records of the oxygen concentration measured at the inlet to the control device before adding combustion air (readings on at least four days per week).

(D) Records of all surface monitoring including the date, time, weather conditions, areas sampled, calibration records, and test results. Test results shall include the approximate location of each detected leak, the date of detection, the date of correction, and the repair method used.

(E) A map indicating the location of areas with intermediate cover and areas with final cover. The map shall indicate the date of cover placement for each area with intermediate cover.

(F) All records of perimeter well testing.

(G) Where an owner subject to the provisions of this paragraph seeks to demonstrate compliance with paragraph (g)(3)(i)(H) of this section:

(1) The calculated maximum expected gas generation flowrate using the method described in paragraph (g)(3)(i)(H)(*1*) of this section.

(2) The calculated area of influence of the extraction wells.

(3) Gauge pressure in the gas collection header at the point where each well is connected to the gas collection header pipe.

(H) Where an owner subject to the provisions of this paragraph seeks to demonstrate compliance through use of an enclosed combustion device:

(1) The average combustion temperature measured every 15 minutes and averaged over the same time period of the performance testing.

(2) The percent reduction of NMOC achieved by the control device.

(I) Where an owner subject to the provisions of this paragraph seeks to demonstrate compliance through use of a boiler:

(1) A description of the location at which the process vent stream is introduced into the boiler or process heater;

(2) The average combustion temperature of the boiler or process heater with a design heat input capacity of less than 44 MW (150 million Btu/hr) measured at least every 15 minutes and averaged over the same time period of the performance testing.

(J) Where an owner subject to the provisions of this paragraph seeks to demonstrate compliance through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flowrate measurements, and exit velocity determinations made during the performance test, continuous records of the flare pilot flame monitoring, and records of all periods of operations during which the pilot flame is absent.

(K) Source test reports showing the NMOC destruction/treatment efficiency and emissions in units of pounds per million BTU of heat input for the control device.

(viii) *Operation and maintenance plan.* The owner shall prepare and adhere to an operation and maintenance plan. The plan shall be revised at least once every six months to reflect operating experience and changing site conditions. The plan shall be submitted to EPA upon request. This plan shall at a minimum contain:

(A) An engineering evaluation of the expected landfill gas generation rate, and design specifications for the gas collection system. Data concerning waste type, volume, tonnage and age shall be included if available.

(B) A map showing the location, spacing and depths of collection wells and/or trenches, and the direction of flow through the header system to the control device.

(C) A map indicating areas of steep slopes and any other safety hazards to personnel performing the surface emissions testing.

(D) Sampling and analysis methods to be used by the owner to meet the requirements of this section.

(E) Specific techniques to ensure that overdraw is minimized. These may include a schedule for periodic temperature measurements at wellheads and a schedule for periodic gas sampling including gas analysis methods.

(F) A schedule detailing inspection and maintenance intervals including dates and durations of expected system shutdowns.

(G) Written justification for less than continuous operation of the gas collection system.

(H) Operating procedures including system start-up, balancing, optimization, and shutdown.

(I) Qualifications and training requirements for on-site personnel.

(J) Safety precautions, protective clothing and equipment requirements, and emergency procedures.

(6) *Test Methods.*

(i) The following procedures shall be used to establish baseline conditions pursuant to paragraph (g)(3)(i)(B) of this section:

(A) The gas collection rate and landfill surface integrity shall be evaluated and brought to baseline conditions by testing for leaks and repairing all such leaks using the repair methods listed in paragraph (g)(3)(i)(H)(*1*) of this section. Surface leak testing shall be performed using an instrument which meets the apparatus specifications of EPA Method 21 (40 CFR part 60, appendix A). The instrument shall be calibrated before and after each test using zero air and an approximate 500 ppm methane standard calibration gas in accordance with the instrument manufacturer's recommendations.

(B) Surface leak testing shall be performed by holding the detector probe 2 inches from the landfill surface while walking a pattern of parallel paths not more than 50 feet apart over all surface areas specified in paragraph (g)(3)(i)(H)(*1*) of this section. Cracks, holes, and other breaches in the surface as well as areas where buried waste interfaces with undisturbed, native soil shall also be evaluated. The owner is not required to monitor surfaces on steep slopes and other areas posing a hazard to testing personnel; however, leaks identified in such areas are not exempt from the provisions of paragraph (g)(3)(i)(H) of this section.

(C) Surface leak testing shall be performed only when the average wind speed is less than 5 miles per hour and instantaneous wind speed is less than 10 miles per hour, unless EPA approves alternate wind speed limits based on demonstrated recurrent site-specific conditions. Average wind speed shall be determined on a 10 minute average using an on-site anemometer with a continuous recorder. Surface testing shall not be conducted when the surface is wet or when there has been rain during the preceding 72 hours. Surface testing of landfill surfaces that are normally wet (i.e., a golf course) may be performed when the surface is wet. EPA personnel may randomly identify leaks without regard to the above wind speed and surface condition requirements.

(D) EPA Method 21 (40 CFR part 60, appendix A) shall be used to determine leaks along the gas transfer path.

(ii) EPA Method 2D (40 CFR part 60, appendix A) shall be used for the flowrate measurements required by paragraphs (g)(3)(i)(B)(*1*) and (g)(3)(i)(D) of this section.

(iii) EPA Method 3A (40 CFR part 60, appendix A) shall be used for the oxygen concentration measurements

required by paragraphs (g)(3)(i)(B)(*2*) and (g)(3)(i)(C) of this section.

(iv) The non-methane organic compound destruction/treatment efficiency of a control device shall be determined using the following equation:

$$\text{Efficiency} = \left(1 - \left(\frac{\text{NMOC}_{out} \times \text{exhaust flow}}{\text{NMOC}_{in} \times \text{inlet flow}}\right)\right) \times 100\%$$

where:

$NMOC_{out}$ = the measured concentration as methane of non-methane organic compounds in the exhaust, and

$NMOC_{in}$ = the measured concentration as methane of non-methane organic compounds in the landfill gas entering the control device.

(A) $NMOC_{in}$ and $NMOC_{out}$ shall be determined using EPA Method 25 (40 CFR part 60, appendix A) sampling and analysis procedures modified to delete the condensate trap from the sampling train. Grab samples of landfill gas at the inlet to the control device, and exhaust from the control device shall be collected simultaneously and at a constant rate over a period of at least 10 minutes in identical clean Tedlar®[33] bags (or equivalent). Each sample volume shall be sufficient to perform two NMOC analyses and to measure the sample's oxygen content. The oxygen concentration shall be measured at both the inlet to the control device and the exhaust from the control device and in each grab sample using EPA Method 3A (40 CFR part 60, appendix A). Corresponding oxygen concentrations (grab samples and sampling port readings) must agree to within 1% oxygen.

(B) The inlet flow shall be determined using:

(*1*) EPA Method 2 (40 CFR part 60, appendix A); or

(*2*) The continuous flow measuring system installed pursuant to paragraph (g)(3)(i)(D) of this section. The continuous flow measuring system shall be used if the entire flow it measures is directed to the control device being tested.

(C) The exhaust flow shall be determined during the collection of grab samples using EPA's design standard for flares, as described in § 60.18.

(v) NMOC emissions from the control device shall be determined using the following equation:

$$Q_c = F_e \times NMOC_{out} \times 3.69 \times 10^{-8}$$

where:

Q_c = NMOC emissions from the control device, in pounds per hour,

F_e = Exhaust flow in standard cubic feet per hour at the actual (measured) oxygen concentration, from paragraph (g)(6)(iv)(C) of this section,

$NMOC_{out}$ = NMOC concentration in exhaust in ppm, from paragraph (g)(6)(iv)(A) of this section, and

3.69×10^{-8} assumes a molecular weight of 14.2 for NMOC as carbon, and 385 cubic feet per pound-mole.

(vi) NO_X and CO emissions from a control device in pounds per million BTU shall be determined using:

(A) EPA Method 7E (40 CFR part 60, appendix A) for NO_X.

(B) EPA Method 10 (40 CFR part 60, appendix A) for CO.

(C) ASTM D1826–77 for the gross (higher) calorific value (GCV) of landfill gas.

(D) EPA Method 3A (40 CFR part 60, appendix A) for Oxygen Concentration.

(E) The calculations contained in § 60.45(f)(5) and § 60.46b(f).

(h) Emissions from Livestock Waste.

(1) *Applicability.* On or after January 1, 1998, any owner or operator of a dairy cattle operation shall comply with the requirements of paragraphs (h)(1) through (h)(6) of this section. For the purposes of this paragraph, the affected areas include the Sacramento Metro Area, the Los Angeles-South Coast Air Basin Area, and the Ventura County Area as described for ozone in 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraph (h) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Covered lagoon means a holding pond with a floating impermeable cover that effectively captures volatile organic compound and methane emissions, recovers them through a collection device and uses the methane for on-farm heating or cooling, electricity generation, or other end use technology.

Dairy cattle mean cows and calves managed as a dairy cattle operation.

Dairy cattle operation means any facility managing greater than 400 cows for the purpose of producing milk or milk products.

Digester means an enclosed non-pressurized vessel in which influent is managed to maximize the generation of methane for utilization in on-farm heating or cooling or electricity generation.

End use technology means the equipment powered by recovered methane gas and its use. Examples of end use technologies are internal combustion engines for generating electricity, boiler and space heaters to produce heat for various operations, and gas-fired chillers to be used for refrigeration.

Influent means manure-containing liquid from the feed apron and milk parlor areas of a dairy cattle operation, which flows to a covered lagoon or digester.

Livestock waste means livestock excrement including liquid wastes, fecal material, and decomposing manure.

Recovery system means a covered lagoon or digester.

Stockpile is manure that is temporarily stored at a designated location prior to shipment for handling at another on-site or off-site location.

(3) *Specific Provisions.*

(i) Dairy cattle operations shall install a recovery system, such as a covered lagoon or digester, to collect and recover livestock waste influent.

(A) A minimum of 55 percent of all livestock waste shall be collected and processed in the recovery system. If a minimum of 55 percent as described above can not be achieved, subject facilities shall identify alternative methods which will achieve an equivalent level of reduction. Facilities shall be subject to the 55 percent requirement until such time as the alternative methods are submitted and approved in writing by the USEPA.

(B) The recovery system shall achieve a minimum 80% control efficiency. Demonstration of control efficiency shall be performed in accordance with the methods specified in paragraph (h)(6) of this section.

(C) The recovery system shall be maintained and operated in a manner which is consistent with manufacturer specifications and which consistently achieves the control efficiency stated in paragraph (h)(3)(i)(B) of this section.

(ii) Manured areas shall be managed to minimize the pooling or accumulation of liquids and shall be sloped 2 to 4 percent to allow drainage

[33] Mention of trade names or specific products does not constitute endorsement by EPA.

of excess moisture. Any facility wastewater and precipitation on or drainage through manure areas shall meet the requirements specified in the California Code of Regulations, Title 23, Division 3, Chapter (Discharges of Waste to Land), "Article 6. Confined Animal Facilities."

(iii) Livestock waste not processed under paragraph (h)(3)(i) of this section and which is placed in a manure storage area or stockpile shall be maintained in long, narrow windrows, no higher than 6 feet. The windrows shall be turned every 5 days during the first 30 days of storage and shall be removed from the dairy cattle facility at least 3 times per year or applied to a disposal field or crop lands at least 3 times per year.

(4) *Reporting.*

(i) Each owner or operator of a facility that is subject to the provisions of paragraph (h)(3) of this section shall submit for approval to the EPA by January 1, 1998 information necessary to demonstrate compliance with the provisions of paragraph (h)(3) of this section by January 1, 1999. This information shall include, at a minimum:

(A) The type of recovery system to be used at the facility;

(B) The type and capacity of the end use technology;

(C) The type of instrumentation and/or techniques to be used for measuring the following parameters:

(*1*) Volume flow rate of gas produced by the recovery system measured in cubic feet per minute;

(*2*) Hours of operation of the recovery system;

(*3*) Hours of operation of the end use technology;

(*4*) Productivity of the end use technology measured in British Thermal Units (BTU), kilowatt-hours (kWh), etc.; and

(*5*) Determination of control efficiency.

(ii) Beginning in 2000, each owner or operator of a facility that is subject to the provisions of paragraph (h)(3) of this section shall submit to the EPA on or before January 1 of each calendar year, a certification of compliance with paragraph (h)(3) of this section for the previous calendar year. The certification shall include, at a minimum, the following information:

(A) The maximum number of cows and calves managed on the facility during the preceding calendar year;

(B) Certification of compliance with the provisions of paragraph (h)(3) of this section.

(5) *Recordkeeping.*

(i) Each owner or operator of a dairy cattle operation shall keep records that demonstrate compliance with paragraph (h)(3) of this section, and shall make these records available to the EPA upon request. At a minimum, these records shall provide the following information:

(A) Date of removal of stockpiled manure as specified by paragraph (h)(3)(iii) of this section;

(B) Values recorded for each parameter specified in paragraph (h)(4)(i)(C) of this section.

(6) *Test Methods.*

(i) Measurements of destruction or removal efficiency shall be determined in accordance with EPA Method 25 (40 CFR part 60, appendix A) or by an alternative method approved in writing by EPA.

(ii) Measurement of capture efficiency shall be determined in accordance with the EPA method[34] or by an alternative method approved in writing by EPA.

(i) *Fugitive Emissions from Gas Processing Plants, Refineries, Bulk Plants, Bulk Terminals, and Chemical Plants.*

(1) *Applicability.* The requirements of paragraphs (i)(1) through (7) of this section shall apply to any owner or operator of a refinery, bulk plant, bulk terminal, chemical plant, or gas processing plant. For the purposes of this section, the affected areas include the Sacramento Metro Area, the Los Angeles-South Coast Air Basin Area, and the Ventura County Area as described for ozone in 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraphs (i)(1) through (7) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Background means a reading expressed as methane on a portable hydrocarbon detection instrument which is taken at least three meters upwind from any component to be inspected and which is not influenced by any specific emission point.

Bulk plant means any distributing facility which receives organic liquid; stores it in stationary tanks; and which loads it into tank trucks for delivery to other bulk plants, service stations or other distribution points.

Bulk terminal means any primary distributing plant which receives organic liquid; stores it in stationary tanks; loads it into transportable containers, excluding marine vessels, for delivery to bulk plants, service stations, or other distribution points.

Chemical plant means any facility engaged in producing organic or inorganic chemicals, and/or manufacturing chemical products by chemical processes. Any facility or operation that has 28 as the first two digits in its four digit Standard Industrial Classification (SIC) Code as defined in the SIC Manual is included.

Closed-vent system means any system that is not open to the atmosphere and is composed of piping, connections and, if necessary, flow-inducing devices that transport gases or vapors from a piece or pieces of equipment to a vapor recovery or disposal system.

Commercial natural gas means processed natural gas containing less than 10% VOC by weight.

Component means any valve, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, open-ended line, or meter.

Compressor means any device used to compress gases and/or vapors.

Control valve means a device that is used to regulate fluid pressure or volume in a process unit that, upon actuation, releases VOC from the process stream. Control valves which are actuated with non-process stream compressed air are excluded from this definition.

Critical component means any component that if shut down would require the shutdown of the associated process unit.

Fitting means a component used to attach or connect pipes, piping details, and other equipment, such as, vessels, heat exchangers, and condensers. These components include but are not limited to flanges, threaded connections, and other connectors.

Gas processing plant means any facility engaged in the separation of liquids from field gas and/or fractionation of the liquids into gaseous products, such as ethane, propane, butane, and natural gasoline. Excluded from the definition are compressor stations, dehydration units, sweetening units, field treatment, underground storage facilities, liquefied natural gas units, and field gas gathering systems unless these facilities are located at a natural gas processing plant.

Hatch means any covered opening system that provides access to a tank or container, usually through the top deck.

Inaccessible component means any component located over fifteen feet above ground when access is required from the ground; or any component located over six feet away from a platform when access is required from the platform.

Leak means a major gas leak, major liquid leak, minor gas leak, or minor liquid leak.

Leak minimization means reducing a leak to the lowest achievable level using best modern practices including

[34] 40 CFR 52.741(a)(4)(iii).

tightening, adjusting, or adding sealing material and without shutting down the process which the component serves.

Leak repair means any corrective action taken for the purposes of reducing a component leak to the lowest achievable level below the applicable standard using best modern practices.

Major component means any 4-inch or larger valve, any 5-horse-power (5-hp) or larger pump, any compressor, and any 4-inch or larger pressure relief device.

Major gas leak for any component except pressure relief devices means the detection of total gaseous organic compounds in excess of 10,000 ppmv as methane above background as measured according to the test procedures in paragraph (i)(7)(i) of this section. A major gas leak for a pressure relief device means the detection of total gaseous organic compounds in excess of 200 ppmv as methane above background as measured according to the test procedures in paragraph (i)(7)(i) of this section.

Major liquid leak means a visible mist or cloud or a continuous flow of liquid.

Minor component means any component that is not a major component.

Minor gas leak for any component means the detection of total gaseous organic compounds in excess of 500 ppmv (for valves and connectors) and 1,000 ppmv (for other components unless otherwise specified) but not more than 10,000 ppmv as methane above background as measured according to the test procedures in paragraph (i)(7)(i) of this section.

Minor liquid leak is any liquid leak which is not a major liquid leak and drips at a rate of more than three drops per minute.

Owner or operator means any person who owns, operates, leases, controls, or supervises an emissions source or air pollution control equipment.

Person means any individual, corporation, copartnership, firm, company, partnership, joint stock company, trust, association, State, municipality, political subdivision, or any other legal entity, or their legal representative, agent, or assigns.

Pipeline transfer station means a facility that handles the storage or transfer, or both, of petroleum products or crude petroleum in pipelines.

Platform means any raised, permanent, horizontal surface that provides access to components.

Pressure relief device means a pressure relief valve or a rupture disc.

Pressure relief valve (PRV) means any valve that is automatically actuated by upstream static pressure, and used for safety or emergency purposes.

Pump means any device used to transport fluids by the addition of mechanical energy.

Refinery means a facility that processes petroleum, as defined in the Standard Industrial Classification Manual as Industry Number 2911, Petroleum Refining.

Rupture disc means a diaphragm held between flanges for the purpose of isolating a volatile organic compound from the atmosphere or from a downstream pressure relief valve.

Unmanned facility means a remote facility which has no permanent sited personnel and is greater than five miles from the nearest manned facility.

Unsafe-to-monitor component means a component installed at a location that would prevent its safe inspection or repair as defined by Occupational Safety and Health Administration (OSHA) standards or in provisions for worker safety found in 29 CFR 1910.

Vacuum service or *In vacuum service* means that the equipment in VOC service is operating at an internal pressure that is at least 5 kPa (0.73 in. Hg) below ambient pressure.

Valve means a device that regulates or isolates the fluid flow in a pipe, tube, or conduit by means of an external actuator.

Vapor control system means any system that is not open to the atmosphere and is composed of piping, connections and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a vapor recovery or disposal system.

Visual inspection means performing a survey to indentify signs of leaking liquid, visible mist, or audible leaks.

(3) *Specific provisions.* Each owner or operator of a gas processing plant, bulk plant, bulk terminal, refinery, or chemical plant shall be in compliance with the requirements of paragraphs (i)(3)(i) and (i)(3)(ii) of this section by January 1, 1996.

(i) *Identification requirements.* Components in VOC service shall meet the following identification requirements:

(A) All major and critical components shall be physically identified clearly and visibly for inspection, repair, replacement, and recordkeeping purposes.

(B) All major, critical, inaccessible, and unsafe-to-monitor components shall be clearly identified in Piping and Instrumentation (P&I) flow diagrams for inspection, repair, replacement, and recordkeeping purposes.

(C) All minor components shall be individually identified and/or grouped together functionally for identification in P&I flow diagrams for inspection, repair, replacement, and recordkeeping purposes.

(D) The EPA shall be notified of any changes in the identification of a major component within thirty days.

(ii) *Inspection and maintenance (I&M) program.* Any owner or operator of a facility subject to this section shall implement an I&M program that meets the requirements of paragraphs (i)(3)(ii)(A) through (i)(3)(ii)(C) of this section.

(A) *Inspection requirements.* The I&M program will be conducted with the following inspection requirements.

(*1*) All pump seals, compressor seals, and pressure relief valves (PRVs) shall be visually inspected for leaks once during every operating shift. Any vapor leak which is identified during the visual inspection of components under paragraphs (i)(3)(ii)(A)(1) of this section shall be measured to quantify emission concentrations according to the test method specified in paragraph (i)(7)(i) of this section.

(*2*) All components, except as provided in paragraphs (i)(3)(ii)(A)(*3*), (*4*) and (*5*) of this section, shall be inspected quarterly according to the method prescribed in paragraph (i)(7)(i) of this section. The time between inspections shall not exceed 110 consecutive days.

(*3*) The components specified in paragraphs (i)(3)(ii)(A)(*3*)(*i*) and (i)(3)(ii)(A)(*3*)(*ii*) of this section shall be subject to other than quarterly inspection requirements.

(*i*) All inaccessible components shall be inspected annually according to the method prescribed in paragraph (i)(7)(i) of this section. The time between inspections shall not exceed 13 consecutive months.

(*ii*) All fittings, including threaded connections and flanges, shall be inspected for leaks according to the method prescribed in paragraph (i)(7)(i) of this section immediately after being placed into service and semi-annually, not to exceed 195 consecutive days between inspections, thereafter.

(*4*) Unsafe-to-monitor components shall be inspected in accordance with an inspection plan approved by the EPA.

(*5*) PRVs shall be inspected according to the method prescribed in paragraph (i)(7)(i) of this section within three calendar days after every pressure relief event.

(*6*) The inspection frequency for all components except pump seals, compressor seals, and PRVs may be

changed to annually, not to exceed 13 consecutive months between inspections, provided that all of the following conditions are met:

(*i*) All components at the facility have been successfully operated and maintained for a period of twelve consecutive months with no leaks exceeding the thresholds listed in the table of leak thresholds in this section.

(*ii*) The requirements specified in paragraph (i)(3)(ii)(A)(*6*)(*i*) of this section are substantiated by documentation and written approval obtained from the EPA.

(*7*) Any annual inspection frequency approved in paragraph (i)(3)(ii)(A)(6)(*ii*) of this section, shall revert to the inspection frequencies specified in paragraphs (i)(3)(ii)(A)(*2*) and (*3*) of this section, should liquid leaks or major gas leaks exceed 0.5 percent of the total components inspected per inspection period.

(*8*) A brightly colored, weather-proof tag shall be affixed to all leaking components showing the date of leak detection and the hydrocarbon concentration determined according to the method prescribed in paragraph (i)(*7*)(i) of this section.

(B) *Repair and maintenance requirements.* The I&M program shall be conducted in accordance with the following repair and maintenance requirements:

(*1*) All component leaks shall be immediately minimized following detection.

(*2*) All leaks from noncritical components shall be successfully repaired or replaced within the time period following detection of the leak, as specified in the table of repair periods in this section.

(*3*) For leaks from critical and unsafe-to-monitor components, the leaking component shall be replaced with Best Available Control Technology (BACT) equipment as determined by EPA within one year or during the next process turnaround, whichever occurs first.

(*i*) The percentage of valves in service and awaiting repair or replacement at any time shall not exceed the values below:

Effective date	Percentage of leaking valves
January 1, 1996	2
January 1, 1997	1
January 1, 1999	0.5

(*ii*) The percentage of pump and compressor seals in service and awaiting repair or replacement at any time shall not exceed the values below:

Effective date	Percentage of leaking pumps and compressors
January 1, 1996	10
January 1, 1999	1

(*4*) Any repaired or replaced component shall be re-inspected in accordance with the method prescribed in paragraph (i)(*7*) of this section by the owner or operator within 30 days of the repair or replacement.

(*5*) A component or parts thereof which incur five repair actions for a major gas or liquid leak within a continuous twelve month period shall be replaced with BACT equipment as determined by EPA.

(C) *Leak control requirements.* The owner or operator of any facility subject to this section shall comply with the following leak control requirements. The requirements of paragraphs (i)(3)(ii)(C) (*1*) and (*2*) of this section shall not apply to components being repaired or replaced within the specified repair or replacement period, as given in the table of repair periods in this section or paragraph (i)(3)(ii)(B)(*3*) of this section, if the requirements for leak minimization under paragraph (i)(3)(ii)(B)(*1*) of this section have been met.

(*1*) Any liquid leak detected during an inspection by EPA shall constitute a violation of this section.

(*2*) Any leak detected during an inspection by EPA, within any continuous 24-hour period, and numbering in excess of the leak thresholds for that component listed in the table of leak thresholds in this section, shall constitute a violation of this section.

(*3*) Any open-ended line or valve found to be leaking shall be sealed with a second valve, blind flange, cap, plug, or a second closed valve except during operations requiring process fluid flow through the open-ended line or valve.

(*4*) Hatches shall be closed at all times except during sampling, addition of process material, or attended maintenance operations.

(*5*) Effective twelve months after the adoption of this section, control valves shall be replaced or retrofitted so that a major leak shall not occur during valve actuation or at any other time.

(*6*) Effective twelve months after the adoption of this section, any component leak that is vented through a stack or other confined air stream shall be transported in a closed-vent system with a collection efficiency of at least 95% to a VOC control device with a control efficiency of at least 95%. The determination of control efficiency shall be made in accordance with the test method specified in paragraph (i)(7)(iv) of this section.

(4) *Exemptions.* The provisions of paragraphs (i)(3)(i) and (ii) of this section shall not apply to the following components:

(i) Pressure relief valves, pump seals, and compressor seals that are equipped with a closed-vent system with a VOC collection efficiency of at least 95% that transports the VOC emissions to a vapor control system with a VOC control efficiency of at least 95%. The determination of control efficiency shall be made in accordance with the test method specified in paragraph (i)(7)(iv) of this section.

(ii) The following cases, where the person seeking the exemption shall supply proof of the applicable criteria to the satisfaction of the EPA:

(A) Components buried below ground.

(B) Components, except those at gas processing plants, exclusively handling fluids with a VOC concentration of 10 percent by weight or less, as determined by the test method specified in paragraph (i)(7)(ii) of this section; or components exclusively handling fluids, if the weight percent evaporated is 10 percent or less at 150 degrees Celsius, as determined by the test method specified in paragraph (i)(7)(iii) of this section.

(iii) One-half inch and smaller stainless steel tube fittings which have been demonstrated to the EPA to be leak-free based on an initial inspection in accordance with paragraph (i)(7)(i) of this section.

(iv) Components in vacuum service.

(5) *Reporting.* Any owner or operator of a facility subject to this section shall comply with the following reporting requirements.

(i) A compliance plan shall be prepared and submitted to the EPA by July 1, 1995. The plan shall include the following information:

(A) Component identification methodology to meet the requirements of paragraphs (i)(3)(i)(A) through (C) of this section.

(B) An inspection schedule for all unsafe-to-monitor components pursuant to paragraph (i)(3)(ii)(A)(4) of this section.

(C) A description of all components meeting the exemption requirements of paragraphs (i)(4)(i) through (iv) of this section.

(ii) An annual certification of compliance shall be submitted to the

EPA on or before January 1, 1996, and annually thereafter. The certification of compliance shall include:

(A) A declaration that the facility is in compliance with all of the requirements of this section.

(B) A summary of any changes that have been made to component identification in the original compliance plan.

(6) *Recordkeeping.*

(i) Each facility operator shall maintain an inspection log containing, at a minimum, the following:

(A) Name, location, type of components, and description of any unit where leaking components are found.

(B) Date of leak detection, emission level (ppmv) of leak, and method of leak detection.

(C) Date of leak repair and description of repair action.

(D) Date and emission level of re-check after leak is repaired.

(E) Identification of leaks from critical components that cannot be repaired until the next process turnaround.

(F) If applicable, the API gravity of petroleum process fluids.

(G) The VOC content of leaking process fluids or gases.

(H) Total number of components inspected, and total number and percentage of leaking components found by component type.

(ii) Records of leaks detected by a quarterly or annual operator inspection and each subsequent repair and reinspection shall be submitted to the EPA upon request.

(iii) All records of operator inspection and repair shall be maintained at the facility for the previous two year period and be made available at the time of inspection by the EPA or immediately upon EPA request.

(7) *Test Methods.*

(i) Measurements of total gaseous organic compounds in leak concentrations shall be conducted according to EPA Reference Method 21. The analyzer shall be calibrated with methane.

(ii) The VOC content of fluids shall be determined using procedures that conform to ASTM Methods E 168, E 169, or E 260 or any other procedure that conforms to the above ASTM methods and is approved by the EPA in writing.

(iii) Determination of the evaporated compounds of liquids shall be performed in accordance with ASTM Method D 86–82.

(iv) Determination of the control efficiency of any VOC control equipment shall be performed in accordance with 40 CFR part 60, appendix A, Method 25 or 25A, or South Coast Air Quality Management District (SCAQMD) Test Method 25.1, which is available from EPA.

(v) Determination of the API gravity of crude oil shall be performed in accordance with ASTM Method D 287.

TABLE OF LEAK THRESHOLDS

Component type	Maximum No. of leaks	
	200 or less components inspected	More than 200 components inspected
Valves	1	0.5% of the number inspected.
Pump seals	2	1% of the number inspected.
Compressors	1	1
Pressure Relief Valves.	1	1
Other Components	1	1

TABLE OF REPAIR PERIODS

Type of leak	Time period (days) [a]
Minor Gas Leak	14
Major Gas Leak	5
Major Gas Leak over 50,000 ppmv	[b]1
Major Liquid Leak	[b]1
Minor Liquid Leak	[b]2

[a] Day means a 24 hour period from the time of leak detection.

[b] Unless prohibited by state safety standards or 29 CFR part 1910.

(j) *Gasoline Transfer and Dispensing.*

(1) *Applicability.* The requirements of paragraphs (j)(1) through (j)(7) of this section shall apply to any owner or operator of a gasoline dispensing facility. For the purposes of this paragraph, the affected areas include the Sacramento Metro Area, the Los Angeles-South Coast Air Basin Area, and the Ventura County Area as described for ozone in 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraph (j) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Alteration(s) and/or repair(s) of a gasoline storage and/or dispensing facility is any of the following: the replacement of one or more existing storage tank(s); the removal or addition of storage tank(s) or dispensing nozzle(s), piping or any other component; the replacement of storage tanks, dispensing nozzle(s), piping or any other component with different characteristics from those of the existing or original equipment; or any excavation (exposure to view by digging) of an existing gasoline storage tank and/or the underground liquid piping from the storage tank(s) to the gasoline dispenser(s).

Balance system is a Phase II (Stage II) vapor recovery system that operates on the principle of vapor displacement.

CARB certified vapor recovery system is any Phase I or Phase II vapor recovery system which has been certified by the California Air Resources Board (CARB) pursuant to section 41954 of the California Health and Safety Code as capable of recovering or processing displaced gasoline vapors to an efficiency of ninety-five (95) percent or greater. For the purpose of this section, the term certified shall refer to CARB certification.

CARB executive orders(s) is the procedure, pursuant to Sections 39600, 39601, and 41954 of the California Health and Safety Code and Title 17 Section 94001 of the California Code of Regulations, used by the California Air Resources Board (CARB) to approve the certification, modification of a certification, or recertification of vapor recovery systems and/or related equipment. Copies of CARB Executive Orders can be obtained from CARB, Compliance Division, P.O. Box 2815, Sacramento, CA, 95812.

Gasoline is any petroleum distillate and/or mixture of petroleum distillates and oxygenates used as a fuel in spark ignition engines and having a Reid vapor pressure of four pounds per square inch or greater.

Gasoline storage and dispensing facility means an aggregate of one or more stationary storage tanks, any of which is subject to the provisions of paragraphs (j)(3) through (j)(7) of this section, together with dispensers and control equipment required by the section.

Hold-open latch is a certified device which is an integral part of the dispensing nozzle and is manufactured specifically for the purpose of dispensing gasoline without requiring the consumer's constant physical contact with the nozzle during fueling operations.

Insertion interlock is any certified mechanism which is an integral part of a bellows-equipped dispensing nozzle which prohibits the dispensing of fuel unless the bellows is compressed.

Liquid removal device is a device designed specifically to remove liquid from the vapor return portion of a coaxial hose.

Liquid tight means a liquid leak rate not exceeding three drops per minute.

Motor vehicle is any self-propelled vehicle registered or which requires registration for use on the highway.

Owner/operator is any person who owns, leases, operates, controls or supervises the operation of a gasoline dispensing facility.

Phase I or *Stage I* is gasoline vapor recovery during the transfer of gasoline into or out of stationary tanks at a gasoline dispensing facility.

Phase II or *Stage II* is gasoline vapor recovery during motor vehicle or utility equipment fueling operations from stationary tanks at gasoline dispensing facilities.

Rebuilt equipment is any component of a vapor recovery system that has undergone repair or replacement of any or all of its internal parts.

Reid vapor pressure means the absolute vapor pressure of volatile crude oil and volatile non-viscus petroleum liquids, except liquified petroleum gases, as determined by ASTM D323–89.

Submerged fill tube is any fill tube; the discharge opening of which is entirely submerged, when the liquid level above the bottom of the tank is: 15.2 cm (6 inches), for tanks filled from the top, except for flat bottom tanks where the liquid level above the bottom is 7.6 cm (3 in.); or 45.7 cm (18 inches) for tanks filled from the side.

Top off is the attempt to dispense gasoline to a motor vehicle or utility equipment fuel tank after the dispensing nozzle primary shutoff mechanism has engaged. The filling of those class of vehicle tanks which, because of the configuration of the fill pipe, cause premature activation of the primary shutoff, shall not be considered topping off.

Vacuum assist system is any Phase II vapor recovery system that utilizes a pump, blower, or other vacuum-producing device. Vacuum assist systems may also incorporate an incinerator to process any excess vapors generated by the collection system.

Vapor tight means the detection of less than 10,000 ppm hydrocarbon concentration, as determined by 40 CFR part 60, appendix A, Method 21, using an appropriate analyzer calibrated with methane.

(3) *Standards.*

(i) *Gasoline Transfer Into Stationary Storage Tanks (Phase I).* An owner/operator shall not transfer, permit the transfer or provide equipment for the transfer of gasoline into from any tank truck, trailer or railroad car into any stationary storage tank with a capacity of 950 liters (251 gallons) or more unless all of the following conditions are met:

(A) Such tank is equipped with a permanent submerged fill tube.

(B) Such tank is equipped with a CARB certified vapor recovery system at, or above 95 percent control efficiency, which is maintained and operated according to the manufacturers specifications.

(C) All vapor return lines are connected between the tank truck, trailer or railroad tank car, and the stationary storage tank and all associated hoses, fittings, and couplings are maintained in a vapor tight condition.

(D) The hatch on any tank truck, trailer, or railroad tank car shall not be opened for more than three minutes for each visual inspection, provided that:

(*1*) Transfer or pumping has been stopped for at least 3 minutes prior to opening; and

(*2*) The hatch is closed before transfer or pumping is resumed.

(E) Underground tank lines are gravity drained, and above-ground tanks are equipped with dry breaks such that upon line disconnect the liquid leak rate does not exceed 3 drops per minute.

(F) As of [Insert date of publication of the final rule], an owner/operator shall not install a coaxial Phase I vapor recovery system at a gasoline dispensing facility unless the Phase I system was certified after January 1, 1994. In addition, an owner/operator shall not install a Phase I vapor recovery system unless that system incorporates certified poppetted drybreaks or spring-loaded vapor check valves on the vapor return coupler of the system.

(G) As of one year after [Insert date of publication of the final rule], all open vent pipes on stationary tanks at gasoline dispensing facilities shall be equipped with a pressure-vacuum relief valve. Unless otherwise specified in the applicable CARB executive order, pressure relief shall be set at 3 inches water column and vacuum relief shall be set at 8 inches water column. For the purposes of this paragraph (j), vent pipes of gasoline storage tanks may be manifolded to a single valve when the storage tanks are manifolded according to the applicable CARB executive order.

(H) As of [Insert date of publication of the final rule], any time a gasoline storage tank or associated piping is replaced or installed this spill box must be equiped with an intregal vapor-tight drain valve to return spilled gasoline to the storage tank.

(I) Equipment subject to this paragraph (j) is operated and maintained, according to all of the following requirements:

(*1*) All fill tubes are equipped with vapor-tight covers, including gaskets;

(*2*) All dry breaks are equipped with vapor-tight seals and dust covers;

(*3*) Fixed or Spring-Loaded coaxial fill tubes are operated so that there is no obstruction of vapor passage from the storage tank back to the tank truck, trailer, or railroad tank car;

(*4*) The fill tube assembly, including fill tube, fittings and gaskets, is maintained to prevent vapor leakage from any portion of the vapor recovery system;

(*5*) All storage tank vapor return lines without dry breaks are equipped with vapor-tight covers, including gaskets.

(ii) *Gasoline Transfer Into Vehicle Fuel Tanks (Phase II).* An owner/operator shall not transfer, or permit the transfer, or provide equipment for the transfer of gasoline from a stationary storage tank into any motor vehicle fuel tank of greater than 19 liters (5 gallons) capacity unless all of the following conditions are met:

(A) The dispensing unit used to transfer the gasoline from the stationary storage tank to the motor vehicle fuel tank is equipped with a CARB certified vapor recovery system.

(B) The vapor recovery system and associated components are operated and maintained in a vapor-tight and liquid-tight manner in accordance with the manufacturer's specifications and the applicable CARB certification.

(C) As of [Insert date of publication of the final rule], an owner/operator shall not install any balance system vapor recovery nozzle unless a vapor check valve is located in the nozzle. In addition, a balance system shall not be operated with more than one check valve per nozzle and hose assembly.

(D) As of one year after [Insert date of publication of the final rule], the nominal inside diameter of the connection between the riser and dispenser cabinet shall not be less than 0.75 inches. If flexible tubing is used for this connection, the material shall be listed for use with gasoline and shall be capable of maintaining electrical continuity between the riser and dispenser.

(E) As of one year after [Insert date of publication of the final rule], an owner/operator shall not sell, offer for sale, or install a bellows-equipped vapor recovery nozzle unless it is equipped with a certified insertion interlock mechanism.

(F) As of one year after [Insert date of publication of the final rule], an owner/operator shall not install or operate a vapor recovery nozzle unless it is equipped with a coaxial hose.

(G) As of one year after [Insert date of publication of the final rule], all liquid removal devices required by CARB

executive orders shall be maintained to achieve a minimum liquid removal rate of five milliliters per gallon transferred. This standard shall apply at dispensing rates exceeding five gallons per minute, unless a higher removal rate is specified by the Executive Order.

(H) As of [Insert date of publication of the final rule], any gasoline storage or dispensing facility that commences alterations or repairs shall comply with the equipment standards of paragraphs (j)(3)(ii) (C) through (G) of this section.

(I) Equipment subject to this section shall be operated and maintained with none of the following defects:

(*1*) Absence or disconnection of any component required to be used in the CARB executive order(s) that certified the system.

(*2*) A vapor hose which is crimped or flattened such that the vapor passage is blocked, or the pressure drop through the vapor hose exceeds by a factor of two or more the requirements in the system certified in the CARB Executive Order(s) applicable to the system.

(*3*) A nozzle boot which is torn in one or more of the following manner:

(*i*) Triangular-shaped or similar tear ½ inch or more to a side, or hole ½ inch or more in diameter or,

(*ii*) Slit 1 inch or more in length.

(*4*) Faceplate or flexible cone which is damaged in the following manner:

(*i*) For balance nozzles and for nozzles for aspirator and educator assist type systems, damage shall be such that the capability to achieve a seal with a fill pipe interface is affected for ¼ of the circumference of the faceplate (accumulated).

(*ii*) For nozzles for vacuum assist-type systems, more than ¼ of the flexible cone missing.

(*5*) Nozzle shutoff mechanisms which malfunction in any manner.

(*6*) Vapor return lines, including such components as swivels, anti-recirculation valves and underground piping, which malfunction or are blocked, or restricted such that pressure drop through the lines exceeds by factor of two or more requirements specified in the CARB Executive Order(s) that certified the system.

(*7*) Vapor processing unit which is inoperative.

(*8*) Vacuum producing device which is inoperative.

(*9*) Pressure/vacuum relief valves, vapor check valves, or dry breaks which are inoperative.

(*10*) Any equipment defect which is identified in an Executive Order certifying a system pursuant to the Certification Procedures incorporated in Section 94001 of Title 17, California Code of Regulations, as substantially impairing the effectiveness of the system in reducing air contaminants.

(*11*) All nozzles affected by the above defects are to be considered defective.

(*iii*) *Additional Requirements.*

(A) An owner/operator shall not offer for sale, sell, or install any new or rebuilt vapor recovery equipment unless the components and the parts are clearly identified or marked by the certified manufacturing company and/or the certified rebuilding company.

(B) An owner/operator shall not perform or permit the "pump-out" (bulk transfer) of gasoline from a storage tank subject to paragraph (j)(3)(i) of this section; unless such bulk transfer is performed using a vapor collection and transfer system capable of returning the displaced vapors to the stationary storage tank or unless the storage tank will be removed or filled with water for testing.

(C) An owner/operator shall not store, or allow the storage of, gasoline in any stationary storage tank with a capacity of 950 liters (251 gallons) or more unless such tank is equipped with a Phase I vapor recovery system.

(D) An owner/operator of any gasoline dispensing facility shall conspicuously post the following signs in the immediate gasoline dispensing area.

(*1*) "NOZZLE" operating instructions;

(*2*) Appropriate District toll-free telephone number; and

(*3*) A warning sign stating:

Toxic Risk—For Your Own Protection Do Not Breathe Fumes. Do Not Top Tanks

(E) All required signs shall conform to all of the following:

(*1*) For decal signs:

(*i*) Each sign shall be located adjacent to the dispenser price indicator (per gallon) on each side next to the driveway it serves; and

(*ii*) Sign shall be readable from a distance of 3 feet or more.

(*2*) All other signs:

(*i*) For pump toppers, one double-back sign per island;

(*ii*) For permanent (non-decal) signs, two single-sided or one double-sided sign(s) per two (2) dispensers.

(*iii*) All signs shall be readable from a distance of 6 feet or more.

(F) A dispenser that is never used to fuel motor vehicles shall have a sign posted on it restricting its use for vehicles.

(G) Gasoline shall not be stored in open container(s) of any size or handled in any other manner (spillage, spraying, etc.) that permit gasoline or gasoline vapors to enter the atmosphere, contaminate the ground, or the sewer.

(H) The failure of an owner/operator to meet any requirements of paragraphs (j)(3) (i), (ii), or (iii) of this section shall constitute a violation. Such equipment determined to be in violation shall be tagged "Out-of-Order."

(I) Except during repair activity, the "Out-of-Order" tag specified in paragraph (j)(3)(iii)(H) of this section shall not be removed and the tagged equipment shall not be used, permitted to be used, or provided for use unless all of the following conditions are satisfied:

(*1*) The tagged equipment has been repaired, replaced, or adjusted, as necessary;

(*2*) The District, Office of Operations, has been notified of the repairs by completing and signing the form supplied by the District;

(*3*) The tagged equipment has been reinspected and/or authorized for use by the District.

(*4*) Exemptions. The provisions of this section shall not apply to the transfer of gasoline into or from any stationary tank if its monthly throughput is used exclusively for the fueling of implements of husbandry, such as vehicles defined in Division 16 (Section 36000 *et seq.*) of the California Vehicle Code, provided such a tank is equipped with a submerged fill tube and its storage capacity is less than or equal to 550 gallons (2,082 liters).

(5) *Compliance Schedule.*

(i) The owner/operator of a new facility subject to this section shall comply with the provisions of this section at the time gasoline receiving and/or dispensing is initiated.

(ii) The owner/operator of any altered and/or repaired facility, who was previously exempted from Phase I or Phase II vapor control requirements shall comply with the provisions of this section at the time gasoline receiving and/or dispensing is initiated after completion of the alteration and/or repair.

(iii) The owner/operator of any other existing facility, who was previously exempt from Phase I or Phase II vapor control requirements, and who has not earlier been required to come into compliance, shall achieve compliance by January 1, 1996.

(6) *Testing.*

(i) For new or altered gasoline storage or dispensing facilities, once the system is in operational condition and ready for use, testing to verify the proper installation and function of the entire system (both infrastructure plumbing and aboveground equipment) shall be conducted. Tests of Phase II systems at gasoline dispensing stations shall be conducted in accordance with the following test procedures as found in appendix J of the EPA document,

"Technical Guidance—Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions a Gasoline Dispensing Facilities," Vol. II (EPA-450/3-91-022b), November 1991:

(A) Bay Area Source Test Procedure ST-30, Leak Test Procedure, or San Diego Test Procedure TP-91-1, Pressure Decay/Leak Test Procedure. In addition, CARB Test Procedure TP-201.3 may be used.

(B) Bay Area Source Test Procedure ST-27, Dynamic Back Pressure, or San Diego Test Procedure TP-91-2, Pressure Drop vs Flow/liquid Blockage Test Procedure. In addition, CARB Test Procedure TP-201.2 may be used; and

(C) Bay Area Source Test Procedure ST-37, Liquid Removal Devices.

(ii) In addition to the above tests, Phase I efficiency testing will be done in accordance with CARB TP-201.1.

(iii) Testing may be done by the facility or by a testing company provided that the testing meets the minimum criteria established by CARB for such tests.

(iv) Reverification of the function of the Phase I or Phase II vapor recovery system shall be performed as shown below or upon alteration or repair of any gasoline storage or dispensing facility. Functional tests may also be performed upon request by EPA or the local Air Pollution Control District. Where multiple tests are specified, a leak or blockage found by any method constitutes a violation of this section.

(A) A static pressure leak test using ST-30, TP-91-2 or CARB TP-201.3 shall be performed at least once per calendar year or upon alteration or repair of facilities equipped with a vacuum-assist Phase II system.

(B) A static pressure leak test using ST-30, TP-91-2 or CARB TP-201.3 shall be performed at least once every two years or upon alteration or repair of facilities equipped with a balanced Phase II system.

(C) A liquid blockage test using ST-27, TP-91-2, or CARB TP-201.2 shall be performed at least every five years.

(v) For existing gasoline storage and dispensing facilities, if the facility has not been verified for functional Phase I or Phase II vapor recovery systems within the last four years before the date of promulgation of this section, then functional tests shall be performed at the facility within one year of the date of promulgation of this section. Facilities which have been tested within four years and have the test results documented, shall perform the reverification tests within five years from the date of the tests. All other existing facilities shall be tested within one year of the date of promulgation of this section. Reverification of static pressure integrity shall be performed within one year after promulgation of this section for vacuum-assist systems or two years after promulgation or after the last test, whichever is earliest, for balanced systems.

(7) *Recordkeeping.* All permits or licenses to operate the facility or to operate a specific system at the facility shall be current at all times. The records required in paragraphs (j)(7) (i) through (iv) of this section shall be maintained at each facility for a minimum of five years, and should be made available to EPA and local enforcement personnel upon request.

(i) Verification that the vapor recovery system meets or exceeds the requirements of the tests specified in paragraphs (j)(6) (i), (ii), and (iv) of this section shall be maintained. The test results shall be dated and shall contain names, addresses, and telephone numbers of the parties responsible for the system installation and/or testing.

(ii) All maintenance conducted on any part of the vapor recovery system shall be logged on a maintenance record maintained in chronological order showing dates, description of any equipment replaced with its location, and a description of the system problem which resulted in repairs. The log shall also indicate the time period and duration of each malfunction of the system.

(iii) A file of all inspection reports issued by inspecting agencies shall be maintained in chronological order.

(iv) A chronologically organized file of all compliance records issued by regulating agencies shall be maintained separately from the inspection reports.

(k) *Emissions from Waste Burning.*

(1) *Applicability.* On or after January 1, 1996, any person conducting agricultural burning or open burning shall comply with the requirements of paragraphs (k) (4) and (5) of this section. For the purposes of this section, the affected areas include the Sacramento Metro Area, the Los Angeles-South Coast Air Basin Area, and the Ventura County Area as described for ozone in 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraph (k) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Agricultural burning means open outdoor fires used in the following operations: agricultural operations; forest management; range improvement; improvement of land for wildlife and game habitat; disease or pest prevention; operation or maintenance of a system for the delivery of water used in any agricultural operation, forest management, range improvement, land improvement for wildlife and game habitat, and disease or pest prevention operation; wildland vegetation management.

Agricultural operations means the production of materials produced wholly from operations in the growing and harvesting of crops or raising of fowl or animals for the primary purpose of making a profit, of providing a livelihood, or of conducting agricultural research or instruction by an educational institution. In connection with open burning of materials produced from agricultural operations are the burning of grass and weeds in or adjacent to fields in cultivation or being prepared for cultivation, and the burning of materials not produced wholly from agricultural operations, but which are intimately related to the growing or harvesting of crops and which are used in the field (e.g., trays for drying raisins, date palm protection paper, and fertilizer and pesticide sacks or containers where the sacks or containers are emptied in the field.)

Designated agency means any agency designated by the State Air Resources Board as having authority to issue agricultural burning permits. The U.S. Forest Service, the California Department of Forestry, local air districts, local fire control agencies are designated for their respective jurisdictions.

Forest management burning means the use of open fires, as part of a forest management practice, to remove forest debris or for forest management practices which include timber operations, silvicultural practices or forest protection practices.

Local air district means any of the following districts: El Dorado County Air Pollution Control District (APCD), Feather River Air Quality Management District (AQMD), Placer County APCD, Sacramento Metropolitan AQMD, South Coast AQMD, Ventura County APCD, Yolo-Solano APCD.

No-burn day means a day on which agricultural burning and open burning are prohibited by the EPA, State Air Resources Board, or local air district due to a predicted exceedence of the State ambient air quality standard (0.09 ppm) for ozone.

Open burning means planned open burning of trash, leaves, and refuse from all activities except agricultural operations, forest management, range improvement, improvement of land for wildlife and game habitat, disease or pest prevention, operation or maintenance of a system for the delivery of water used in any agricultural

operation, forest management, range improvement, land improvement for wildlife and game habitat, and disease or pest prevention operation, and wildland vegetation management where the products of combustion are not directed through a flue.

Permissive-burn day means a day on which agricultural burning and open burning are allowed by the EPA, State Air Resources Board, or local air district.

Range improvement burning means the use of open fires to remove vegetation for a wildlife, game or livestock habitat or for the initial establishment of an agricultural practice on previously uncultivated land.

Silvicultural practices means establish, development, care and reproduction of stands of timber.

Timber operations means cutting or removal of timber or other forest vegetation.

Waste burning means agricultural burning, range management burning, forest management burning, and open burning.

Wildland vegetation management burning means the use of prescribed burning conducted by a public agency, or through a cooperative agreement or contract involving a public agency, to burn land predominantly covered with chaparral, trees, grass, or standing brush.

(3) *No-burn day determination.* A no-burn day may be declared by the USEPA, State Air Resources Board, or local air district if an exceedence of the State ambient air quality standard for ozone (0.09 ppm) is predicted. The following conditions will be evaluated each day for predicting the ozone level for the following day.

(i) Current hourly ozone level, in ppm, measured in the portion of the local air district that falls within the boundaries of the Sacramento FIP area;

(ii) Predicted meteorology including wind speed, and mixing height; and

(iii) Forecast temperature.

(4) *Permitting.* Agricultural burning is prohibited unless a valid burn permit is obtained from the appropriate designated agency.

(5) *Restrictions.*

(i) Agricultural burning shall be prohibited on a no-burn day.

(ii) Open burning shall be prohibited on a no-burn day.

(6) *Exemptions.* [Reserved].

(l) *Emissions of Oxides of Nitrogen from Natural Gas-fired Water Heaters.*

(1) *Applicability.* For the purposes of paragraph (l) of this section, the affected area includes the Sacramento Metro Area as described for ozone in 40 CFR 81.305. The requirements of paragraphs (l)(1) through (6) of this section shall apply to any person who manufactures, offers for sale, sells, or installs any natural gas-fired water heater with a rated heat input capacity less than 75,000 British thermal units per hour (Btu/hr).

(2) *Definitions.* For the purposes of paragraph (l) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

British thermal unit (Btu) means the amount of heat required to raise the temperature of one pound of water from 59°F to 60°F at one atmosphere.

Heat input means the actual amount of heat released by natural gas burned in a water heater.

Heat output means the product obtained by multiplying the recovery efficiency, as defined by Title 20, California Administrative Code, Chapter 2, Subchapter 4, Article 4, Sections 1603 and 1607, by the heating value of the natural gas furnished to the water heater.

Natural gas means a mixture of gaseous hydrocarbons containing at least 80 percent methane by volume as determined according to American Standard Test Method (ASTM) D1945–64.

Rated heat input capacity means the heat input capacity specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the new maximum heat input shall be considered as the rated heat input capacity.

Water heater means a device that heats water at a thermostatically-controlled temperature for delivery on demand.

(3) *Standards.* After May 31, 1995, no person shall manufacturer, offer for sale, sell, or install any natural gas-fired water heater with NO_X emissions in excess of 40 nanograms calculated as weight equivalent NO_X per joule (ng/j) [93 pounds per billion Btu (93 lb/10^9 Btu)] of heat output.

(4) *Exemptions.* The provisions of this section shall not apply to:

(i) Water heaters with a rated heat input of 75,000 Btu/hr or greater.

(ii) Water heaters used in recreational vehicles.

(iii) Water heaters used exclusively to heat swimming pools and hot tubs.

(5) *Reporting and Recordkeeping.*

(i) *Compliance Report.* A manufacturer shall submit to the Administrator a Compliance Report which demonstrates that each water heater model complies with the section. A manufacturer shall submit a new Compliance Report for any water heater model whose design is changed in any manner which may alter NO_X emissions. Compliance Reports, for either new models or altered models, shall be submitted to the Administrator at least 30 days before the water heater model is offered for sale, sold, or installed in the control area. The Compliance Report shall contain the following information:

(A) *General Information.*

(*1*) Name and address of manufacturer;

(*2*) Brand name and model;

(*3*) Model number as it appears on the rating plate of each water heater; and

(*4*) Description of each water heater model being certified.

(B) *Test Report.*

(*1*) All compliance test procedures and results for each water heater model; and

(*2*) All calculations for determining compliance of each water heater model.

(C) *Compliance Statement.* A signed and dated statement attesting to the accuracy of all statements and information in the Compliance Report.

(ii) *Labeling.* A manufacturer shall display the model number of the water heater on the shipping carton and rating plate of each water heater unit.

(iii) *Recordkeeping.* A manufacturer shall keep Compliance Reports, test reports, and compliance statements for as long as the water heater model is offered for sale, sold, or installed in the control area, or for five calendar years, whichever is longer.

(6) *Test Methods.* The manufacturer shall have each water heater model tested in accordance with the following procedures:

(i) Each water heater model tested shall be operated in accordance with Section 2.4 of American National Standards Institute (ANSI) Z21.10.1–1975 at normal test pressure, input rates, and with a 5-foot exhaust stack installed during the NO_X emissions tests, and

(ii) The measurement of NO_X emissions shall be conducted in accordance with the EPA Reference Methods or Submethods described in appendix A of 40 CFR part 60, or other methods as approved in writing by the Administrator.

(iii) The following procedure shall be used to calculate the NO_X emissions rate in ng/j (lb/10^9 Btu) of heat output:

$$N = \frac{5211 \times Cf \times P \times F}{Ho \times C}$$

Where:

N=Nanograms of NO_X expressed as weight equivalent NO_2 emitted per

joule of heat output, ng/j (lb/10^9 Btu)

Cf=Carbon number of fuel, dimensionless

P=NO_x concentration in flue gas, parts per million by volume

F=Volume of fuel burned, cubic feet at 30 inches of mercury (Hg) and 60°F

Ho=Heat output, Btu

C=Concentration of CO_2 measured in flue gas, percent

The definitions of and the measurement procedures for the above parameters are described in the South Coast Air Quality Management District's Rule 1121 Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers. A manufacturer that has certified a water heater model to demonstrate compliance with a State or local agency rule that meets the requirements of this section, may submit the test results to EPA in lieu of conducting duplicative certification tests.

(m) *Emissions of oxides of nitrogen from stationary reciprocating internal combustion engines.*

(1) *Applicability.* For the purposes of this paragraph, the affected area includes the Sacramento Metro Area as described for ozone in 40 CFR 81.305.

(i) Any owner or operator of a stationary internal combustion engine rated at equal to or greater than 50 brake horsepower shall comply with the applicable requirements of paragraphs (m)(1) through (m)(7) of this section.

(ii) Any owner or operator of a stationary internal combustion engine that claims an exemption from the standards of paragraph (m)(3) of this section because of the exemption criteria specified in paragraph (m)(4)(ii) of this section shall comply with the monitoring requirements of paragraph (m)(6)(ii)(C) of this section.

(iii) Any owner or operator of a diesel stationary internal combustion engine that claims an exemption from the standards of paragraph (m)(3) of this section because of the exemption criteria specified in paragraph (m)(4)(viii) of this section shall comply with the monitoring and reporting requirements of paragraph (m)(4)(viii) of this section.

(2) *Definitions.* For the purposes of paragraphs (m)(1) through (m)(7) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Diesel engine means a compression ignited two or four-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

Emergency standby engine means an internal combustion engine used only when normal power line or natural gas service fails, or for the emergency pumping of water for either fire protection or flood relief. An emergency standby engine may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has been either reached or exceeded.

Engine rating means the output of an engine as determined by the engine manufacturer and listed on the nameplate of the unit, regardless of any derating.

Higher heating value (HHV) means the total heat liberated per mass of fuel burned (Btu per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. If certification of the HHV is not provided by the third party fuel supplier, it shall be determined by one of the following test methods: ASTM D2015–85 for solid fuels; ASTM D240–87 or ASTM D2382–88 for liquid hydrocarbon fuels; or ASTM D1826–88 or ASTM D1945–81 in conjunction with ASTM D3588–89 for gaseous fuels.

Lean-burn engine means any two or four-stroke spark-ignited engine that is not a rich-burn engine.

Maintenance operation means the use of an emergency standby engine and fuel system during testing, repair and routine maintenance to verify its readiness for emergency standby use.

Output means the shaft work output from an engine plus the energy reclaimed by any useful heat recovery system.

Peak load means the maximum instantaneous operating load.

Permitted capacity factor means the annual permitted fuel use divided by the manufacturers specified maximum fuel consumption times 8,760 hours per year.

Rich-burn engine means a two or four-stroke spark-ignited engine where the manufacturers original recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio is less than or equal to 1.1.

Shutdown means the period of time a unit is cooled from its normal operating temperature to cold or ambient temperature.

Startup means the period of time a unit is heated from cold or ambient temperature to its normal operating temperature as specified by the manufacturer.

Stationary internal combustion engine means any internal combustion engine of the reciprocating type that is either attached to a foundation at a facility or is portable equipment operated at a specific facility for more than 90 days in any 12-month period.

Stoichiometric air/fuel ratio means the air/fuel ratio where all fuel and all oxygen in the air/fuel mixture will be consumed.

Unit means any diesel, lean-burn, or rich-burn stationary internal combustion engine as defined in this paragraph.

Waste gas means the fuel gas produced at either waste-water/sewage treatment facilities or landfills containing no more than 25 percent by volume supplemental gas.

(3) *Standards.*

(i) No owner or operator of a unit subject to the standards of this paragraph shall operate the unit unless the owner or operator complies with the requirements of paragraphs (m)(3)(i)(A), (B), (C), or (D) of this section. Any owner or operator that chooses to comply with this paragraph by means of paragraph (m)(3)(i) (C) or (D) of this section shall also comply with the requirements of paragraphs (m)(3)(ii) and (iii) of this section.

(A) Replace the unit with an electric motor in accordance with the applicable compliance schedule specified in paragraph (m)(5) of this section.

(B) Decrease the annual operating time of the unit to less than 200 hours per calendar year in accordance with the operating time phase-down schedule specified in paragraph (m)(5)(v) of this section. Any owner or operator that chooses to comply with this paragraph shall comply with the monitoring requirements of paragraph (m)(6)(ii)(C) of this section.

(C) No owner or operator of a stationary internal combustion engine shall cause to be discharged into the atmosphere any gases that contain NO_x in excess of the following applicable limit expressed as NO_2 corrected to 15 percent parts per million by volume (ppmv) stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes:

(*1*) Rich-burn, general: 25 ppmv.

(*2*) Lean-burn, general: 45 ppmv.

(*3*) Diesel: 80 ppmv.

(*4*) Rich-burn, waste gas: 50 ppmv.

(*5*) Lean-burn, waste gas: 125 ppmv.

(*6*) Each emission limit expressed in paragraphs (m)(3)(i)(C)(*1*) through (*5*) of this section may be multiplied by X, where X equals the engine efficiency (E) divided by a reference efficiency of 30 percent. Engine efficiency (E) shall be determined using one of the methods

specified in paragraph (m)(3)(i)(C)(*6*)(*i*) or (*ii*) of this section, whichever provides a higher value. However, engine efficiency (E) shall not be less than 30 percent. An engine with an efficiency lower than 30 percent shall be assigned an efficiency of 30 percent.

$$(i) \quad E = \frac{(\text{Engine output}) \times (100)}{\text{Energy input}}$$

where energy input is determined by a fuel measuring device accurate to ±5 percent and is based on the HHV of the fuel. Percent efficiency (E) shall be averaged over 15 consecutive minutes and measured at peak load for the applicable engine.

$$(ii) \quad E = \frac{(\text{Mftrs Rated Efficiency [Continuous] at LHV} \times (\text{LHV})}{(\text{HHV})}$$

where

LHV=the lower heating value of the fuel; and

HHV=the higher heating value of the fuel

(D) In lieu of complying with the NO_X emission limit in paragraph (m)(3)(i)(C)(*1*), (*2*), or (*3*) of this section, an owner or operator shall achieve the applicable percent reduction of the NO_X concentration in the uncontrolled exhaust gas stream specified below. A controlled ppmv NO_X limit shall be established in accordance with the requirements of paragraph (m)(7) of this section for the purpose of demonstrating compliance with the applicable percent reduction.

(*1*) Rich-burn, general: 96 percent.

(*2*) Lean-burn, general: 94 percent.

(*3*) Diesel: 90 percent.

(ii) Standards for carbon monoxide (CO). Any owner or operator of a stationary internal combustion engine subject to the requirements of paragraph (m)(3)(i)(C) or (D) of this section shall establish a controlled ppmv CO emission limit that represents good operating and combustion practices. No owner or operator shall cause to be discharged into the atmosphere any gases that contain CO in excess of the lowest of one of the following limits:

(A) 120 percent of the CO ppmv level established by an initial compliance test in accordance with the requirements of paragraph (m)(7) of this section; or

(B) 4,500 ppmv.

The owner or operator shall subsequently comply with the limit once it is established. The ppmv CO emissions shall be corrected to 15 percent volume stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes.

(iii) Standards for volatile organic compounds (VOC). Any owner or operator of a stationary internal combustion engine subject to the requirements of paragraph (m)(3)(i) (C) or (D) of this section shall establish a controlled ppmv VOC emission limit. No owner or operator shall cause to be discharged into the atmosphere any gases that contain VOC in excess of the lowest of one of the following limits:

(A) 120 percent of the VOC ppmv level established by an initial compliance test in accordance with the requirements of paragraph (m)(7) of this section; or

(B) 350 ppmv.

The owner or operator shall subsequently comply with the limit once it is established. The ppmv VOC emissions shall be corrected to 15 percent volume stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes.

(4) *Exemptions.* The requirements of paragraphs (m) (3), (5), (6), and (7) of this section shall not apply to the following, unless otherwise specified:

(i) Engines rated at less than 50 brake horsepower.

(ii) Engines operated at less than 200 hours per calendar year. Owners or operators that claim an exemption from the standards of paragraph (m)(3) of this section by means of this paragraph shall comply with the monitoring requirements of paragraph (m)(6)(ii)(C) of this section.

(iii) Emergency standby engines operated during either an emergency or maintenance operation. Maintenance operation shall be limited to 50 hours per calendar year.

(iv) Engines used in a laboratory for the sole purpose of conducting research or teaching.

(v) Engines used directly and exclusively for agricultural operations necessary for the growing of crops or the raising of fowl or animals.

(vi) Engine test stands used for evaluating engine performance.

(vii) Diesel engines used to power cranes necessary for emergency evacuation or safety of personnel.

(viii) Diesel engines rated at less than 125 brake horsepower and operated at less than 200,000 horsepower-hours per calendar year.

(A) To demonstrate that a unit is operated less than 200,000 horsepower-hours in a calendar year, the owner or operator shall install, operate, and maintain in calibration equipment that continuously monitors and records elapsed time of operation. For each year, the owner or operator shall also keep an operating log of start and stop times, type and quantity of fuel used, and cumulative annual hours and horsepower-hours of operation for each unit. Each operating log shall be maintained at the plant at which the unit is located for a period of five years. The operating log shall be made available to the Administrator upon request.

(B) The owner or operator of any unit that claims an exemption from the requirements of paragraph (m)(3) of this section under paragraph (m)(4)(viii)(A) of this section shall notify the Administrator within 7 days if the unit is ever operated equal to or greater than 200,000 horsepower-hours in a calendar year. If the unit is ever operated equal to or greater than 200,000 horsepower-hours in a calendar year, the exemption shall be permanently withdrawn and the owner or operator shall be subject to the compliance schedule in paragraph (m)(5)(iv) of this section and the applicable requirements of paragraphs (m) (3), (6), and (7) of this section. Nothing in this paragraph shall prevent EPA from bringing enforcement action for violation of paragraph (m)(3) of this section or for failure to demonstrate compliance with this paragraph (m)(3) of this section.

(5) *Compliance schedule.*

(i) Any owner or operator of a unit in existence prior to the date of adoption of this section that does not need to retrofit the unit, install new control equipment, or decrease annual operating hours to comply with the requirements of paragraph (m)(3) of this section shall demonstrate compliance with all of the applicable requirements of this section by May 15, 1995.

(ii) Any owner or operator of a unit in existence prior to the date of adoption of this section that must retrofit the unit to comply with the requirements of paragraphs (m)(3)(i) (A), (C) or (D), (m)(3)(ii), and (m)(3)(iii) of this section, shall demonstrate compliance in accordance with the applicable schedule specified in paragraph (m)(5)(ii) (A) or (B) of this section.

(A) Any owner or operator that chooses to convert the unit to electric power shall demonstrate compliance with all of the applicable requirements of this section by May 15, 1999. Any owner or operator of a unit to which this paragraph is applicable shall meet the following increments of progress:

(*1*) By January 1, 1997, apply for all authority-to-construct permits required by the local Air Pollution Control District for conversion of the unit to electric power, and

(*2*) By January 1, 1999, commence conversion of the unit to electric power, as approved by the local Air Pollution

Control District, to demonstrate compliance by May 15, 1999.

(B) Any owner or operator that chooses to retrofit the unit with combustion controls or install new control equipment shall demonstrate compliance with all of the applicable requirements of this section by May 15, 1997. Any owner or operator of a unit to which this paragraph is applicable shall meet the following increments of progress:

(*1*) By January 1, 1996, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(*2*) By January 1, 1997, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance by May 15, 1997.

(iii) Any owner or operator of a new unit that is constructed on and after the date of adoption of this section shall apply for, and receive approval of, all authority-to- construct permits required by the local Air Pollution Control District prior to beginning construction of the unit. The owner or operator shall demonstrate that the unit will be operated in compliance with all of the applicable requirements of this section within 60 days after the date of the initial startup of the unit.

(iv) On and after the date of adoption of this section, any owner or operator of a diesel engine that claims an exempt from the requirements of paragraph (m)(3) of this section which operates the unit equal to or greater than 200,000 brake horsepower hours in a calendar year shall demonstrate compliance in accordance with the applicable schedule specified in paragraph (m)(5)(iv) (A) or (B) of this section.

(A) Any owner or operator that chooses to retrofit the unit with combustion controls or install new control equipment shall meet the following increments of progress:

(*1*) Within 2 months after the day that the unit is operated equal to or greater than 200,000 brake horsepower hours in a calendar year, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(*2*) Within 6 months after the day that the unit is operated equal to or greater than 200,000 brake horsepower hours in a calendar year, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance within 12 months after the day that the unit is operated equal to or greater than 200,000 brake horsepower hours in a calendar year.

(B) Any owner or operator that chooses to convert the unit to electric power shall meet the following increments of progress:

(*1*) Within 4 months after the day that the unit is operated equal to or greater than 200,000 brake horsepower hours in a calendar year, apply for all authority-to-construct permits required by the local Air Pollution Control District for conversion of the unit to electric power, and

(*2*) Within 18 months after the day that the unit is operated equal to or greater than 200,000 brake horsepower hours in a calendar year, commence conversion of the unit to electric power, as approved by the local Air Pollution Control District, to demonstrate compliance within 24 months after the day that the unit is operated equal to or greater than 200,000 brake horsepower hours in a calendar year.

(v) Any owner or operator of a unit in existence prior to the date of adoption of this section that chooses to comply with the requirements of paragraph (m)(3) of this section by means of paragraph (m)(3)(i)(B) of this section shall comply with the following increments of progress:

(A) From May 15, 1996 through May 14, 1997, no owner or operator shall operate a unit in excess of 4,380 hours. The owner or operator shall demonstrate that the unit is operated less than or equal to 4,380 hours in accordance with the requirements of paragraph (m)(6)(ii)(C) of this section.

(B) From May 15, 1997 through May 14, 1998, no owner or operator shall operate a unit in excess of 1,800 hours. The owner or operator shall demonstrate that the unit is operated less than or equal to 1,800 hours in accordance with the requirements of paragraph (m)(6)(ii)(C) of this section.

(C) From May 15, 1998 through May 14, 1999, no owner or operator shall operate a unit in excess of 900 hours. The owner or operator shall demonstrate that the unit is operated less than or equal to 900 hours in accordance with the requirements of paragraph (m)(6)(ii)(C) of this section.

(D) On and after May 15, 1999, no owner or operator shall operate a unit equal to or greater than 200 hours per calendar year. The owner or operator shall demonstrate that the unit is operated less than 200 hours in accordance with the requirements of paragraph (m)(6)(ii)(C) of this section.

(6) *Reporting, monitoring, and recordkeeping.*

(i) *Reporting requirements.* Any owner or operator subject to the requirements of paragraph (m)(3) of this section shall comply with the applicable notification requirements of § 60.7, and shall also comply with the following requirements:

(A) By May 15, 1995, submit to the Administrator the identification number and type of each unit subject to the section, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with the section. For each unit identified, the following information shall be submitted to the Administrator:

(*1*) The rated brake horsepower and combustion method (i.e., rich-burn, lean-burn, or diesel) of the engine; type of gaseous and/or liquid fuel(s) that will be burned in the unit; purpose for which the unit is used; hours of operation and fuel consumption (cubic feet of gas or gallons of liquid) for each type of fuel for the previous one year period; brake horsepower hours for the previous one year period; and manufacturer, model designation, and age of the unit.

(*2*) A selection of the standard(s) in paragraph (m)(3) of this section with which the unit will comply.

(*3*) For owners or operators complying by means of paragraph (m)(3)(i) (C) or (D) of this section, a description of the NO_X control system that will be installed on the engine (if any), including type (e.g., selective or nonselective catalytic reduction, "clean-burn" combustion, etc.) and manufacturer, as well as a description of any ancillary equipment related to the control of emissions (e.g., automatic air/fuel ratio controller, fuel valves, etc.).

(B) Any owner or operator subject to the compliance schedule specified in paragraph (m)(5) (ii), (iii), or (iv) of this section shall notify the Administrator in writing of the following:

(*1*) The date construction is commenced on retrofits and/or additions of new control equipment to the unit.

(*2*) The anticipated date of initial startup of the unit after completing retrofits and/or additions of new control equipment to the unit.

(*3*) The actual date of initial startup of the unit after completing retrofits and/or additions of new control equipment to the unit.

(C) By the applicable compliance date specified in paragraph (m)(5) of this section, submit to the Administrator certification that the unit is in compliance with the applicable standards in paragraph (m)(3) of this

section. Any owner or operator complying by means of paragraphs (m)(3)(i) (C) or (D), (3)(ii), and (3)(iii) of this section shall demonstrate compliance by submitting to the Administrator and the local Air Pollution Control District the results of an initial compliance test performed in accordance with the applicable requirements of paragraph (m)(7) of this section. The owner or operator shall provide the Administrator at least 30 days prior notice of the compliance test to afford the Administrator the opportunity to have an observer present. As a part of the certification, the owner or operator shall submit to the Administrator and the local Air Pollution Control District a written report of the results of the compliance test.

(D) Engine operator inspection plan. By the applicable compliance date specified in paragraph (m)(5) of this section, any owner or operator of a unit rated at equal to or greater than 50 brake horsepower and less than 300 brake horsepower that chooses to comply with the requirements of paragraph (m)(3) of this section by means of paragraphs (m)(3)(i) (C) or (D), (3)(ii), and (3)(iii) of this section shall submit an Engine Operator Inspection Plan to the Administrator and the local Air Pollution Control District. The owner or operator may request a change to the plan at any time. On and after the applicable compliance date specified in paragraph (m)(5) of this section, the plan shall be updated and submitted to the Administrator and the local Air Pollution Control District prior to commencing any change in operation. The Plan shall include the following for each engine:

(*1*) The manufacturer, model number, rated brake horsepower, combustion method (i.e., rich-burn, lean-burn, or diesel), and company identification number and the location of the engine.

(*2*) A description of the NO_X control system installed on the engine (if any), including type (e.g., selective or nonselective catalytic reduction, "clean-burn" combustion, etc.) and manufacturer, as well as a description of any ancillary equipment related to the control of emissions (e.g., automatic air/fuel ratio controller, fuel valves, etc.).

(*3*) Establish engine operating parameters (e.g., timing, manifold vacuum pressure, valve set points, etc.) using the results of the initial compliance test required under paragraph (m)(6)(i)(C) of this section. In addition, the plan shall establish engine exhaust oxygen concentrations in accordance with the test data.

(*4*) A specific emission inspection procedure to assure that the engine is operated in continual compliance with the requirements of this section. The procedure shall include an inspection schedule requiring that inspections be conducted every calendar quarter or after every 2,000 hours of engine operation. In no event shall the frequency of inspection be less than once per calendar year.

(*5*) The plan shall require that a portable NO_X analyzer be used to take readings during any quarter in which source tests are not performed. The instrument readings for each parameter in the inspection plan, a description of the corrective actions taken, a determination of whether or not the engine is in compliance, and the name of the person recording the measurement shall be recorded in the inspection log.

(*6*) Each preventative or corrective maintenance procedure or practice that will be used to maintain the engine and NO_X control system in continual compliance with the provisions of this section.

(ii) *Monitoring requirements.*

(A) Any owner or operator of a unit rated at equal to or greater than 300 brake horsepower that chooses to comply with the requirements of paragraph (m)(3) of this section by means of paragraph (m)(3)(i) (C) or (D) and paragraph (m)(3)(ii) of this section shall comply with the following requirements:

(*1*) By the applicable compliance date specified in paragraph (m)(5) of this section, install, calibrate, operate, and maintain a continuous emissions monitoring system (CEMS) in accordance with the applicable requirements of Appendices B and F of 40 CFR part 60 to demonstrate continuous compliance with the requirements of paragraph (m)(3) (i) and (ii) of this section. The CEMS shall be installed and operational before conducting the initial compliance test required under paragraph (m)(6)(i)(C) and paragraph (m)(7) of this section. The owner or operator shall submit to the Administrator documentation that the CEMS is in compliance with the requirements of this paragraph.

(*2*) Each owner or operator shall submit an excess emissions and monitoring systems performance report, in accordance with the requirements of § 60.7(c) and § 60.13, to the Administrator within 30 days after the end of each calendar quarter.

(B) Any owner or operator of a unit rated at equal to or greater than 50 brake horsepower and less than 300 brake horsepower that chooses to comply with the requirements of paragraph (m)(3) of this section by means of either paragraph (m)(3)(i) (C) or (D), and paragraphs (m)(3)(ii) and (m)(3)(iii) of this section, shall comply with the following requirements:

(*1*) Complete an emission test at least once every 24 months in accordance with the requirements of paragraph (m)(7) of this section. If the results of an emission test indicate that a unit is in violation of the applicable NO_X, CO, and/or VOC emission standards specified in paragraphs (m)(3)(i)(C), (m)(3)(i)(D), (m)(3)(ii), and (m)(3)(iii) of this section, the owner or operator shall make any adjustments to the operating parameters of the unit and/or associated control equipment necessary to bring the unit into compliance as demonstrated through an emission test. If it is necessary to adjust the operating parameters of the unit and/or associated control equipment that are different from those specified in the Engine Operator Inspection Plan to bring the unit into compliance, the owner or operator shall revise the Engine Operator Inspection Plan to reflect the changes made to the operating parameters, and shall submit the revisions to the Administrator and the local Air Pollution Control District. Nothing in this paragraph shall prevent EPA from bringing an enforcement action for violation of the applicable emission standards in paragraphs (m)(3)(i)(C), (m)(3)(i)(D), (m)(3)(ii), and (m)(3)(iii) of this section or for failure to demonstrate compliance with this paragraph.

(*2*) By the applicable compliance date in paragraph (m)(5) of this section, each IC Engine subject to this part shall either install, calibrate, operate and maintain a CEMS for NO_X in accordance with the requirements of 40 CFR part 60, appendix B or shall have an engine parameter monitoring scheme developed which shall be capable of continuously predicting the NO_X emission concentration. By the applicable compliance date such parameter monitoring scheme shall be demonstrated to meet a 20% relative accuracy for predicting the 15 minute concentration of NO_X in the exhaust. This relative accuracy evaluation should be conducted in accordance with the techniques of 40 CFR part 60, appendix B and shall compare the predicted 15 minute NO_X concentration through a continuous parameter monitoring model to the NO_X emissions measured by a Method 7E stack test. The parameter monitoring scheme shall continually meet the 20% relative accuracy requirement and at a minimum the parameter monitoring scheme shall be

reevaluated for the relative accuracy during each biannual test required by paragraph (m)(6)(ii)(B)(*1*) of this section.

(C) Any owner or operator of a unit rated at equal to or greater than 50 brake horsepower that chooses to comply with the requirements of paragraph (m)(3) of this section by means of paragraph (m)(3)(i)(B) of this section, and any owner or operator that claims an exemption from the standards of paragraph (m)(3) of this section by means of paragraph (m)(4)(ii) of this section, shall install, operate, and maintain in calibration equipment that continuously monitors and records elapsed time of operation to demonstrate compliance with the compliance schedule specified in paragraph (m)(5)(v) of this section. For each year, the owner or operator shall keep an operating log of start and stop times, type and quantity of fuel used, and cumulative annual hours of operation and brake horsepower hours for each unit. Each operating log shall be maintained at the plant at which the unit is located for a period of five years. The operating log shall be made available to the Administrator upon request.

(iii) *Recordkeeping requirements.* Any owner or operator of a unit subject to this section shall maintain all records necessary to demonstrate compliance with the section for a period of five calendar years at the plant at which the subject unit is located. The records shall be made available to the Administrator upon request. The owner or operator shall maintain records of the following information for each day the unit is operated:

(A) Identification and location of each engine subject to the requirements of this section.

(B) Calendar date of record.

(C) The number of hours the unit is operated during each day including startup, shutdown, and breakdown periods and the type and duration of maintenance and repairs.

(D) Date and results of each emission inspection.

(E) A summary of any emissions corrective maintenance taken.

(F) Any additional information required in the Engine Operator Inspection Plan.

(G) The results of all compliance tests.

(H) If a unit is equipped with a CEMS:

(*1*) Identification of time periods during which NO_X and CO standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances.

(*2*) Identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

(7) *Test Methods.* Any owner or operator that is required to perform a compliance test to demonstrate compliance with the standards specified in paragraphs (m)(3)(i) (C) or (D), (m)(3)(ii), and (m)(3)(iii) of this section shall comply with the requirements of § 60.8 (c), (d), and (e). The test shall be performed and data reduced and reported as follows:

(i) Each emission test shall be conducted while the unit is operated at maximum operating capacity and operating under representative operating conditions.

(ii) Each emission test shall be conducted in accordance with the appropriate test methods in 40 CFR part 60, appendix A. Except for the modifications in this paragraph (m) and unless otherwise approved by the Administrator, NO_X shall be measured in accordance with Method 7E, CO shall be measured in accordance with Method 10, and the diluent shall be measured using Method 3A. Reactive organic compounds shall be measured in accordance with Method 25 or 25A, referenced to methane. If Method 25A is used, Method 18 shall be used to determine methane content. Testing shall be conducted for four 15 minute testing periods. Compliance shall be evaluated for each 15 minute period. Data recorded during testing to determine the 15 minute average shall either be continuously integrated by the testing instrument and data recorder, or recorded manually at 30 second intervals during each 15 minute test period. Zero and calibration checks shall be conducted after each 15 minute test period.

(iii) Any owner or operator that chooses to comply with the requirements of paragraph (m)(3) of this section by means of paragraph (m)(3)(i)(D) of this section shall calculate the applicable percent NO_X emission reduction using the pre- and post-controlled ppmv NO_X concentration. After demonstrating the applicable percent reduction by means of a post-controlled emissions test, the post-controlled NO_X concentration shall be used to establish the outlet ppmv NO_X emission limit for determining subsequent compliance. The outlet ppmv NO_X emission limit established for determining subsequent compliance shall be documented in the applicable certification report required under paragraph (m)(6)(i)(C) of this section.

(iv) The ppmv CO and VOC emission limits required by paragraphs (m)(3) (ii) and (iii) of this section, respectively, shall be established during the initial compliance test for NO_X emissions. The CO and VOC emission limits established for determining subsequent compliance shall be documented in the applicable certification report required under paragraph (m)(6)(i)(C) of this section.

(n) *Biomass boilers or steam generators.*

(1) *Applicability.* Any owner or operator of a biomass boiler or steam generator with a rated heat input capacity equal to or greater than 5 million British thermal units per hour (mmBtu/hr) and an annual heat input equal to or greater than 9 billion British thermal units per year (10^9 Btu/yr) shall comply with the applicable requirements of paragraphs (n) (1) through (7) of this section. For the purposes of this paragraph, the affected area includes the Sacramento Metro Area as described for ozone in 40 CFR 81.305.

(*2*) *Definitions.* For the purposes of paragraphs (n)(1) through (n)(7) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Annual heat input means the actual amount of heat released by fuels burned in a unit during a 12 calendar month rolling period, based on the fuel's higher heating value. The annual heat input shall be calculated as the sum of the previous 12 monthly fuel use rates multiplied by the fuel's higher heating value.

Biomass means any solid organic material used as a fuel source for boilers or steam generators including, but not limited to, wood, almond shells, or agricultural waste.

Biomass boiler or steam generator means any combustion equipment used in any institutional, commercial, or industrial operation that is designed to burn biomass to produce steam, heat water and/or other fluids, and/or generate electricity. A biomass boiler or steam generator does not include any waste heat recovery boiler that is used to recover sensible heat from the exhaust of a combustion turbine or any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

British thermal unit (Btu) means the amount of heat required to raise the temperature of one pound of water from 59°F to 60°F at one atmosphere.

Heat input means the chemical heat released due to fuel combustion in a unit, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.

Higher heating value (HHV) means the total heat liberated per mass of fuel burned (Btu per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. If certification of the HHV is not provided by the third party fuel supplier, it shall be determined by one of the following test methods: ASTM D2015–85 for solid fuels; ASTM D240–87 or ASTM D2382–88 for liquid hydrocarbon fuels; or ASTM D1826–88 or ASTM D1945–81 in conjunction with ASTM D3588–89 for gaseous fuels.

Municipal-type solid waste means household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single and multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes material discarded by schools, hospitals, nonmanufacturing activities at prisons and government facilities and other similar establishments or facilities.

NO_X emissions means the sum of nitric oxides and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide.

Rated heat input capacity means the heat input capacity specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the new maximum heat input shall be considered as the rated heat input capacity.

Shutdown means the period of time a unit is cooled from its normal operating temperature to cold or ambient temperature.

Startup means the period of time a unit is heated from cold or ambient temperature to its normal operating temperature as specified by the manufacturer.

Unit means any biomass boiler or steam generator as defined in this paragraph.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

(3) Standards.

(i) No owner or operator of a biomass boiler or steam generator shall cause to be discharged into the atmosphere any gases that contain NO_X in excess of one of the following standards, which ever is less stringent:

(A) 70 parts per million (ppm) corrected to 12 percent volume stack gas carbon dioxide (CO_2) on a rolling 3 hour average dry basis; or

(B) 50 percent (0.50) of the NO_X concentration in the uncontrolled exhaust gas stream. A controlled ppm NO_X limit shall be established in accordance with the requirements of paragraph (n)(7)(ii) of this section for the purpose of demonstrating continuous compliance with the 50 percent reduction.

(ii) The owner or operator of any biomass boiler or steam generator subject to one of the standards in paragraph (n)(3)(i) of this section shall establish a controlled ppm carbon monoxide (CO) emission limit that represents good operating and combustion practices. No owner or operator shall cause to be discharged into the atmosphere any gases that contain CO in excess of 120 percent of the CO ppm level established by an initial compliance test in accordance with the requirements of paragraph (n)(7)(iii) of this section. The owner or operator shall subsequently comply with the limit once it is established. The ppm CO emissions shall be corrected to 12 percent volume stack gas CO_2 on a rolling 3 hour average dry basis.

(4) *Exemptions.* The requirements of paragraphs (n) (3), (5), (6), and (7) of this section shall not apply to any owner or operator of the following:

(i) Any boiler or steam generator fired with only gaseous and/or liquid fuel that is subject to paragraph (u) of this section.

(ii) Any boiler or steam generator that is designed for the primary purpose of burning municipal-type solid waste.

(5) *Compliance Schedule.*

(i) Any owner or operator of a unit in existence prior to the date of adoption of this section that does not need to retrofit the unit or install new control equipment to comply with the requirements of paragraph (n)(3) of this section shall demonstrate compliance with all of the applicable requirements of this section by May 15, 1995.

(ii) Any owner or operator of a unit in existence prior to the date of adoption of this section that must retrofit the unit or install new control equipment to comply with the requirements of paragraph (n)(3) of this section shall demonstrate compliance with all of the applicable requirements of this section by May 15, 1997. Any owner or operator of a unit to which this paragraph is applicable shall meet the following increments of progress:

(A) By January 1, 1996, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment to the unit, and

(B) By January 1, 1997, commence construction of all retrofits and/or additions of new control equipment to the unit, as approved by the local Air Pollution Control District, to demonstrate compliance by May 15, 1997.

(iii) Any owner or operator of a new unit that is constructed on and after the date of adoption of this section shall apply for, and receive approval of, all authority-to-construct permits required by the local Air Pollution Control District prior to beginning construction of the unit. The owner or operator shall demonstrate that the unit will be operated in compliance with all of the applicable requirements of this section within 60 days after the date of the initial startup of the unit.

(iv) On and after the date of adoption of this section, any owner or operator of a unit exempt from the requirements of paragraph (n)(3) of this section that becomes subject to requirements of paragraph (n)(3) of this section because the unit's annual heat input rate equals or exceeds 9×10^9Btu/yr shall meet the following increments of progress:

(A) Within 7 months after the day that the unit is operated equal to or greater than 9×10^9 Btu/yr, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(B) Within 19 months after the day that the unit is operated equal to or greater than 9×10^9 Btu/yr, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance within 24 months after the day that the unit is operated equal to or greater than 9×10^9 Btu/yr.

(6) *Reporting, Monitoring, and Recordkeeping.*

(i) *Reporting Requirements.* Any owner or operator subject to the requirements of paragraph (n)(3) of this section shall comply with the applicable notification and reporting requirements of § 60.7, and shall also comply with the following requirements:

(A) By May 15, 1995, submit to the Administrator the identification number and type of each unit subject to the section, the name and address of the plant where the unit is located, and the

name and telephone number of the person responsible for demonstrating compliance with the section. For each unit identified, the following information shall be submitted to the Administrator:

(*1*) The rated heat input capacity, hours of operation during the previous one-year period, anticipated annual operating time and annual heat input for 1995, type of fuel(s) that will be burned in the unit, and age and manufacturer of the unit.

(*2*) Documentation of existing emissions of NO_X and CO in accordance with the applicable requirements of paragraph (n)(7) of this section, a selection of the standard in paragraph (n)(3)(i) of this section with which the unit will comply, and the control method selected for achieving compliance.

(B) Any owner or operator subject to the compliance schedule specified in paragraph (n)(5) (ii), (iii), or (iv) of this section shall notify the Administrator in writing of the following:

(*1*) The date construction is commenced on all retrofits and/or additions of new control equipment to the unit.

(*2*) The anticipated date of initial startup of the unit after completing all retrofits and/or additions of new control equipment to the unit.

(*3*) The actual date of initial startup of the unit after completing all retrofits and/or additions of new control equipment to the unit.

(C) By the applicable compliance date specified in paragraph (n)(5) of this section, submit to the Administrator certification that the unit is in compliance with the applicable standard in paragraph (n)(3) of this section as demonstrated through a report of the initial compliance test performed in accordance with the applicable requirements of paragraph (n)(4)(ii)(A) or (n)(7) of this section. The owner or operator shall provide the Administrator at least 30 days prior notice of the compliance test to afford the Administrator the opportunity to have an observer present.

(ii) *Continuous Emissions Monitoring System (CEMS) Requirements.* Any owner or operator subject to the requirements of paragraph (n)(3) of this section shall comply with the following:

(A) By the applicable compliance date specified in paragraph (n)(5) of this section, install, calibrate, operate, and maintain a CEMS in accordance with the applicable requirements of Appendices B and F of 40 CFR part 60 to demonstrate continuous compliance with the requirements of paragraph (n)(3) of this section. The CEMS shall be installed and operational before conducting the initial compliance test required under paragraph (n)(6)(i)(C) and paragraph (n)(7) of this section. As a part of the certification requirement under paragraph (n)(6)(i)(C) of this section, the owner or operator shall submit documentation that the CEMS is in compliance with the requirements of this paragraph.

(B) Each owner or operator shall submit an excess emissions and monitoring systems performance report, in accordance with the requirements of § 60.7(c) and (d) and 60.13, to the Administrator within 30 days after the end of each calendar quarter.

(iii) *Recordkeeping Requirements.* Any owner or operator of a unit subject to this section shall maintain all records necessary to demonstrate compliance with the section for a period of five calendar years at the plant where the subject unit is located. The records shall be made available to the Administrator upon request. The owner or operator shall maintain records of the following information for each day the unit is operated:

(A) Identification and location of each unit subject to the requirements of this section.

(B) Calendar date of record.

(C) The number of hours the unit is operated during each day.

(D) Boiler load, fuel type, actual time of startups and shutdowns, breakdown periods, and the type and duration of maintenance and repairs.

(E) The results of all compliance tests.

(F) The rolling 3 hour average NO_X emission concentration (expressed as NO_2 corrected to 12 percent CO_2) measured.

(G) The rolling 3 hour average CO emission concentration (corrected to 12 percent volume stack gas CO_2) measured.

(H) Identification of time periods during which NO_X and CO standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances.

(I) Identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

(7) *Test Methods.*

(i) Any owner or operator that chooses to comply with the standard specified in paragraph (n)(3)(i)(A) of this section shall perform an initial compliance test to demonstrate compliance with the standard in accordance with the applicable requirements of § 60.8, and shall also comply with the following:

(A) Each emission test run shall be conducted while the unit is operated at maximum operating capacity. No emission test shall be conducted during start-up, shutdown, or under breakdown conditions for the purpose of demonstrating compliance with this section.

(B) Sampling and analytical procedures shall be conducted in accordance with the applicable EPA Reference Methods and Submethods described in appendix A of 40 CFR part 60.

(C) The 70 ppm emission limit specified in paragraph (n)(3)(i)(A) of this section shall be corrected to 12 percent volume stack gas CO_2 on a rolling 3 hour average dry basis.

(ii) Any owner or operator that chooses to comply with the standard specified in paragraph (n)(3)(i)(B) of this section shall perform an initial compliance test to demonstrate compliance with the standard in accordance with the applicable requirements of § 60.8, and shall also comply with the following:

(A) The requirements of paragraphs (n)(7)(i)(A) and (B) of this section.

(B) The 50 percent NO_X emission reduction specified in paragraph (n)(3)(i)(B) of this section shall be calculated based on the pre- and post-controlled ppm NO_X concentration referenced at 12 percent volume stack gas CO_2 on a rolling 3 hour average dry basis. The pre-controlled ppm NO_X concentration to be used in demonstrating the 50 percent reduction shall be the ppm NO_X concentration submitted to the Administrator in accordance with the requirements of paragraph (n)(6)(i)(A)(*2*) of this section. After demonstrating a 50 percent reduction by means of a post-controlled emissions test, the post-controlled NO_X concentration shall be used to establish the outlet ppm NO_X emission limit for determining subsequent compliance. The ppm NO_X emission limit shall be corrected to 12 percent volume stack gas CO_2 on a rolling 3 hour average dry basis. The outlet ppm NO_X emission limit established for determining subsequent compliance shall be documented in the applicable certification report required under paragraph (n)(6)(i)(C) of this section.

(iii) Any owner or operator that is subject to the requirements of paragraph (n)(3)(ii) of this section shall perform a test for CO emissions during the initial compliance test for NO_X emissions to establish a ppm CO emission limit that represents good operating and combustion practices for the fuel(s) burned in the unit. Sampling of CO emissions shall be performed at the

outlet of the control system in accordance with the applicable requirements of § 60.8 and the applicable EPA Reference Methods and Submethods described in appendix A of 40 CFR part 60. The ppm CO emissions shall be corrected to 12 percent volume stack gas CO_2 on a rolling 3 hour average dry basis. The outlet ppm CO emission limit established for determining subsequent compliance shall be documented in the applicable certification report required under paragraph (n)(6)(i)(C) of this section.

(o) *Emissions of oxides of nitrogen from stationary gas turbines.*

(1) *Applicability.* For the purposes of paragraph (o) of this section, the affected area includes the Sacramento Metro Area as described for ozone in 40 CFR 81.305. Any owner or operator of a stationary gas turbine with a rated heat output capacity equal to or greater than 0.3 megawatt (MW) shall comply with the applicable requirements of paragraphs (o) (1) through (7) of this section.

(2) *Definitions.* For the purposes of paragraph (o) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

British thermal unit (Btu) means the amount of heat required to raise the temperature of one pound of water from 59°F to 60°F at one atmosphere.

Chemical processing stationary gas turbine unit means a gas turbine that vents its exhaust gases into the operating stream of a chemical process.

Cogeneration cycle stationary gas turbine unit means a gas turbine that is operated both for the simultaneous production of shaft work and for the recovery of useful thermal energy from the exhaust gases or waste steam as defined by Section 25134 of the California Public Resources Code.

Combined cycle stationary gas turbine unit means a gas turbine that is operated both for the production of electrical energy from shaft work and the useful energy produced from heat recovered from its exhaust gases.

Emergency standby stationary gas turbine unit means a gas turbine that is operated only as a mechanical or electrical power source for a facility when the primary power source has been rendered inoperable, except due to power interruption pursuant to an interruptible power supply agreement. This does not include utility company electrical power plant units.

Exhaust after treatment means a control method for the post- combustion reduction of NO_X emissions, such as selective catalytic reduction.

Higher heating value (HHV) means the total heat liberated per mass of fuel burned (Btu per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. If certification of the HHV is not provided by the third party fuel supplier, it shall be determined by one of the following test methods: ASTM D2015–85 for solid fuels; ASTM D240–87 or ASTM D2382–88 for liquid hydrocarbon fuels; or ASTM D1826–88 or ASTM D1945–81 in conjunction with ASTM D3588–89 for gaseous fuels.

LHV means the lower heating value of a fuel.

NO_X emissions means the sum of nitric oxides and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide.

Measured NO_X emissions concentration corrected to International Standards Organization (ISO) standard conditions is: $NO_X = (NO_X \text{ obs})(\text{Pref}/\text{Pobs})^{0.5}(288\text{K}/\text{Tamb})^{1.53}(e^{19(\text{Hobs}-0.00633)})$,

where:

NO_X=emissions of NO_X at 15 percent oxygen and ISO standard conditions on a dry basis, ppm.

NO_X obs=measured NO_X emissions at 15 percent oxygen on a dry basis, ppm.

Pref=reference ambient absolute pressure, 101.3 kilopascals (14.696 psia).

Pobs=measured ambient absolute pressure.

Hobs=measured absolute specific humidity of ambient air, pounds water per pound dry air.

e=transcendental constant (2.718).

Tamb=measured temperature of ambient air, degrees K.

Peaking unit means a stationary gas turbine that is used intermittently to produce energy on a demand basis.

Power augmentation means the increase in the gas turbine shaft output and/or the decrease in gas turbine fuel consumption by the addition of energy recovered from exhaust heat.

Rating of a unit means the continuous MW (megawatt) rating or mechanical equivalent by a manufacturer for gas turbine(s) without power augmentation.

Shutdown means the period of time a unit is cooled from its normal operating temperature to cold or ambient temperature.

Startup means the period of time a unit is heated from cold or ambient temperature to its normal operating temperature as specified by the manufacturer.

Stationary gas turbine (unit) means any gas turbine system that is gas and/or liquid fueled with or without power augmentation. This unit is either attached to a foundation at a facility or is portable equipment operated at a specific facility for more than 90 days in any 12-month period. Two or more gas turbines powering one shaft shall be treated as one unit.

Thermal stabilization period means the two-hour start up time necessary to build-up steam pressure for NO_X control purposes in cogeneration cycle and combined cycle units.

(3) *Standards.*

(i) No owner or operator of a stationary gas turbine unit shall cause to be discharged into the atmosphere any gases that contain NO_X, at concentrations corrected for ISO standard conditions, in excess of the following standards:

$$\text{Compliance Limit} = \text{Reference Limit} \times \frac{\text{EFF}}{25\%}$$

where:

Compliance Limit=allowable NO_X emissions (ppm by volume).

Reference Limit=the NO_X emission limit (ppm by volume), calculated at ISO standard conditions, corrected to 15 percent oxygen on a dry basis, and averaged over 15 consecutive minutes.

The limits for various megawatt ratings (continuous rating by the manufacturer without power augmentation) are as follows:

Unit Size

Megawatt rating, MW	Reference limit, ppm
≥0.3 to <2.9 MW	25
≥2.9 MW	9

And,

$$EFF = \frac{3413 \times 100\%}{\text{Actual Heat Rate at HHV of Fuel (Btu/kw-hr)}}$$

The demonstrated percent efficiency of the gas turbine only as calculated without consideration of any downstream energy recovery from the actual heat rate [i.e., (British thermal units (Btu)/kilowatt-hour) or 1.34 Btu/horsepower-hour], corrected to the HHV of the fuel and ISO conditions, as measured at peak load for the turbine. The value of EFF shall not be less than 25 percent. Gas turbines with lower efficiencies will be assigned a 25 percent efficiency for this calculation.

or

$$EFF = \text{Manufacturer Rated Efficiency at LHV} \times \frac{LHV}{HHV}$$

The manufacturer's continuous rated percent efficiency (manufacturer's rated efficiency) of the gas turbine after correction from LHV to the HHV of the fuel, whichever efficiency is higher. The value of EFF shall not be less than 25 percent. Gas turbines with lower efficiencies will be assigned a 25 percent efficiency for this calculation.

(ii) The owner or operator of any stationary gas turbine subject to the standards in paragraph (o)(3) of this section shall establish a controlled ppm carbon monoxide (CO) emission limit that represents good operating and combustion practices. No owner or operator shall cause to be discharged into the atmosphere any gases that contain CO in excess of 120 percent of the CO ppm level established by an initial compliance test in accordance with the requirements of paragraph (o)(7)(ii) of this section. The owner or operator shall subsequently comply with the limit once it is established. The ppm CO emissions shall be corrected to 15 percent volume stack gas O 52 on a dry basis averaged over a period of 15 consecutive minutes.

(4) *Exemptions.*

(i) The requirements of paragraphs (o)(3), (5), (6), and (7) of this section shall not apply to the following:

(A) Laboratory units used in research and testing.

(B) Units operated exclusively for firefighting and/or flood control.

(C) Chemical processing gas turbine units.

(ii) Peaking Units and Emergency Standby Units.

(A) The requirements of paragraphs (o)(3), (5), (6), and (7) of this section shall not apply to peaking units or emergency standby units that operate less than 200 hours per calendar year. To demonstrate that a unit is operated less than 200 hours in a calendar year, the owner or operator shall install, operate, and maintain in calibration equipment that continuously monitors and records elapsed time of operation. The owner or operator shall also keep an operating log of start and stop times, type and quantity of fuel used, and cumulative hours of operation for each unit.

(B) The owner or operator of any stationary gas turbine exempt under paragraph (o)(ii)(A) of this section shall notify the Administrator within 7 days if the unit is operated equal to or greater than 200 hours in a calendar year. If the unit is ever operated equal to or greater than 200 hours in a calendar year, the exemption shall be permanently withdrawn and the owner or operator shall be subject to the applicable requirements of paragraphs (o)(3), (6), and (7) of this section in accordance with the compliance schedule in paragraph (o)(5)(iv) of this section.

(5) *Compliance Schedule.*

(i) Any owner or operator of a unit in existence prior to [*Insert date of publication of the final rule*] that does not need to retrofit the unit or install new control equipment to comply with the requirements of paragraph (o)(3) of this section shall demonstrate compliance with all of the applicable requirements of this section by May 15, 1995.

(ii) Any owner or operator of a unit in existence prior to [*Insert date of publication of the final rule*] that must retrofit the unit or install new control equipment to comply with the requirements of paragraph (o)(3) of this section shall demonstrate compliance with all of the applicable requirements of this section by May 15, 1997. Any owner or operator of a unit to which this paragraph is applicable shall meet the following increments of progress:

(A) By January 1, 1996, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(B) By January 1, 1996, comply with the requirements of paragraph (o)(6)(ii)(A) of this section if the owner or operator chooses to monitor operating conditions of its turbine to demonstrate continuous compliance with the section.

(C) By January 1, 1997, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance by May 15, 1997.

(iii) Any owner or operator of a new unit that is constructed on and after [*Insert date of publication of the final rule*] the date of adoption of this section shall apply for, and receive approval of, all authority-to-construct permits required by the local Air Pollution Control District prior to beginning construction of the unit. The owner or operator shall demonstrate that the unit will be operated in compliance with all of the applicable requirements of this section within 60 days after the date of the initial startup of the unit.

(iv) On and after [*Insert date of publication of the final rule*], any owner or operator of a unit that becomes subject to requirements of paragraph (o)(3) of this section because of the loss of an exemption under paragraph (o)(4)(ii) of this section shall meet the following increments of progress:

(A) Within 7 months after the day that the unit is operated equal to or greater than 200 hours in a calendar year, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(B) Within 7 months after the day that the unit is operated equal to or greater than 200 hours in a calendar year, comply with the requirements of paragraph (o)(6)(ii)(A) of this section if the owner or operator chooses to monitor operating conditions of its turbine rather than installing a continuous emissions monitoring system to demonstrate continuous compliance with the section.

(C) Within 19 months after the day that the unit is operated equal to or greater than 200 hours in a calendar year, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance within 24 months after the day that the unit is operated equal to or greater than 200 hours in a calendar year.

(6) *Reporting, Monitoring, and Recordkeeping.*

(i) *Reporting Requirements.* Any owner or operator subject to the requirements of paragraph (o)(3) of this section shall comply with the applicable notification and reporting requirements of § 60.7, and shall also comply with the following requirements:

(A) By May 15, 1995, submit to the Administrator the identification number and type of each unit subject to the section, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with the section. For each unit identified, the following information shall be submitted to the Administrator:

(*1*) The rated heat output capacity (in MW and brake horsepower units); type of fuel(s) (i.e., gaseous and/or liquid) that will be burned in the unit; anticipated annual heat output rate (Btu/kW-hr) corrected to the HHV for each type of fuel; hours of operation and fuel consumption (cubic feet of gas or gallons of liquid) for each type of fuel for the previous one year period; and manufacturer, model designation, and age of the unit.

(*2*) Identification of the standards in paragraph (o)(3) of this section with which the unit will comply, and the control method selected for achieving compliance.

(B) Any owner or operator subject to the compliance schedule specified in paragraph (o)(5) (ii), (iii), or (iv) of this section shall notify the Administrator in writing of the following:

(*1*) The date construction is commenced on all retrofits and/or additions of new control equipment to the unit.

(*2*) The anticipated date of initial startup of the unit after completing all retrofits and/or additions of new control equipment to the unit.

(*3*) The actual date of initial startup of the unit after completing all retrofits and/or additions of new control equipment to the unit.

(C) By the applicable compliance date specified in paragraph (o)(5) of this section, submit to the Administrator certification that the unit is in compliance with the applicable standard in paragraph (o)(3) of this section as demonstrated through a report of the initial compliance test performed in accordance with the applicable requirements of paragraph (o)(6)(ii) or (7) of this section. The owner or operator shall provide the Administrator at least 30 days prior notice of the compliance test to afford the Administrator the opportunity to have an observer present.

(ii) *Continuous Emissions Monitoring Requirements.* Any owner or operator of a unit with a rated heat output capacity less than 2.9 MW that is subject to the requirements of paragraph (o)(3) of this section shall either comply with the requirements of paragraphs (o)(6)(ii) (A) or (B) and (o)(6)(ii)(C) of this section. Any owner or operator of a unit with a rated heat output capacity equal to or greater than 2.9 MW that is subject to the requirements of paragraph (o)(3) of this section shall comply with the requirements of paragraphs (o)(6)(ii) (B) and (C) of this section.

(A) Any owner or operator that chooses to monitor operating conditions shall comply with the following:

(*1*) By the applicable compliance date specified in paragraph (o)(5) of this section, submit a plan to the Administrator that includes the following:

(*i*) Identify the specific operating conditions to be monitored and the relationship between the operating conditions and NO_X, CO, and O_2 emission concentrations in the flue gas. For stationary gas turbines, the most important operating variables are turbine load (i.e., actual heat output/design maximum heat output or actual steam generating rate/design maximum steam generating capacity), the level of excess air (i.e., flue gas O_2 level), and type and nitrogen content of each fuel.

(*ii*) In addition to those described in paragraph (o)(6)(ii)(A)(*1*)(*i*) of this section, the water or steam-to-fuel ratio and turbine load are important operating variables to be monitored for water- or steam-injection systems. For selective catalytic reduction systems, the reagent (i.e., ammonia or urea)-to-NO_X ratio and reagent injection pressure are important operating variables to be monitored.

(*iii*) Include the data and information that will be used to identify the relationship between NO_X, CO, and O_2 emission concentrations and the operating conditions.

(*iv*) Describe how the relationship between the operating conditions (including turbine load and fuel type) and NO_X, CO, and O_2 emission concentrations will be established during the initial compliance test. The relationship between the operating conditions and NO_X, CO, and O_2 emission concentrations shall be based on the maximum operating conditions at which the unit can be operated. Once the plan has been approved by the Administrator, the operating conditions used to establish the relationship will be the optimum operating conditions under which the owner or operator should operate the unit. Deviations from these optimum operating conditions in excess of 10% (averaged over the fifteen minute period) shall be recorded and reported in accordance with paragraph (o)(6)(ii)(C) of this section.

(*v*) Identify how the operating conditions, including turbine load and fuel type, will be monitored on a fifteen minute basis; the quality assurance procedures or practices that will be used to ensure that the data generated by monitoring the operating conditions will be representative and accurate; and the type and format of the records of the operating conditions, including turbine load and fuel type, that will be maintained by the owner or operator.

(*2*) By the applicable compliance date specified in paragraph (o)(5) of this section, and annually thereafter, submit to the Administrator certification that the turbine has been operated in accordance with all of the applicable requirements of this section specified under paragraphs (o)(3) and (o)(6)(ii)(A) of this section.

(B) Any owner or operator that is required or chooses to install an in-stack continuous emissions monitoring system (CEMS) shall comply with the following:

(*1*) By the applicable compliance date specified in paragraph (o)(5) of this section, install, calibrate, operate, and maintain a CEMS in accordance with the applicable requirements of appendices B and F of 40 CFR part 60 to demonstrate continuous compliance with the requirements of paragraph (o)(3) of this section. The CEMS shall be installed and operational before conducting the initial compliance test required under paragraphs (o)(6)(i)(C) and (o)(7) of this section. As a part of the certification requirement under paragraph (o)(6)(i)(C) of this section, the owner or operator shall submit documentation that the CEMS is in compliance with the requirements of this paragraph (o). The CEMS shall include equipment that measures and records the following:

(*i*) Exhaust gas NO_X and CO concentrations corrected to ISO conditions at 15 percent oxygen on a dry basis.

(*ii*) Flow rate of liquid or gaseous fuels and the ratio of water- or steam-to-fuel added to the combustion chamber or to the exhaust for the reduction of NO_X emissions.

(*iii*) Elapsed time of operation.

(*2*) [Reserved]

(C) Each owner or operator shall submit an operating conditions deviation or excess emissions report and a monitoring systems performance report, in accordance with the requirements of § 60.7(c) and (d) and

60.13, to the Administrator within 30 days after the end of each calendar quarter.

(iii) *Recordkeeping Requirements.* Any owner or operator of a unit subject to this section shall maintain all records necessary to demonstrate compliance with the section for a period of five calendar years at the plant where the subject unit is located. The records shall be made available to the Administrator upon request. The owner or operator shall maintain records of the following information for each day the unit is operated:

(A) Identification and location of each unit subject to the requirements of this section.

(B) Calendar date of record.

(C) The number of hours the unit is operated during each day including actual time of startups and shutdowns, breakdown periods, and the type and duration of maintenance and repairs.

(D) The results of all compliance tests.

(E) For owners or operators of units complying by means of the monitoring requirements of paragraph (o)(6)(ii)(A) of this section, the monitored operating conditions, including turbine load and fuel type, identified in the plan approved by the Administrator.

(F) The NO_X emission concentration (expressed as NO_2corrected to 15 percent volume stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes) measured or predicted.

(G) The CO emission concentration corrected to 15 percent volume stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes) measured or predicted.

(H) Identification of time periods during which NO_X and CO standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances.

(I) Identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

(7) *Test Methods.*

(i) Any owner or operator subject to an emission standard under paragraph (o)(3) of this section and required to conduct stack testing shall comply with the requirements of § 60.8 (c), (d), and (e). The test shall be performed and data reduced and reported as follows:

(A) Each emission test shall be conducted while the unit is operated at maximum capacity and operating under representative operating conditions.

(B) Emission test shall be conducted in accordance with the appropriate test methods in 40 CFR part 60, appendix A. Except for the modifications in this paragraph and unless otherwise approved by the Administrator: NO_X shall be measured in accordance with 40 CFR part 60, appendix A, Method 7E; CO shall be measured in accordance with 40 CFR part 60, appendix A, Method 10; and the diluent shall be measured using 40 CFR part 60, appendix A, Method 3A. Testing shall be conducted for twelve 15 minute testing periods. Compliance shall be evaluated for each 15 minute period. Data recorded during testing to determine the 15 minute average shall either be continuously integrated by the testing instrument and data recorder, or recorded manually at 30 second intervals during each 15 minute test period. Zero and calibration checks shall be conducted after each 15 minute test period.

(ii) Any owner or operator that is subject to the requirements of paragraph (o)(3)(ii) of this section shall perform a test for CO emissions during the initial compliance test for NO_X emissions to establish a ppm CO emission limit that represents good operating and combustion practices for fuel(s) burned in the unit. The CO emission limit established for determining subsequent compliance shall be documented in the applicable certification report required under paragraph (o)(6)(i)(C) of this section.

(p) *RACT Determination—Formica Corporation.*

(1) *Applicability.*

The provisions of paragraph (p) of this section shall apply to the "Formica Corporation" (Formica Corporation) or any subsequent owner or operator of the Formica Corporation, Sierra Plant located at 3500 Cincinnati Avenue, Sunset Whitney Ranch, California.

(2) *Definitions.*

For the purpose of paragraph (p) this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Air Pollution Control Officer means the Executive Officer or his or her delegate of an air quality management district or an air pollution control district.

Coating applicator is an apparatus used to apply a surface coating.

Melamine treater means a paper treater that applies a melamine resin to the paper substrate.

Oven is a chamber within which heat is used for one or more of the following purposes: Dry, bake, cure, or polymerize a surface coating or ink.

Paper treating is a coating line process in which a uniform layer of phenolic or melamine resin is applied by dipping a continuous moving paper substrate into the resin and then using rollers to squeeze the excess resin from the paper.

Paper treating operations is the operation or process of paper treating, together with associated equipment including a coating applicator and oven.

Phenolic treater means a paper treater that applies a phenolic resin to the paper substrate.

Pounds of VOC per gallon of coating less water and less exempt compounds means the weight of VOC per combined volume of VOC and coating solids and is calculated by the following equation:

$$G_{voc}=(W_s-W_w-W_{es})/(V_m-V_w-V_{es})$$

where:

G_{voc}=Pounds VOC per gallon coating less water and exempt compounds;

W_s=Weight of volatile compounds in pounds;

W_w=Weight of water in pounds;

W_{es}=Weight of exempt compounds in pounds;

V_m=Volume of material in gallons;

V_w=Volume of water in gallons;

V_{es}=Volume of exempt compounds in gallons.

Reasonably Available Control Technology or *RACT*, for the purposes of paragraph (p) of this section, means the lowest emission limitation that a particular coating line is capable of meeting by using measures that are reasonably available in terms of technological and economic feasibility. Such measures may include either control system(s) or coating reformulation(s) or both.

(3) *Standards.*

(i) *Limits.* VOC emissions from paper treating operations as defined in paragraph (p)(2) of this section must meet the emission limit of 1.13 pounds of VOC per gallon of coating applied in phenolic treater operations and 0.002 pounds of VOC per gallon of coating applied in melamine treater operations, less water and less exempt compounds, as defined in paragraph (p)(2) of this section.

(ii) *Emission Control System.* Alternatively, a facility may comply with the provisions of paragraph (p)(3)(i) of this section by using an emission control system, provided that the overall efficiency of the system (capture efficiency multiplied by destruction efficiency) shall not be less than 85% by weight in reducing organic compounds. The emission control system, as well as the operation and maintenance plan necessary to ensure compliance on an ongoing basis, shall be approved in writing by the Executive Officer.

(iii) *Compliance Schedule.* Limits as defined in paragraphs (p)(3)(i) or

(p)(3)(ii) of this section shall be achieved upon publication of the final rule. Implementation Plan (FIP), whichever occurs first.

(4) *Test Methods.*

(i) *Determination of VOC content of coatings.* The VOC content of coatings subject to the provisions of paragraph (p) of this section, excluding exempt compounds, shall be analyzed as prescribed by U.S. EPA Reference Method 24 (40 CFR part 60, appendix A).

(ii) *Determination of exempt compounds.* Measurement of exempt compounds shall be conducted and reported in accordance with ASTM D 4457–85. For exempt compounds where no reference test method is available, a facility requesting the exemption shall provide appropriate test methods approved by the Administrator.

(iii) *Determination of destruction efficiency.* Destruction efficiency as specified in paragraph (p)(3)(ii) of this section shall be determined by U.S. EPA Reference Methods 25 and 25A (40 CFR part 60, appendix A).

(iv) *Determination of capture efficiency.* Measurement of capture efficiency of the emission control system as specified in paragraph (p)(3)(ii) of this section shall be conducted and reported in accordance with the U.S. EPA protocols,[35] or other capture efficiency methods approved by the Administrator.

(5) *Administrative Requirements.*

(i) *Coating and Solvent Records.*

(A) The facility shall maintain a current list of coatings and solvents in use which include the following information:

(1) Name and manufacturer information;

(2) Mixing instructions;

(3) VOC content of coatings as applied;

(4) Weight percent water; and

(5) Weight percent exempt solvent.

(B) The facility shall maintain records of the amounts of coatings and VOCs used according to the following schedule:

(1) Monthly records showing the types and amounts of coatings used that meet the coating standards in paragraph (p)(3)(i) of this section; and

(2) Daily records showing the types and amounts of coatings used when such usage was in conjunction with emission control equipment.

(ii) *Emission Control Equipment Records.* Any facility complying with the provisions of paragraph (p)(3)(ii) of this section by using air pollution control equipment shall maintain daily records of key system operating parameters, such as temperatures, pressures, and/or flow rates, for the emission control equipment.

(iii) *Proof of Compliance.* The facility shall prove compliance with the standards of paragraph (p)(3) of this section by conducting annual source testing of paper treating operations and analyzing resin content as per paragraph (p)(4) of this section.

(iv) *Retention of Records.* All records maintained pursuant to this section shall be retained and available for inspection by the Administrator for the previous five-year period.

(q) *Reasonably Available Control Technology for Emissions of Volatile Organic Compounds at SierraPine, Ltd.*

(1) *Applicability.* The requirements of paragraph (q) of this section shall apply to the owner or operator of SierraPine Limited (SierraPine), a medium density fiberboard plant, conducting operations at 4300 Dominguez Road, Rocklin, California.

(2) *Definitions.* For the purposes of paragraph (q) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Fiber drier means a device which uses steam-generated heat to reduce the moisture content of wood fibers.

Fiberboard press means a device which uses heat and pressure to form fiberboard from a preformed mat of wood fiber and resin.

Press line means a series of operations occurring within the press building including mat forming, fiberboard pressing, board unloading, and board cooling.

Press vent means a device used to exhaust fiberboard press line emissions from the press line building.

Wood waste-fired boiler means a combustion device which uses wood, wood fiber, sanderdust, or other wood byproducts as fuel to produce steam for process operations.

(3) *Standards.* The owner or operator of SierraPine shall demonstrate compliance with the requirements of paragraphs (q)(3) (i) through (iii) of this section by January 1, 1996.

(i) Emissions of unburned gaseous combustibles, including VOC and carbon monoxide, from the wood waste-fired boiler shall be minimized by maintaining proper combustion conditions. Proper combustion conditions include but are not limited to optimum combustion temperature, fuel moisture content, fuel firing rate, and sufficient secondary air. The owner or operator of the facility shall submit for approval by EPA a determination of proper combustion conditions. The source shall incorporate additional combustion conditions as recommended in writing by EPA.

(ii) A capture and control system shall be installed and operated to reduce VOC emissions from the wood fiber driers and which meets the following requirements:

(A) The capture and control system shall achieve a minimum 95% VOC control efficiency. Demonstration of VOC control efficiency shall be performed in accordance with the methods specified in paragraph (q)(6) of this section.

(B) The VOC capture and control system shall be operated at all times during the operation of the wood fiber driers. The capture and control system shall be maintained and operated in a manner which consistently achieves the VOC control efficiency stated in paragraph (q)(3)(ii)(A) of this section.

(iii) A capture and control system shall be installed and operated to reduce VOC emissions from press vents and which meets the following requirements:

(A) The VOC capture and control system shall achieve a minimum 90% overall VOC control efficiency. Demonstration of VOC control efficiency shall be performed in accordance with the methods specified in paragraph (q)(6) of this section.

(B) The VOC capture and control system shall be operated at all times during the operation of the press vents. The VOC capture and control system shall be maintained and operated in a manner which consistently achieves the overall VOC control efficiency stated in paragraph (q)(3)(iii)(A) of this section.

(4) *Reporting.* The owner or operator of SierraPine shall be subject to the following reporting requirements.

(i) A compliance plan shall be submitted to the EPA prior to installation of any VOC capture and control system or by July 1, 1995, whichever comes first. The compliance plan shall include a description of how the requirements of paragraph (q) of this section shall be met, including:

(A) A description of the proposed VOC capture and control system to be installed at the facility including the following information at a minimum:

(*1*) Equipment supplier.

(*2*) Design drawings of the selected capture and control system, including necessary hooding and ducting.

(*3*) Operating principles of the selected equipment, including any anticipated complications.

(*4*) Anticipated VOC capture and control efficiency of any installed system.

[35] 40 CFR 52.741(a)(4)(iii).

(5) Disposal of any VOCs that are collected, but not destroyed within the control equipment.

(6) A description of maintenance practices and schedules for the VOC capture and control system necessary to meet the requirements of paragraphs (q)(3)(ii)(B) and (q)(3)(iii)(B) of this section.

(B) Compliance test dates and test methods to be used to satisfy the requirements of paragraph (q)(3)(ii)(A) of this section.

(ii) An annual certification of compliance shall be submitted to the EPA on or before January 1 of each year. The certification of compliance shall include:

(A) A declaration that the facility is in compliance with all of the requirements of paragraph (q) of this section.

(B) The results of any compliance testing performed during the previous year.

(C) A description of any process upsets that occurred during the previous year that resulted in noncompliance with the emission limit or proper combustion conditions as approved by EPA stated in paragraph (q)(3) of this section and corrective actions taken to correct the noncompliance.

(iii) By January 1, 1996, the owner or operator of the facility shall submit for approval by EPA a determination of proper combustion conditions.

(5) *Recordkeeping.* The owner or operator of SierraPine shall maintain records on site sufficient to show compliance with paragraph (q) of this section for a period of five years. Records shall be made available to the EPA upon request. At a minimum the following information shall be recorded:

(i) Process data sufficient to show that efficient combustion practices are being utilized at the wood waste-fired boiler. These data will include, at a minimum, the following:

(A) Fuel feed rate and composition.

(B) Combustion temperature.

(C) Fuel moisture content.

(D) Percentage of overfire air.

(E) Boiler load.

(ii) VOC capture and control system operating parameters identified by the EPA following review and approval of the compliance plan submitted pursuant to paragraph (q)(4)(i) of this section.

(6) *Test Methods.*

(i) Measurements of destruction or removal efficiency shall be determined in accordance with 40 CFR part 60, appendix A, Method 25.

(ii) Measurement of capture efficiency shall be determined in accordance with the EPA method[36] or by an alternative method approved in writing by EPA.

(iii) Characterization of the stack gas shall be determined in accordance with the applicable EPA Reference Methods described in 40 CFR part 60, appendix A.

(r) *RACT Determination—Michigan-California Lumber Company.*

(1) *Applicability.*

The provisions of paragraph (r) of this section shall apply to the "Michigan-California Lumber Company" or any subsequent owner or operator of the Michigan-California Lumber Facility located at 3970 Carson Road, Camino, California. All provisions are RACT and the emissions standards only apply to the main wood waste-fired boiler (Boiler #3) at the facility.

(2) *Definitions.* For the purpose of paragraph (r) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Air Pollution Control Officer means the Executive Officer, or his or her delegate, or an air quality management district or an air pollution control district.

Boiler means any external combustion equipment fired with any fuel used to produce heat or steam.

Production rate is the total steam output of a boiler in pounds of steam per hour (lbs-steam/hour) of boiler operation.

Reasonably Available Control Technology or *RACT*, for the purposes of paragraph (r) of this section, means the lowest emission limitation that a particular boiler is capable of meeting by using measures that are reasonably available in terms of technological and economic feasibility. Such measures may include either control system(s) or improved combustion conditions, or both.

Total organic gases are any compounds that contain at least one carbon atom.

Wood wastes include bark, sawdust, shavings, hogged wood, and other wood refuse generated during processing operations.

(3) *Standards.*

(i) *Emission limits (ppmv).* VOC emissions from wood waste boiler operations at a production rate exceeding an annual (calendar year) average of 50,000 lbs-steam per hour as defined in paragraph (r)(2)(i) of this section must meet the emission limit of 150 ppmv of VOC in the stack exhaust stream.

(ii) *Emission limit maintenance.* The VOC emission limit presented in paragraph (r)(3)(i) of this section shall be maintained through any one or more of the following provisions:

(A) Use of fuel with a maximum moisture content of 50%;

(B) Operation of the boiler at optimal combustion conditions;

(C) Proper operation and maintenance of pollution control equipment; and

(D) Periodic inspection, maintenance, and repairs on the boiler and other equipment.

(iii) *Compliance Schedule.* The VOC emission limit defined in paragraph (r)(3)(i) of this section shall be achieved upon publication of the final rule.

(4) *Test Methods and Calculations.*

(i) *Determination of VOC content of exhaust stream.* The VOC content of the exhaust gas stream subject to the provisions of paragraph (r) of this section, excluding exempt compounds, shall be analyzed as prescribed by 40 CFR part 60, appendix A, Methods 25 and 25A.

(ii) *Determination of exempt compounds.* Measurement of exempt compounds shall be conducted and reported in accordance with 40 CFR part 60, appendix A, Method 18.

(5) *Administrative requirements.*

(i) *Emissions testing and records.* The facility subject to the standards of paragraph (r)(3) of this section shall, at a minimum, conduct sample analysis for VOC pollutants at least once each year. The Air Pollution Control Officer (APCO) shall be provided with adequate advance notification at least 2 weeks before any scheduled emissions tests. The analysis results must be submitted to the Administrator and APCO within 60 days of the emissions test.

(ii) *Emission control records.* Any facility complying with the provisions of paragraph (r)(3)(i) of this section through the provisions of paragraph (r)(3)(ii) of this section with air pollution control equipment shall maintain applicable records of system operating parameters, including temperatures, pressures, fuel flow rate, and steam production rate, repair, fuel moisture, and all VOC control measures.

(iii) *Reporting.* The Administrator and APCO shall be notified within 48 hours of any event or incident that results in a known exceedance of this standard.

(iv) *Retention of records.* All records maintained pursuant to this section shall be retained and available for inspection by the Administrator for the previous five-year period.

(s) *RACT determination: Reynolds Metals Company.*

(1) *Applicability.*

The provisions of paragraph (s) of this section shall apply to the Reynolds Metals Company or any subsequent owner or operator of the Reynolds Metals Company's Rocklin Plant located

[36] 40 CFR 52.741(a)(4)(iii).

at 3939 Cincinnati Avenue, Rocklin, California.

(2) *Definitions.*

For the purposes of paragraph (s) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Air pollution control officer (APCO) means the Executive Officer or his or her delegate of an air quality management district or an air pollution control district.

Capture efficiency means the quantity of an air contaminant that is collected into the control device versus the total amount emitted, expressed as a percentage. This is defined by the following equation:

$$\frac{\text{Mass of Air Contaminants Collected into Control Device}}{\text{Total Mass of Air Contaminant Emitted by the Process}} \times 100$$

Control efficiency means the quantity of air contaminant removed from the inlet stream to the control device, expressed as a percentage. This is defined by the following equation:

$$\frac{\text{Inlet Mass of Contaminant} - \text{Outlet Mass of Contaminant}}{\text{Inlet Mass of Contaminant entering Control Device}} \times 100$$

Lubricant applicator is an apparatus used to apply a surface lube.

Oven is a chamber within which heat is used for one or more of the following purposes: dry, bake, cure, or polymerize a surface coating or ink.

Pounds of VOC per gallon of lubricant less water and less exempt compounds means the weight of VOC per combined volume of VOC and coating solids and is calculated by the following equation:

$G_{voc}=(W_s—W_w—W_{es}) / (V_m—V_w—V_{es})$

where:

G_{voc}=Pounds VOC per gallon lubricant less water and exempt compounds;

W_s=Weight of volatile compounds in pounds;

W_w=Weight of water in pounds;

W_{es}=Weight of exempt compounds in pounds;

V_m=Volume of material in gallons;

V_w=Volume of water in gallons;

V_{es}=Volume of exempt compounds in gallons.

Reasonably available control technology or *RACT*, for the purposes of paragraph (s) of this section, means the lowest emission limitation that a particular coating line is capable of meeting by using measures that are reasonably available in terms of technological and economic feasibility. Such measures may include either control system(s) or coating reformulation(s) or both.

Tab press lubrication is the process which uses a lubricated mechanical press to create beverage container lid tabs from flat aluminum metal stock.

(3) *Standards.*

(i) *Limits.* Tab press lubricant cannot exceed a VOC content of 5.73 pounds per gallon of lubricant used, less water and less exempt compounds, as defined in paragraph (s)(2) of this section; and VOC emissions from tab press lubricant usage cannot exceed 1.2×10^{-5} pounds of VOC per tab produced.

(ii) *Emission control system.* Alternatively, a facility may comply with the provisions of paragraph (s)(3)(i) of this section by using an emission control system, provided that the overall efficiency of the system (capture efficiency multiplied by destruction efficiency) shall not be less than 85% by weight in reducing organic compounds. The emission control system, as well as the operation and maintenance plan necessary to ensure compliance on an ongoing basis, shall be approved in writing by the Administrator.

(iii) *Compliance schedule.* Limits as defined in paragraphs (s)(3)(i) or (ii) of this section shall be achieved upon publication of the final rule.

(4) *Test methods.*

(i) *Determination of VOC content of lubricants.* The VOC content of coatings subject to the provisions of paragraph (s) of this section, excluding exempt compounds, shall be analyzed as prescribed by 40 CFR part 60, appendix A, Method 24.

(ii) *Determination of exempt compounds.* Measurement of exempt compounds shall be conducted and reported in accordance with ASTM D 4457–85. For exempt compounds where no reference test method is available, a facility requesting the exemption shall provide appropriate test methods approved by the Administrator.

(iii) *Determination of destruction efficiency.* Destruction efficiency as specified in paragraph (s)(3)(ii) of this section shall be determined by 40 CFR part 60, appendix A, Methods 25 and 25A.

(iv) *Determination of capture efficiency.* Measurement of capture efficiency of the emission control system as specified in paragraph (s)(3)(ii) of this section shall be conducted and reported in accordance with the U.S. EPA protocols,[37] or other capture efficiency methods approved by the Administrator.

(5) *Administrative requirements.*

(i) *Material usage records.*

(A) The facility shall maintain a current list of lubricants and solvents in use which include the following information:

(*1*) Name and manufacturer information;

(*2*) Mixing instructions;

(*3*) VOC content of tab press lubricants as applied;

(*4*) Weight percent water; and

(*5*) Weight percent exempt solvent. (B) The facility shall maintain records of the amounts of lubricants and VOCs used according to the following schedule:

(*1*) Monthly records showing the types and amounts of lubricants used that meet the standards in paragraph (s)(3)(i) of this section; and

(*2*) Daily records showing the types and amounts of lubricants used when such usage was in conjunction with emission control equipment.

(C) The facility shall maintain monthly records of the number of tabs produced by each type of tab press.

(ii) *Emission control equipment records.* Any facility complying with the provisions of paragraph (s)(3)(ii) of this section by using air pollution control equipment shall maintain daily records of key system operating parameters, such as temperatures, pressures, and/or flow rates, for the emission control equipment.

(iii) *Proof of compliance.* The facility shall prove compliance with the

[37] 40 CFR 52.741(a)(4)(iii).

standards of paragraph (s)(3) of this section by conducting annual source testing of tab press lubrication operations and analyzing VOC content of the lubricants as per paragraph (s)(4)(i) of this section.

(iv) *Retention of records.* All records maintained pursuant to this section shall be retained and available for inspection by the Administrator for the previous five-year period.

(t) *Fugitive emissions from oil and gas production facilities and conveying stations.*

(1) *Applicability.* The requirements of paragraph (t) of this section shall apply to any owner or operator of an oil or gas production field or conveying station. For the purposes of this paragraph, the affected areas include the Sacramento Metro Area, the Los Angeles-South Coast Air Basin Area, and the Ventura County Area as described for ozone in 40 CFR 81.305.

(2) *Definitions.* For the purposes of paragraphs (t)(1) through (t)(7) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Background means the ambient concentration of organic compounds expressed as methane as determined by a portable hydrocarbon detection instrument when the reading is taken at least three meters upwind from any component to be inspected and which is not influenced by any specific emission point.

Closed-vent system means any system that is not open to the atmosphere and is composed of piping, connections and, if necessary, flow-inducing devices that transport gases or vapors from a piece or pieces of equipment to a vapor recovery or disposal system.

Commercial natural gas means natural gas containing less than 10% VOC by weight.

Component means any valve, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, open-ended line, or meter.

Compressor means any device used to compress gases and/or vapors.

Control valve means a device used to regulate the fluid pressure or volume in a process unit that, upon actuation, releases process stream VOCs. Excluded from this definition are control valves that are actuated by non-process stream compressed air.

Conveying station means any compressor station, metering station, or other transfer station located between the extraction well and the refinery or gas processing plant.

Critical component means any component that if shut down would require the shutdown of a critical process unit.

Critical process unit means a process unit that has no standby equipment available, that cannot be bypassed, and that would be technically infeasible to repair leaks from without shutting down the associated process.

Fitting means a component used to attach or connect pipes, piping details, and other equipment, such as, vessels, heat exchangers, and condensers. These components include but are not limited to flanges, threaded connections, and other connectors.

Gas processing plant means any facility engaged in the separation of liquids from field gas and/or fractionation of the liquids into gaseous products, such as ethane, propane, butane, and natural gasoline.

Gas production facility means a facility at which petroleum gas or natural gas extraction and handling are conducted, as defined in the Standard Industrial Classification Manual as Industry Number 1311, Crude Petroleum and Natural Gas. This definition includes, but is not limited to, compressor stations, dehydration units, sweetening units, field treatment units, liquefied natural gas units, extraction wells, flow lines, gathering lines, separators, and other auxiliary nontransportation equipment used in petroleum gas or natural gas extraction and handling.

Hatch means any covered opening system that provides access to a tank or container, usually through the top deck.

Inaccessible component means any component located over fifteen feet above ground when access is required from the ground; or any component located over six feet away from a platform when access is required from the platform.

Leak means a major gas leak, major liquid leak, minor gas leak, or minor liquid leak.

Leak minimization means reducing a leak to the lowest achievable level using best modern practices including tightening, adjusting, or adding sealing material and without shutting down the process which the component serves.

Leak repair means any corrective action taken for the purposes of reducing a component leak to the lowest achievable level below the applicable standard using best modern practices.

Major component means any 4-inch or larger valve, any 5-horse-power (5-hp) or larger pump, any compressor, and any 4-inch or larger pressure relief device.

Major gas leak for any component means the detection of total gaseous organic compounds in excess of 10,000 ppmv as methane above background as measured according to the test procedures in paragraph (t)(7)(i) of this section.

Major liquid leak means a visible mist or cloud or a continuous flow of liquid.

Minor component means any component that is not a major component.

Minor gas leak means for any component, except stuffing boxes and control valves, the detection of total gaseous organic compounds in excess of 1,000 ppmv but not more than 10,000 ppmv as methane above background as measured according to the test procedures in paragraph (t)(7)(i) of this section.

Minor liquid leak is any liquid leak which is not a major liquid leak and drips at a rate of more than three drops per minute.

Oil production facility means a facility at which crude oil extraction and handling is conducted, as defined in the Standard Industrial Classification Manual as Industry Number 1311, Crude Petroleum and Natural Gas. This definition includes, but is not limited to, extraction wells, flow lines, gathering lines, separators, and other auxiliary nontransportation equipment used in petroleum extraction and handling.

Open ended line means any valve, except safety relief valves, having one side of the valve seat in contact with the process fluid or gas and one side open to the atmosphere.

Owner or operator means any person who owns, operates, leases, controls, or supervises an emissions source or air pollution control equipment.

Person means any individual, corporation, copartnership, firm, company, partnership, joint stock company, trust, association, State, municipality, political subdivision, or any other legal entity, or their legal representative, agent, or assigns.

Pipeline transfer station means a facility that handles the storage or transfer, or both, of petroleum products or crude petroleum in pipelines.

Platform means any raised, permanent, horizontal surface that provides access to components.

Pressure relief device (PRD) means a pressure relief valve, rupture disc, or any other equipment designed to relieve pressure within process a line when the static pressure reaches a setpoint.

Pressure relief event means a release from a pressure relief device resulting when the static pressure reaches the setpoint of the pressure relief device. A pressure relief event is not a leak.

Pressure relief valve (PRV) means any valve that is automatically actuated by

upstream static pressure, and used for safety or emergency purposes.

Pump means any device used to transport fluids by the addition of mechanical energy.

Refinery means a facility that processes petroleum, as defined in the Standard Industrial Classification Manual as Industry Number 2911, Petroleum Refining.

Repair means any corrective action taken for the purposes of reducing a leak to below the applicable standard.

Rupture disc means a diaphragm held between flanges for the purpose of isolating a volatile organic compound from the atmosphere or from a downstream pressure relief valve.

Stuffing box means a packing gland, a chamber or "box" which holds packing material compressed around a moving pump rod or valve stem. For the purposes of paragraph (t) of this section, stuffing box seals are considered to be pump seals.

Unmanned facility means a remote facility which has no permanent sited personnel and is greater than five miles from the nearest manned facility.

Unsafe-to-monitor component means a component installed at a location that would prevent its safe inspection or repair as defined by Occupational Safety and Health Administration (OSHA) standards or in provisions for worker safety found in 29 CFR part 1910.

Vacuum service or *In vacuum service* means that the equipment in VOC service is operating at an internal pressure that is at least 5 kPa (0.73 in. Hg) below ambient pressure.

Valve means a device that regulates or isolates the fluid flow in a pipe, tube, or conduit by means of an external actuator.

Vapor control system means any system that is not open to the atmosphere and is composed of piping, connections and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a vapor recovery or disposal system.

Visual inspection means performing a survey to identify signs of leaking liquid, visible mist, or audible leaks.

(3) *Specific provisions.* Each owner or operator of an oil or gas production field or conveying station shall be in compliance with the requirements of paragraphs (t)(3) (i) and (ii) of this section by January 1, 1996.

(i) *Identification requirements.* Components in VOC service shall meet the following identification requirements:

(A) All major and critical components shall be physically identified clearly and visibly for inspection, repair, replacement, and recordkeeping purposes. The physical identification shall consist of labels, tags, or other system approved by the EPA which enables the EPA and the operator to locate each individual component.

(B) All major, critical, inaccessible, and unsafe-to-monitor components shall be clearly identified in Piping and Instrumentation (P&I) diagrams for inspection, repair, replacement, and recordkeeping purposes. For identical field production units, the following items will satisfy the requirements of this paragraph:

(*1*) A single P&I diagram representing the typical component configuration.

(*2*) A listing of field production units by the identification number which is located on a lease map in use by the owner/operator.

(C) A list of all components subject to paragraph (t) of this section shall be prepared which includes separate identification of inaccessible, unsafe-to-monitor, and critical components. The list shall include component identification information as specified under paragraph (t)(3)(i)(A) of this section, the number of minor components by component type, and a description of the VOC service for each component or component type.

(D) The EPA shall be notified of any changes in the identification of a major component within thirty days. The notification shall include necessary amendments to the compliance plan specified under paragraph (t)(5)(i) of this section.

(ii) *Inspection and Maintenance (I&M) program.* Any owner or operator of a facility subject to this section shall implement an I&M program that meets the requirements of paragraphs (t)(3)(ii)(A) through (C) of this section within twelve months after [*Insert date of publication of the final rule*].

(A) *Inspection requirements.* The I&M program will be conducted in accordance with the following inspection requirements.

(*1*) Visual inspection requirements.

(*i*) All pumps, compressors, and pressure relief valves (PRVs) shall be visually inspected for leaks once during every operating shift, except for components located at oil and natural gas production fields.

(*ii*) All pumps, compressors, PRVs, and stuffing boxes located at manned oil and gas production fields shall be visually inspected for leaks once per day and the same components located at unmanned fields shall be inspected once per week.

(*iii*) Any vapor leak which is identified during the visual inspection of components under paragraphs (t)(3)(ii)(A)(*1*)(*i*) and (*ii*) of this section shall be measured to quantify emission concentrations according to the test method specified in paragraph (t)(7)(i) of this section.

(*2*) All components, except as provided in paragraphs (t)(3)(ii) (*1*), (*3*), (*4*), and (*5*) of this section, shall be inspected quarterly according to the method prescribed in paragraph (t)(7)(i) of this section. The time between inspections shall not exceed 110 consecutive days.

(*3*) The components specified in paragraphs (t)(3)(ii)(A)(*3*) (*i*) and (*ii*) of this section shall be subject to other than quarterly inspection requirements.

(*i*) All inaccessible components shall be inspected annually according to the method prescribed in paragraph (t)(7)(i) of this section. The time between inspections shall not exceed 13 consecutive months.

(*ii*) All fittings, including threaded connections and flanges, shall be inspected for leaks according to the method prescribed in paragraph (t)(7)(i) of this section immediately after being placed into service and semi-annually, not to exceed 195 consecutive days between inspections, thereafter.

(*4*) Unsafe-to-monitor components shall be inspected in accordance with an inspection plan approved by the EPA.

(*5*) PRVs shall be inspected according to the method prescribed in paragraph (t)(7)(i) of this section within three calendar days after every pressure relief event.

(*6*) The inspection frequency for all components except pump seals, compressor seals, PRVs, and stuffing boxes may be changed to annually, not to exceed 13 consecutive months between inspections, provided that all of the following conditions are met:

(*i*) All components at the facility have been successfully operated and maintained for a period of twelve consecutive months with no leaks exceeding the thresholds listed in the table of leak thresholds in paragraph (t) of this section. Leaks from stuffing boxes are not included in the total count of leaking components specified by paragraphs (t)(3)(ii)(*A*) (*6*) and (*7*) of this section.

(*ii*) The requirements specified in paragraph (t)(3)(ii)(A)(*6*)(*i*) of this section are substantiated by documentation and written approval obtained from the EPA.

(*7*) Any annual inspection frequency approved in paragraph (t)(3)(ii)(A)(*6*)(*ii*) of this section, shall revert to the inspection frequencies specified in paragraphs (t)(3)(ii)(A) (*2*) and (*3*) of this section, should liquid leaks or major gas

leaks exceed 0.5 percent of the total components inspected per inspection period.

(*8*) A brightly colored, weather-proof tag shall be affixed to all leaking components showing the date of leak detection and the hydrocarbon concentration determined according to the method prescribed in paragraph (t)(7)(i) of this section.

(B) *Repair and maintenance requirements.* The I&M program shall be conducted in accordance with the following repair and maintenance requirements:

(*1*) All component leaks shall be immediately minimized following detection.

(*2*) All leaks from noncritical components shall be successfully repaired or replaced within the time period following detection of the leak, as specified in the table of repair periods in paragraph (t) of this section.

(*3*) For leaks from critical and unsafe-to-monitor components, the leaking component shall be replaced with Best Available Control Technology (BACT) equipment as determined by EPA within one year or during the next process turnaround, whichever occurs first.

(*i*) The percentage of valves in service and awaiting repair or replacement at any time shall not exceed the values below:

Effective Date Percentage of Leaking Valves

January 1, 1996—2%
January 1, 1997—1%
January 1, 1999—0.5%

(*ii*) The percentage of pump and compressor seals in service and awaiting repair or replacement at any time shall not exceed the values below:

Effective Date Percentage of Leaking Pumps and Compressors

January 1, 1996—10%
January 1, 1999—1%

(*4*) Any repaired or replaced component shall be re-inspected in accordance with the method prescribed in paragraph (t)(7)(i) of this section by the owner or operator within 30 days of the repair or replacement.

(*5*) A component or parts thereof which incur five repair actions for a major gas or liquid leak within a continuous twelve month period shall be replaced with BACT equipment as determined by EPA. Replacement with BACT equipment for all components except critical components shall take place within the time periods following the fifth repair action specified in the table of repair periods in paragraph (t) of this section. For critical components, replacement with BACT equipment shall take place within one year of the fifth repair action or at the next process turn around following the fifth repair action, whichever comes first.

(C) *Leak control requirements.* The owner or operator of any facility subject to this section shall comply with the following leak control requirements. The requirements of paragraphs (t)(3)(ii)(C) (*1*) and (*2*) of this section shall not apply to components being repaired or replaced within the specified repair or replacement period, as given in the table of repair periods or paragraph (t)(3)(ii)(B)(*3*) of this section, if the requirements for leak minimization under paragraph (t)(3)(ii)(B)(*1*) of this section have been met.

(*1*) A liquid leak from any component detected during an inspection by EPA shall constitute a violation of this section.

(*2*) Any leak detected during an inspection by EPA, within any continuous 24-hour period, and numbering in excess of the leak thresholds for that component listed in the table of leak thresholds, shall constitute a violation of this section.

(*3*) Any open-ended line or valve found to be leaking shall be sealed with a second valve, blind flange, cap, plug, or a second closed valve except during operations requiring process fluid flow through the open-ended line or valve.

(*4*) Hatches shall be closed at all times except during sampling, addition of process material, or attended maintenance operations.

(*5*) Effective twelve months after [*Insert date of publication of the final rule*], control valves shall be replaced or retrofitted so that a major leak shall not occur during valve actuation or at any other time.

(*6*) Effective twelve months after [*Insert date of publication of the final rule*], any component leak that is vented through a stack or other confined air stream shall be transported in a closed-vent system with a collection efficiency of at least 95% to a VOC control device with a control efficiency of at least 95%. The determination of control efficiency shall be made in accordance with the test method specified in paragraph (t)(7)(iv) of this section.

(*7*) Effective twelve months after [*Insert date of publication of the final rule*], any venting of wellhead gases shall be done through a closed vent system to a control device with a VOC control efficiency of at least 95%.

(4) *Exemptions.* The provisions of paragraphs (t)(3) (i) and (ii) of this section shall not apply to the following components:

(i) Pressure relief valves, pump seals, and compressor seals that are equipped with a closed-vent system with a VOC collection efficiency of at least 95% that transports the VOC emissions to a vapor control system with a VOC control efficiency of at least 95%. The determination of control efficiency shall be made in accordance with the test method specified in paragraph (t)(7)(iv) of this section.

(ii) The following cases, where the person seeking the exemption shall supply proof of the applicable criteria to the satisfaction of the EPA:

(A) Components buried below ground.

(B) Components exclusively handling fluids with a VOC concentration of 10 percent by weight or less, as determined by the test method specified in paragraph (t)(7)(ii) of this section; or components exclusively handling fluids, if the weight percent evaporated is 10 percent or less at 150 degrees Celsius as determined by the test method specified in paragraph (t)(7)(iii) of this section.

(C) Components at oil and gas production facilities or conveying stations handling liquids of:

(*1*) Less than or equal to 20 degree API gravity after the point of primary separation.

(*2*) Between 20 and 30 degree API gravity which are located either:

(*i*) Downstream of a wellhead equipped with a casing vapor recovery system, provided that the vapor recovery is at a pressure of less than 10 psig; or

(*ii*) After the point of primary separation of oil and gas, provided the separation vessel is equipped with a vapor recovery system and is operated at a pressure less than 25 psig.

(*3*) Components qualifying for an exemption under paragraph (t)(4)(ii)(C)(*2*) (*i*) or (*ii*) of this section shall be subject to the following requirements:

(*i*) Components shall be visually inspected on a quarterly basis. Upon detection of a visible leak, the leak shall be measured to quantify emission concentrations according to paragraph (t)(7)(i) of this section. The quarterly visual inspection can be changed to an annual inspection if the requirements of paragraph (t)(3)(ii)(A)(*6*) of this section are satisfied; and

(*ii*) Components shall either be subject to paragraph (t)(4)(ii)(C)(*3*)(*i*) of this section, or that any leak from components not subject to an inspection program that are detected by the EPA shall constitute a violation of this section.

(iii) One-half inch and smaller stainless steel tube fittings which have

been demonstrated to the EPA to be leak-free based on an initial inspection in accordance with paragraph (t)(7)(i) of this section.

(iv) Components in vacuum service.

(5) *Reporting.* Any owner or operator of a facility subject to paragraph (t) of this section shall comply with the following reporting requirements.

(i) A compliance plan shall be prepared and submitted to the EPA by July 1, 1995. The plan will include the following information:

(A) Component identification methodology to meet the requirements of paragraphs (t)(3)(i) (A) through (C) of this section.

(B) An inspection schedule for all unsafe-to-monitor components pursuant to paragraph (t)(3)(ii)(A)(*4*) of this section.

(C) A description of all components meeting the exemption requirements of paragraphs (t)(4) (i) through (iv) of this section.

(ii) A certification of compliance shall be submitted to the EPA on or before January 1, 1996, and annually thereafter. The certification of compliance shall include:

(A) A declaration that the facility is in compliance with all of the requirements of paragraph (t) of this section.

(B) A summary of any changes that have been made to component identification in the original compliance plan.

(6) *Recordkeeping.*

(i) Each facility operator shall maintain an inspection log containing, at a minimum, the following:

(A) Name, location, type of components, and description of any unit where leaking components are found.

(B) Date of leak detection, emission level (ppmv) of leak, and method of leak detection.

(C) Date of leak repair and description of repair action.

(D) Date and emission level of re-check after leak is repaired.

(E) Identification of leaks from critical components that cannot be repaired until the next process turnaround.

(F) If applicable, the API gravity of petroleum process fluids.

(G) The VOC content of leaking process fluids or gases.

(H) Total number of components inspected, and total number and percentage of leaking components found by component type.

(ii) Records of leaks detected by a quarterly or annual operator inspection and each subsequent repair and reinspection shall be submitted to the EPA upon request.

(iii) All records of operator inspection and repair shall be maintained at the facility for the previous two year period and be made available at the time of inspection by the EPA or immediately upon EPA request.

(7) *Test methods.*

(i) Measurements of total gaseous organic compounds in leak concentrations shall be conducted according to EPA Reference Method 21. The analyzer shall be calibrated with methane.

(ii) The VOC content of fluids shall be determined using procedures that conform to ASTM Methods E 168, E 169, or E 260 or any other procedure that conforms to the above ASTM methods and is approved by the EPA in writing.

(iii) Determination of the evaporated compounds of liquids shall be performed in accordance with ASTM Method D 86–82.

(iv) Determination of the control efficiency of any VOC control equipment shall be performed in accordance with 40 CFR part 60, appendix A, Method 25 or 25A; or SCAQMD Test Method 25.1, which is available from EPA.

(v) Determination of the API gravity of crude oil shall be performed in accordance with ASTM Method D 287.

TABLE OF LEAK THRESHOLDS

Component type	Maximum number of leaks	
	200 or less components inspected	More than 200 components inspected
Valves	1	(1)
Pump seals	2	(2)
Compressors	1	1
Pressure relief valves	1	1
Hatches	0	0
Open ended lines	0	0
Other components	1	1

1 0.5% of the number inspected.
2 1% of the number inspected.

TABLE OF REPAIR PERIODS

Type of leak	Time period (days) [a]	
	Onshore	Offshore
Minor Gas Leak	14	14
Major Gas Leak	5	5
Major Gas Leak over 50,000 ppmv	[b,c] 1	5
Major Liquid Leak	[b,c] 1	5
Minor Liquid Leak	[b] 2	5

[a] Day means a 24 hour period from the time of leak detection.
[b] Unless prohibited by state safety standards or 29 CFR 1910.
[c] Components located at unmanned oil and gas production facilities or conveying stations shall be repaired within two days.

(u) *Emissions of oxides of nitrogen from large institutional, commercial, and industrial boilers, steam generators, and process heaters.*

(1) *Applicability.* For the purposes of this paragraph, the affected area includes the Sacramento Metro Area as described for ozone in 40 CFR 81.305.

(i) Any owner or operator of a boiler, steam generator, or process heater with a rated heat input capacity equal to or greater than 5 million British thermal units per hour (mmBtu/hr) shall comply with the applicable requirements standards of paragraphs (u)(1) through (u)(7) of this section.

(ii) Any owner or operator of a boiler, steam generator, or process heater with a rated heat input capacity equal to or greater than 5 million British thermal units per hour (mmBtu/hr) that claims an exemption from the standards of paragraph (u)(3) of this section because of the exemption criteria specified under paragraph (u)(4)(ii) of this section shall comply with the applicable requirements of paragraph (u)(6)(iii)(I) of this section.

(2) *Definitions.* For the purposes of paragraph (u)(1) through (u)(7) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Annual heat input means the actual amount of heat released by fuels burned in a unit during a 12 calendar month rolling period, based on the fuel's higher heating value. The annual heat input shall be calculated as the sum of the previous 12 monthly fuel use rates multiplied by the fuel's higher heating value.

Boiler or steam generator means any combustion equipment used in any institutional, commercial, or industrial operation that is designed to burn gaseous and/or liquid fuel and used to produce steam, heat water and/or other fluids, and/or generate electricity. A boiler or steam generator does not include any waste heat recovery unit that is used to recover sensible heat from the exhaust of a combustion turbine or any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

British thermal unit (Btu) means the amount of heat required to raise the temperature of one pound of water from 59°F to 60°F at one atmosphere.

Heat input means the chemical heat released due to fuel combustion in a unit, using the higher heating value of the fuel. This does not include the

sensible heat of incoming combustion air.

Higher heating value (HHV) means the total heat liberated per mass of fuel burned (Btu per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. If certification of the HHV is not provided by the third party fuel supplier, it shall be determined by one of the following test methods: ASTM D2015–85 for solid fuels; ASTM D240–87 or ASTM D2382–88 for liquid hydrocarbon fuels; or ASTM D1826–88 or ASTM D1945–81 in conjunction with ASTM D3588–89 for gaseous fuels.

Non-gaseous fuel means any fuel which is not a gas at 68 °F and one atmosphere.

NO_X emissions means the sum of nitric oxides and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide.

Process heater means any combustion equipment used in any institutional, commercial, or industrial operation that is designed to burn gaseous and/or liquid fuel and which transfers heat from combustion gases to water, heat transfer medium, or process streams. Process heater does not include any kiln or oven used for drying, baking, cooking, calcining or vitrifying; any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment; or any fuel-fired degreasing or metal finishing equipment.

Rated heat input capacity means the heat input capacity specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the new maximum heat input shall be considered as the rated heat input capacity.

Shutdown means the period of time a unit is cooled from its normal operating temperature to cold or ambient temperature.

Stack gas oxygen trim system means the system of monitors that is used to measure stack excess combustion air, typically consisting of flue gas oxygen and/or carbon monoxide monitors that automatically provide a feedback signal to the combustion air controller that maintains the stack excess air at the desired level.

Startup means the period of time a unit is heated from cold or ambient temperature to its normal operating temperature as specified by the manufacturer.

Unit means any boiler, steam generator, or process heater as defined in this definition.

(3) *Standards.*

(i) Any owner or operator that operates a unit with an annual heat input rate equal to or greater than 9 billion British thermal units per year (10^9 Btu/yr) shall:

(A) Not cause to be discharged into the atmosphere any gases that contain NO_X emissions in excess of the following:

(*1*) For gaseous fuels, 30 parts per million (ppm) corrected to 3 percent volume stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes; or

(*2*) For liquid fuels, 40 ppm corrected to 3 percent volume stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes; and

(*3*) Demonstrate initial compliance with the NO_X emission standard in accordance with the requirements of paragraph (u)(7)(i) of this section.

(B) Establish a controlled ppm carbon monoxide (CO) emission limit that represents good operating and combustion practices. No owner or operator shall cause to be discharged into the atmosphere any gases that contain CO in excess of the lowest of one of the following limits:

(*1*) 120 percent of the CO ppm level established by an initial compliance test in accordance with the requirements of paragraph (u)(7) of this section, or

(*2*) 400 ppm. The owner or operator shall subsequently comply with the limit once it is established. The ppm CO emissions shall be corrected to 3 percent volume stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes.

(C) Demonstrate initial compliance with the NO_X and CO emission standards specified in paragraphs (u)(3)(i) (A) and (B) of this section in accordance with the requirements of paragraphs (u)(6)(i)(C) and (u)(7)(i) of this section.

(D) Units with a rated heat input capacity equal to or greater than 5 mmBtu/hr and less than 40 mmBtu/hr shall demonstrate compliance with the NO_X and CO emission standards specified in paragraphs (u)(3)(i) (A) and (B) of this section in accordance with the requirements of paragraph (u)(7)(i) of this section not less than once every 24 months since the previous compliance test.

(E) Units with a rated heat input capacity greater than 40 mmBtu/hr and less than 100 mmBtu/hr shall demonstrate compliance with the NO_X and CO emission standards specified in paragraphs (u)(3)(i) (A) and (B) of this section in accordance with the requirements of paragraph (u)(7)(i) of this section not less than once every 12 months since the previous compliance test.

(F) Units with a rated heat input capacity equal to or greater than 100 mmBtu/hr shall demonstrate compliance with the NO_X and CO emission standards specified in paragraphs (u)(3)(i) (A) and (B) of this section in accordance with the requirements of paragraph (u)(6)(ii)(A) of this section.

(ii) Any owner or operator that operates a unit with an annual heat input rate less than 9×10^9 Btu/yr shall comply with one of the following:

(A) The unit shall be tuned once every 6 months or after 750 hours of operation since the previous tuneup, whichever occurs last, but in no case less than once per calendar year. The unit shall be tuned in accordance with the procedures described in paragraph (u)(7)(ii) of this section; or

(B) The unit shall be operated in a manner that maintains stack gas oxygen concentrations at less than or equal to 3 percent on a dry basis for any 15 consecutive minute averaging period; or

(C) The unit shall be operated using a stack gas oxygen trim system set at 3 percent oxygen. The tolerance of the setting shall be ±5 percent; or

(D) Demonstrate compliance with the NO_X and CO emission standards specified in paragraphs (u)(3)(i) (A) and (B) of this section in accordance with the applicable requirements of paragraphs (u)(3)(i)(D), (E), or (F) of this section.

(E) Any owner or operator of a unit subject to the requirements of paragraph (u)(3)(ii) of this section shall comply with the requirements of paragraph (u)(3)(i) of this section if the unit is ever operated during any rolling 12 calendar month period at a total annual heat input rate equal to or greater than 9×10^9 Btu/yr.

(4) Exemptions.

(i) The requirements of paragraphs (u)(3), (u)(5), (u)(6), and (u)(7) of this section shall not apply to any owner or operator of a unit with a rated heat input capacity of less than 5 mmBtu/hr.

(ii) The requirements of paragraph (u)(3)(i)(A)(*1*) of this section shall not apply to any owner or operator of a unit normally operated on gaseous fuel under the following conditions:

(A) Non-gaseous fuel use is required due to the curtailment of natural gas service to the individual unit by the natural gas supplier. Non-gaseous fuel use in this case shall not exceed the period of natural gas curtailment.

(B) Non-gaseous fuel use is required to maintain the non-gaseous fuel system. Non-gaseous fuel use in this case shall not exceed 50 hours per year.

(C) Any owner or operator that claims an exemption under paragraph (u)(4)(ii) of this section shall comply with the recordkeeping requirements specified under paragraph (u)(6)(iii)(I) of this section.

(5) *Compliance schedule.*

(i) Any owner or operator of a unit in existence prior to *[Insert date of publication of the final rule]* that does not need to retrofit the unit or install new control equipment to comply with the requirements of paragraph (u)(3) of this section shall demonstrate compliance with all of the applicable requirements of paragraph (u) of this section by May 15, 1995.

(ii) Any owner or operator of a unit in existence prior to [Insert date of publication of the final rule] that must retrofit the unit and/or install new control equipment to comply with the requirements of paragraph (u)(3) of this section shall demonstrate compliance with all of the applicable requirements of paragraph (u) of this section by May 15, 1997. Any owner or operator of a unit to which paragraph (u) of this section is applicable shall meet the following increments of progress:

(A) By January 1, 1996, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(B) By January 1, 1997, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance by May 15, 1997.

(iii) Any owner or operator of a new unit that is constructed on and after [Insert date of publication of the final rule] the date of adoption of this section shall apply for, and receive approval of, all authority-to-construct permits required by the local Air Pollution Control District prior to beginning construction of the unit. The owner or operator shall demonstrate that the unit will be operated in compliance with all of the applicable requirements of paragraph (u) of this section within 60 days after the date of the initial startup of the unit..

(iv) On and after [Insert date of publication of the final rule], any owner or operator of a unit exempt from the requirements of paragraph (u)(3)(i) of this section that becomes subject to requirements of paragraph (u)(3)(i) of this section because the unit's rolling 12 calendar month annual heat input rate equals or exceeds 9×10^9 Btu/yr shall meet the following increments of progress:

(A) Within 7 months after the day that the unit is operated equal to or greater than 9×10^9 Btu/yr, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(B) Within 19 months after the day that the unit is operated equal to or greater than 9×10^9 Btu/yr, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance within 24 months after the day that the unit is operated equal to or greater than 9×10^9 Btu/yr.

(6) *Reporting, monitoring, and recordkeeping.*

(i) *Reporting requirements.* Any owner or operator subject to the requirements of paragraph (u)(3) of this section shall comply with the applicable notification and reporting requirements of § 60.7, and shall also comply with the following requirements:

(A) By May 15, 1995, submit to the Administrator the identification number and type of each unit subject to the section, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with paragraph (u) of this section. For each unit identified, the following information shall be submitted to the Administrator:

(*1*) The rated heat input capacity, hours of operation during the previous one-year period, anticipated annual operating time and annual heat input for 1995, type of gaseous and/or liquid fuel(s) that will be burned in the unit, and age and manufacturer of the unit.

(*2*) Identification of the NO_X standard in paragraph (u)(3)(i) or (u)(3)(ii) of this section with which the unit will comply, and the control and compliance method selected for demonstrating compliance.

(B) Any owner or operator subject to the compliance schedule specified in paragraph (u)(5) (ii), (iii), or (iv) of this section shall notify the Administrator in writing of the following:

(*1*) The date construction is commenced on all retrofits and/or additions of new control equipment to the unit.

(*2*) The anticipated date of initial startup of the unit after completing all retrofits and/or additions of new control equipment to the unit.

(*3*) The actual date of initial startup of the unit after completing all retrofits and/or additions of new control equipment to the unit.

(C) By the applicable compliance date specified in paragraph (u)(5) of this section, any owner or operator of a unit subject to the requirements of paragraph (u)(3)(i) of this section shall submit to the Administrator certification that the unit is in compliance with the applicable standards in paragraph (u)(3)(i) of this section as demonstrated through the applicable requirements of paragraph (u)(6)(ii)(A) or (u)(7)(i) of this section. As a part of the certification, the owner or operator shall submit a written report of the results of the compliance method used. If an owner or operator demonstrates compliance by use of a compliance test in accordance with the requirements of paragraph (u)(7)(i) of this section, the owner or operator shall provide the Administrator at least 30 days prior notice of the compliance test to afford the Administrator the opportunity to have an observer present.

(D) Any owner or operator that must or chooses to demonstrate compliance with paragraph (u)(3)(i) of this section shall submit to the Administrator a written report of the results of all compliance tests required under paragraph (u)(3)(i)(D) or (E) of this section within 60 days after completing each compliance test. The owner or operator shall provide the Administrator at least 30 days prior notice of the compliance test to afford the Administrator the opportunity to have an observer present.

(E) By the applicable compliance date specified in paragraph (u)(5) of this section, any owner or operator of a unit subject to the requirements of paragraph (u)(3)(ii) of this section shall submit to the Administrator a report that documents the compliance method selected for demonstrating compliance with the requirements of paragraph (u)(3)(ii) of this section. The report shall also contain documentation of the procedure used or the results of the compliance method to demonstrate that the unit is in compliance with the requirements of paragraph (u)(3)(ii) of this section.

(F) Any owner or operator subject to the requirements of paragraph (u)(3)(ii) of this section shall submit to the Administrator a report every 12 months after the initial compliance date that contains documentation of the procedure used and the results of the compliance method to demonstrate that the unit is in compliance with the requirements of paragraph (u)(3)(ii) of this section.

(G) Any owner or operator subject to the monitoring requirements of paragraph (u)(6)(ii)(B) of this section shall notify the Administrator in writing within 30 days after the rolling 12

calendar month annual heat input rate of the unit equals or exceeds $9 \times 1.2 \times 10^9$ Btu/yr. Any owner or operator that becomes subject to the requirements of paragraph (u)(3)(i) of this section as a result of the requirements of this paragraph shall be subject to the compliance schedule in paragraph (u)(5)(iv) of this section and the applicable requirements of paragraphs (u)(6) and (u)(7) of this section.

(ii) *Monitoring requirements.*

(A) Continuous Emissions Monitoring System (CEMS) Requirements. Owners or operators subject to the requirements of this paragraph because of paragraph (u)(3)(i)(F) of this section shall comply with the following:

(*1*) By the applicable compliance date specified in paragraph (u)(5) of this section, install, calibrate, operate, and maintain a CEMS in accordance with the applicable requirements of appendices B and F of 40 CFR part 60 to demonstrate continuous compliance with the requirements of paragraphs (u)(3)(i) (A) and (B) of this section. The CEMS shall be installed and operational before conducting the initial compliance test required under paragraphs (u)(6)(i)(C) and (u)(7) of this section. The owner or operator shall submit to the Administrator documentation that the CEMS is in compliance with the requirements of paragraph (u) of this section.

(*2*) Each owner or operator shall submit an excess emissions and monitoring systems performance report, in accordance with the requirements of § 60.7 (c) and (d) and § 60.13, to the Administrator within 30 days after the end of each calendar quarter.

(B) Any owner or operator of a unit with an annual heat input rate of less than 9×10^9 Btu/yr and not complying with the requirements of paragraph (u)(3)(i) of this section shall install a totalizing fuel meter for each applicable unit and for each fuel. Meters shall be accurate to ± 1 percent, as certified by the manufacturer in writing. Fuel consumption for each unit shall be compiled monthly into a rolling 12 calendar month report.

(iii) *Recordkeeping requirements.* Any owner or operator of a unit subject to this section shall maintain all records necessary to demonstrate compliance with the section for a period of five calendar years at the plant where the subject unit is located. The records shall be made available to the Administrator upon request. The owner or operator shall maintain records of the following information for each day the unit is operated:

(A) Identification and location of each unit subject to the requirements of this section.

(B) Calendar date of record.

(C) The number of hours the unit is operated during each day.

(D) Boiler load, fuel type, actual time of startups and shutdowns, breakdown periods, and the type and duration of maintenance and repairs.

(E) The results of all compliance tests and monitored stack gas oxygen concentrations.

(F) If a unit is equipped with a flue gas recirculation system, records of the percentage of the flue gas that is recirculated to the combustion chamber of the unit.

(G) If a unit is equipped with a CEMS:

(*1*) The NO_X and CO emission concentrations measured, corrected to 3 percent volume stack gas O^2 on a dry basis averaged over a period of 15 consecutive minutes.

(*2*) Identification of time periods during which NO_X and CO standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances.

(*3*) Identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

(H) For units with an annual heat input rate less than 9×10^9 Btu/yr, the monthly fuel consumption and the rolling 12 calendar month fuel consumption.

(I) Any owner or operator that uses a non-gaseous fuel in any unit, pursuant to the requirements of paragraph (u)(4)(ii) of this section, shall maintain daily records of each occurrence. Each record shall specify the reason why non-gaseous fuel is used in a unit and shall include the type of fuel, the quantity of fuel, and the hours of operation during the use of non-gaseous fuel. If non-gaseous fuel is used during a natural gas curtailment, the owner or operator shall obtain information from the natural gas supplier to verify the period of curtailment. If non-gaseous fuel is used to maintain the non-gaseous fuel system, the owner or operator shall maintain records of the total hours during which the unit was operated on non-gaseous fuel during each calendar year.

(*7*) *Test methods.*

(i) Any owner or operator of a unit that is required to perform a compliance test to demonstrate compliance with the standards specified in paragraph (u)(3(i) of this section, or chooses to perform a compliance test to demonstrate compliance with the requirements of paragraph (u)(3)(ii) of this section, shall comply with the requirements of § 60.8 (c), (d), and (e). The test shall be performed and data reduced and reported as follows:

(A) Each emission test shall be conducted while the unit is operated at maximum capacity and operating under representative operating conditions.

(B) Each emission test shall be conducted in accordance with the appropriate test methods in 40 CFR part 60, appendix A. Except for the modifications in this paragraph and unless otherwise approved by the Administrator: NO_X shall be measured in accordance with 40 CFR part 60, appendix A, Method 7E; CO shall be measured in accordance with 40 CFR part 60, appendix A, Method 10; and the diluent shall be measured using 40 CFR part 60, appendix A, Method 3A. Testing shall be conducted for twelve 15 minute testing periods. Compliance shall be evaluated for each 15 minute period. Data recorded during testing to determine the 15 minute average shall either be continuously integrated by the testing instrument and data recorder, or recorded manually at 30 second intervals during each 15 minute test period. Zero and calibration checks shall be conducted after each 15 minute test period.

(C) The ppm CO emission limit required by paragraph (u)(3)(i)(B) of this section shall be established during the initial compliance test for NO_X emissions to establish a ppm CO emission limit that represents good operating and combustion practices for fuel(s) burned in the unit. The CO emission limit established for determining subsequent compliance shall be documented in the applicable certification report required under paragraph (u)(6)(i)(C) of this section.

(ii) Any owner or operator that chooses to comply with the requirements of paragraph (u)(3)(ii) of this section by the compliance method specified in paragraph (u)(3)(ii)(A) of this section shall tune the unit using the equipment tuning procedure specified in this paragraph.[38] Nothing in the equipment tuning procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, California Department of Industrial Relations (Occupational Safety and Health Division), Federal Occupational

[38] This tuning procedure is based on a tune-up procedure developed by KVD, Inc. for the USEPA.

Safety and Health Administration, or other relevant regulations and requirements.

(A) *Step 1.* Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operation, operate it at its average firing rate.

(B) *Step 2.* At this firing rate, record stack gas temperature, oxygen concentration, and CO concentration (for gaseous fuels) or smoke-spot [39] number (for liquid fuels), and observe flame conditions after unit operation stabilizes at the firing rate selected. If the excess oxygen in the stack gas is at the lower end of the range of typical minimum values,[40] and if the CO emissions are low and there is no smoke, the unit is probably operating at near optimum efficiency at this particular firing rate. However, complete the remaining portion of this procedure to determine whether still lower oxygen levels are practical.

(C) *Step 3.* Increase combustion air flow to the furnace until stack gas oxygen levels increase by 1 to 2 percent over the level measured in Step 2. As in Step 2, record the stack gas temperature, CO concentration (for gaseous fuels) or smoke-spot number (for liquid fuels), and observe flame conditions for these higher oxygen levels after boiler operation stabilizes.

(D) *Step 4.* Decrease combustion air flow until the stack gas oxygen concentration is at the level measured in Step 2. From this level gradually reduce the combustion air flow, in small increments. After each increment, record the stack gas temperature, oxygen concentration, CO concentration (for gaseous fuels) and smoke-spot number (for liquid fuels). Also, observe the flame and record any changes in its condition.

(E) *Step 5.* Continue to reduce combustion air flow stepwise, until one of these limits is reached:

(*1*) Unacceptable flame conditions—such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability.

(*2*) Stack gas CO concentrations greater than 400 ppm.

(*3*) Smoking at the stack.

(*4*) Equipment-related limitations—such as low windbox/furnace pressure differential, built in air-flow limits, etc.

(F) *Step 6.* Develop an O_2/CO curve (for gaseous fuels) or O_2/smoke curve (for liquid fuels) similar to those shown in Figures 1 and 2 using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.

(G) *Step 7.* From the curves prepared in Step 6, find the stack gas oxygen levels where the CO emissions or smoke-spot number equal the following values:

Fuel	Measurement	Value
Gaseous	CO Emissions.	400 ppm.
#1 & 2 oils	Smoke-spot ..	Number 1.
#4 oil	Smoke-spot number.	Number 2.
#5 oil	Smoke-spot number.	Number 3.
Other oils	Smoke-spot number.	Number 4.

The above conditions are referred to as CO or smoke threshold, or as the minimum excess oxygen level. Compare this minimum value of excess oxygen to the expected value provided by the combustion unit manufacturer. If the minimum level found is substantially higher than the value provided by the combustion unit manufacturer, burner adjustments can probably be made to improve fuel and air mixing, thereby allowing operation with less air.

(H) *Step 8.* Add 0.5 to 2.0 percent to the minimum excess oxygen level found in Step 7 and reset burner controls to operate automatically at this higher stack gas oxygen level. This margin above the minimum oxygen level accounts for fuel variations, variations in atmospheric conditions, load changes, and nonrepeatability or play in automatic controls.

(I) *Step 9.* If the load of the combustion unit varies significantly during normal operation, repeat Steps 1–8 for firing rates that represent the upper and lower limits of the range of the load. Because control adjustments at one firing rate may affect conditions at other firing rates, it may not be possible to establish the optimum excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give best performance over the range of firing rates. If one firing rate predominates, settings should optimize conditions at that rate.

(J) *Step 10.* Verify that the new settings can accommodate the sudden load changes that may occur in daily operation without adverse effects. Do this by increasing and decreasing load rapidly while observing the flame and stack. If any of the conditions in Step 5 result, reset the combustion controls to provide a slightly higher level of excess oxygen at the affected firing rates. Next, verify these new settings in a similar fashion. Then make sure that the final control settings are recorded at steady-state operating conditions.

(v) *Emissions of oxides of nitrogen from small institutional, commercial, and industrial boilers, steam generators, and process heaters.*

(1) *Applicability.* For the purposes of this paragraph, the affected area includes the Sacramento Metro Area as described for ozone in 40 CFR 81.305.

(i) Any owner or operator of a boiler, steam generator, or process heater with a rated heat input capacity equal to or greater than 1 million British thermal units per hour (mmBtu/hr) and less than 5 mmBtu/hr shall comply with the applicable requirements standards of paragraphs (v)(1) through (v)(7) of this section.

(ii) Any owner or operator of a boiler, steam generator, or process heater with a rated heat input capacity equal to or greater than 1 mmBtu/hr and less than 5 mmBtu/hr that claims an exemption from the standards of paragraph (v)(3) of this section because of the exemption criteria specified under paragraph (v)(4) of this section shall comply with the applicable requirements of paragraph (v)(6)(iii)(H) of this section.

(2) *Definitions.* For the purposes of paragraph (v) of this section, the following definitions shall apply. All terms not defined herein shall have the meaning given them in § 52.2950.

Annual heat input means the actual amount of heat released by fuels burned in a unit during a 12 calendar month rolling period, based on the fuel's higher heating value. The annual heat input shall be calculated as the sum of the previous 12 monthly fuel use rates multiplied by the fuel's higher heating value.

Boiler or steam generator means any combustion equipment used in any institutional, commercial, or industrial operation that is designed to burn gaseous and/or liquid fuel and used to produce steam, heat water and/or other fluids, and/or generate electricity. A boiler or steam generator does not include any waste heat recovery unit that is used to recover sensible heat from the exhaust of a combustion turbine or any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

British thermal unit (Btu) means the amount of heat required to raise the temperature of one pound of water from 59°F to 60°F at one atmosphere.

Heat input means the chemical heat released due to fuel combustion in a unit, using the higher heating value of the fuel. This does not include the

[39] The smoke-spot number can be determined with ASTM Test Method D–2156 or with the Bacharach method.

[40] Typical minimum oxygen levels for boilers at high firing rates are: 0.5 to 3 percent for natural gas; and 2 to 4 percent for liquid fuels.

sensible heat of incoming combustion air.

Higher heating value (HHV) means the total heat liberated per mass of fuel burned (Btu per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. If certification of the HHV is not provided by the third party fuel supplier, it shall be determined by one of the following test methods: ASTM D2015–85 for solid fuels; ASTM D240–87 or ASTM D2382–88 for liquid hydrocarbon fuels; or ASTM D1826–88 or ASTM D1945–81 in conjunction with ASTM D3588–89 for gaseous fuels.

Non-gaseous fuel means any fuel which is not a gas at 68 °F and one atmosphere.

NO_X emissions means the sum of nitric oxides and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide.

Process heater means any combustion equipment used in any institutional, commercial, or industrial operation that is designed to burn gaseous and/or liquid fuel and which transfers heat from combustion gases to water, heat transfer medium, or process streams. Process heater does not include any kiln or oven used for drying, baking, cooking, calcining or vitrifying; any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment; or any fuel-fired degreasing or metal finishing equipment.

Rated heat input capacity means the heat input capacity specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the new maximum heat input shall be considered as the rated heat input capacity. This alteration or modification can be through either burner alteration or modification or installation of a fixed orifice. The new maximum heat input must be certified, in writing, by the manufacturer or installer and engineering calculations supporting the new maximum heat input rating must be submitted to the Administrator.

Shutdown means the period of time a unit is cooled from its normal operating temperature to cold or ambient temperature.

Stack gas oxygen trim system means the system of monitors that is used to measure stack excess combustion air, typically consisting of flue gas oxygen and/or carbon monoxide monitors that automatically provide a feedback signal to the combustion air controller that maintains the stack excess air at the desired level.

Startup means the period of time a unit is heated from cold or ambient temperature to its normal operating temperature as specified by the manufacturer.

Unit means any boiler, steam generator, or process heater as defined in paragraph (v) of this section.

(3) *Standards.*

(i) Any owner or operator that operates a unit with an annual heat input rate equal to or greater than 1.8 billion British thermal units per year (10^9 Btu/yr) shall:

(A) Not cause to be discharged into the atmosphere any gases that contain NO_X emissions in excess of 30 parts per million (ppm) corrected to 3 percent volume stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes.

(B) Establish a controlled ppm carbon monoxide (CO) emission limit that represents good operating and combustion practices. No owner or operator shall cause to be discharged into the atmosphere any gases that contain CO in excess of the lowest of one of the following limits:

(*1*) 120 percent of the CO ppm level established by an initial compliance test in accordance with the requirements of paragraph (v)(7) of this section, or

(*2*) 400 ppm.

The owner or operator shall subsequently comply with the limit once it is established. The ppm CO emissions shall be corrected to 3 percent volume stack gas O_2 on a dry basis averaged over a period of 15 consecutive minutes.

(C) Demonstrate initial compliance with the NO_X and CO emission standards specified in paragraphs (v)(3)(i) (A) and (B) of this section in accordance with the requirements of paragraphs (v)(6)(i)(C) and (v)(7)(i) of this section.

(D) Demonstrate compliance with the NO_X and CO emission standards specified in paragraphs (v)(3)(i) (A) and (B) of this section in accordance with the requirements of paragraph (v)(7)(i) of this section not less than once every 24 months since the previous compliance test.

(ii) Any owner or operator that operates a unit with an annual heat input rate equal to or greater than 0.3×10^9 Btu/yr and less than 1.8×10^9 Btu/yr shall comply with one of the following:

(A) The unit shall be tuned once every 6 months or after 750 hours of operation since the previous tuneup, whichever occurs last, but in no case less than once per calendar year. The unit shall be tuned in accordance with the procedures described in paragraph (v)(7)(ii) of this section; or

(B) The unit shall be operated in a manner that maintains stack gas oxygen concentrations at less than or equal to 3 percent on a dry basis for any 15 consecutive minute averaging period; or

(C) The unit shall be operated using a stack gas oxygen trim system set at 3 percent oxygen for any 15 consecutive minute averaging period. The tolerance of the setting shall be ±5 percent; or

(D) Demonstrate compliance with the NO_X and CO emission standards specified in paragraphs (v)(3)(i) (A) and (B) of this section in accordance with the requirements of paragraphs (v)(3)(i) (C) and (D) of this section.

(iii) Any owner or operator of a unit exempt from the requirements of paragraph (v)(3)(i) of this section shall demonstrate that the unit is exempt by complying with the applicable reporting, monitoring, and recordkeeping requirements of paragraphs (v)(6)(i)(H), (v)(6)(ii), and (v)(6)(iii) of this section, respectively. If the unit is ever operated during any rolling 12 calendar month period at a total annual heat input rate equal to or greater than 1.8×10^9 Btu/yr, the owner or operator shall comply with the requirements of paragraph (v)(3)(i) of this section. If the unit is ever operated during any rolling 12 calendar month period at a total annual heat input rate equal to or greater than 0.3×10^9 Btu/yr and less than 1.8×10^9 Btu/yr, the owner or operator shall comply with the requirements of paragraph (v)(3)(ii) of this section.

(4) *Exemptions.* The requirements of paragraph (v)(3)(i) of this section shall not apply to any owner or operator of a unit operated on non-gaseous fuel under the following conditions:

(i) Non-gaseous fuel use is required due to the curtailment of natural gas service to the individual unit by the natural gas supplier. Non-gaseous fuel use in this case shall not exceed the period of natural gas curtailment.

(ii) Non-gaseous fuel use is required to maintain the non-gaseous fuel system. Non-gaseous fuel use in this case shall not exceed 50 hours per year.

(iii) Any owner or operator that claims an exemption under paragraph (v)(4) of this section shall comply with the recordkeeping requirements specified under paragraph (v)(6)(ii)(I) of this section.

(5) *Compliance schedule.*

(i) Any owner or operator of a unit in existence prior to the [*Insert date of publication of the final rule*] that does not need to retrofit the unit or install new control equipment to comply with

the requirements of paragraph (v)(3) of this section shall demonstrate compliance with all of the applicable requirements of paragraph (v) of this section by May 15, 1995.

(ii) Any owner or operator of a unit in existence prior to [*Insert date of publication of the final rule*] that must retrofit the unit and/or install new control equipment to comply with the requirements of paragraph (v)(3) of this section shall demonstrate compliance with all of the applicable requirements of this paragraph (v) of this section by May 15, 1997. Any owner or operator of a unit to which paragraph (v) of this section is applicable shall meet the following increments of progress:

(A) By January 1, 1996, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(B) By January 1, 1997, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance by May 15, 1997.

(iii) Any owner or operator of a new unit that is constructed on and after [*Insert date of publication of the final rule*] shall apply for, and receive approval of, all authority-to-construct permits required by the local Air Pollution Control District prior to beginning construction of the unit. The owner or operator shall demonstrate that the unit will be operated in compliance with all of the applicable requirements of paragraph (v) of this section within 60 days after the date of the initial startup of the unit.

(iv) On and after [*Insert date of publication of the final rule*], any owner or operator of a unit exempt from requirements of paragraph (v)(3)(i) of this section that becomes subject to requirements of paragraph (v)(3)(i) of this section because the unit's rolling 12 calendar month annual heat input rate equals or exceeds 1.8×10^9 Btu/yr shall meet the following increments of progress:

(A) Within 7 months after the day that the unit is operated equal to or greater than 1.8×10^9 Btu/yr, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(B) Within 19 months after the day that the unit is operated equal to or greater than 1.8×10^9 Btu/yr, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance within 24 months after the day that the unit is operated equal to or greater than 1.8×10^9 Btu/yr.

(v) On and after [*Insert date of publication of the final rule*], any owner or operator of a unit exempt from the requirements of paragraph (v)(3)(ii) of this section that becomes subject to requirements of paragraph (v)(3)(ii) of this section because the unit's rolling 12 calendar month annual heat input rate equals or exceeds 0.3×10^9 Btu/yr shall meet the following increments of progress:

(A) Within 7 months after the day that the unit is operated equal to or greater than 0.3×10^9 Btu/yr, apply for all authority-to-construct permits required by the local Air Pollution Control District for all retrofits and/or additions of new control equipment, and

(B) Within 19 months after the day that the unit is operated equal to or greater than 0.3×10^9 Btu/yr, commence construction of all retrofits and/or additions of new control equipment, as approved by the local Air Pollution Control District, to demonstrate compliance within 24 months after the day that the unit is operated equal to or greater than 0.3×10^9 Btu/yr.

(6) *Reporting, monitoring, and recordkeeping.*

(i) *Reporting requirements.* Any owner or operator subject to the requirements of paragraph (v)(3) of this section shall comply with the applicable notification requirements of § 60.7, and shall also comply with the following requirements:

(A) By May 15, 1995, submit to the Administrator the identification number and type of each unit subject to the section, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with paragraph (v) of this section. For each unit identified, the following information shall be submitted to the Administrator:

(*1*) The rated heat input capacity, hours of operation during the previous one-year period, anticipated annual operating time and annual heat input for 1995, type of gaseous and/or liquid fuel(s) that will be burned in the unit, and age and manufacturer of the unit.

(*2*) Identification of the NO_X standard in paragraph (v)(3)(i) or (v)(3)(ii) of this section with which the unit will comply, and the control and compliance method selected for demonstrating compliance.

(B) Any owner or operator subject to the compliance schedule specified in paragraph (v)(5) (ii), (iii), (iv), or (v) of this section shall notify the Administrator in writing of the following:

(*1*) The date construction is commenced on all retrofits and/or additions of new control equipment to the unit.

(*2*) The anticipated date of initial startup of the unit after completing all retrofits and/or additions of new control equipment to the unit.

(*3*) The actual date of initial startup of the unit after completing all retrofits and/or additions of new control equipment to the unit.

(C) By the applicable compliance date specified in paragraph (v)(5) of this section, any owner or operator of a unit subject to the requirements of paragraph (v)(3)(i) of this section shall submit to the Administrator certification that the unit is in compliance with the applicable standards in paragraph (v)(3)(i) of this section as demonstrated through the applicable requirements of paragraph (v)(7)(i) of this section. As a part of the certification, the owner or operator shall submit a written report of the results of the compliance method used. If an owner or operator demonstrates compliance by use of a compliance test in accordance with the requirements of paragraph (v)(7)(i) of this section, the owner or operator shall provide the Administrator at least 30 days prior notice of the compliance test to afford the Administrator the opportunity to have an observer present.

(D) Any owner or operator that must or chooses to demonstrate compliance with paragraph (v)(3)(i) of this section shall submit to the Administrator a written report of the results of all compliance tests required under paragraph (v)(3)(i)(D) of this section within 60 days after completing each compliance test. The owner or operator shall provide the Administrator at least 30 days prior notice of the compliance test to afford the Administrator the opportunity to have an observer present.

(E) By the applicable compliance date specified in paragraph (v)(5) of this section, any owner or operator of a unit subject to the requirements of paragraph (v)(3)(ii) of this section shall submit to the Administrator a report that documents the compliance method selected for demonstrating compliance with the requirements of paragraph (v)(3)(ii) of this section. The report shall also contain documentation of the procedure used or the results of the compliance test to demonstrate that the unit is in compliance with the requirements of paragraph (v)(3)(ii) of this section.

(F) Any owner or operator subject to the requirements of paragraph (v)(3)(ii) of this section shall submit to the Administrator a report every 12 months after the initial compliance date that

contains documentation of the procedure used and the results of the compliance method to demonstrate that the unit is in compliance with the requirements of paragraph (v)(3)(ii) of this section.

(G) Any owner or operator subject to the monitoring requirements of paragraph (v)(6)(ii) of this section shall notify the Administrator in writing within 30 days after the rolling 12 calendar month annual heat input rate of the unit equals or exceeds 1.8×10^9 Btu/yr or 0.3×10^9 Btu/yr. Any owner or operator that becomes subject to the requirements of paragraph (v)(3)(i) or (v)(3)(ii) of this section as a result of the requirements of this paragraph shall be subject to the compliance schedule in paragraph (v)(5)(iv) or (v)(5)(v) of this section and the applicable requirements of paragraphs (v)(6) and (v)(7) of this section.

(ii) *Monitoring requirements.* Any owner or operator of a unit with an annual heat input rate of less than 1.8×10^9 Btu/yr and not complying with the requirements of paragraph (v)(3)(i) of this section shall install a totalizing fuel meter for each applicable unit and for each fuel. Meters shall be accurate to ±1 percent, as certified by the manufacturer in writing. Fuel consumption for each unit shall be compiled monthly into a rolling 12 calendar month report.

(iii) *Recordkeeping requirements.* Any owner or operator of a unit subject to paragraph (v) of this section shall maintain all records necessary to demonstrate compliance with the section for a period of five calendar years at the plant where the subject unit is located. The records shall be made available to the Administrator upon request. The owner or operator shall maintain records of the following information for each day the unit is operated:

(A) Identification and location of each unit subject to the requirements of this section.

(B) Calendar date of record;

(C) The number of hours the unit is operated during each day;

(D) Boiler load, fuel type, actual time of startups and shutdowns, breakdown periods, and the type and duration of maintenance and repairs.

(E) The results of all compliance tests and monitored stack gas oxygen concentrations.

(F) If a unit is equipped with a flue gas recirculation system, records of the percentage of the flue gas that is recirculated to the combustion chamber of the unit.

(G) For units with an annual heat input rate less than 1.8×10^9 Btu/yr, the monthly fuel consumption and the rolling 12 calendar month fuel consumption.

(H) Any owner or operator that uses a non-gaseous fuel in any unit, pursuant to the requirements of paragraph (v)(4) of this section, shall maintain daily records of each occurrence. Each record shall specify the reason why non-gaseous fuel is used in a unit and shall include the type of fuel, the quantity of fuel, and the hours of operation during the use of non-gaseous fuel. If non-gaseous fuel is used during a natural gas curtailment, the owner or operator shall obtain information from the natural gas supplier to verify the period of curtailment. If non-gaseous fuel is used to maintain the non-gaseous fuel system, the owner or operator shall maintain records of the total hours during which the unit was operated on non-gaseous fuel during each calendar year.

(7) *Test methods.*

(i) Any owner or operator of a unit that is required to perform a compliance test to demonstrate compliance with the standards specified in paragraph (v)(3)(i) of this section, or chooses to perform a compliance test to demonstrate compliance with the requirements of paragraph (v)(3)(ii) of this section, shall comply with the requirements of § 60.8 (c), (d), and (e). The test shall be performed and data reduced and reported as follows:

(A) Each emission test shall be conducted while the unit is operated at maximum capacity and operating under representative operating conditions.

(B) Each emission test shall be conducted in accordance with the appropriate test methods in 40 CFR part 60, appendix A. Except for the modifications in this paragraph and unless otherwise approved by the Administrator: NO_X shall be measured in accordance with 40 CFR part 60, appendix A, Method 7E; CO shall be measured in accordance with 40 CFR part 60, appendix A, Method 10; and the diluent shall be measured using 40 CFR part 60, appendix A, Method 3A. Testing shall be conducted for four 15 minute testing periods. Compliance shall be evaluated for each 15 minute period. Data recorded during testing to determine the 15 minute average shall either be continuously integrated by the testing instrument and data recorder, or recorded manually at 30 second intervals during each 15 minute test period. Zero and calibration checks shall be conducted after each 15 minute test period.

(C) The ppm CO emission limit required by paragraph (v)(3)(i)(B) of this section shall be established during the initial compliance test for NO_X emissions to establish a ppm CO emission limit that represents good operating and combustion practices for fuel(s) burned in the unit. The CO emission limit established for determining subsequent compliance shall be documented in the applicable certification report required under paragraph (v)(6)(i)(C) of this section.

(ii) Any owner or operator that chooses to comply with the requirements of paragraph (v)(3)(ii)(A) of this section shall tune the unit using the equipment tuning procedure specified in this paragraph.[41] Nothing in these equipment tuning procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, California Department of Industrial Relations (Occupational Safety and Health Division), Federal Occupational Safety and Health Administration, or other relevant regulations and requirements.

(A) *Step 1.* Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operation, operate it at its average firing rate.

(B) *Step 2.* At this firing rate, record stack gas temperature, oxygen concentration, and CO concentration (for gaseous fuels) or smoke-spot[42] number (for liquid fuels), and observe flame conditions after unit operation stabilizes at the firing rate selected. If the excess oxygen in the stack gas is at the lower end of the range of typical minimum values,[43] and if the CO emissions are low and there is no smoke, the unit is probably operating at near optimum efficiency at this particular firing rate. However, complete the remaining portion of this procedure to determine whether still lower oxygen levels are practical.

(C) *Step 3.* Increase combustion air flow to the furnace until stack gas oxygen levels increase by 1 to 2 percent over the level measured in Step 2. As in Step 2, record the stack gas temperature, CO concentration (for gaseous fuels) or smoke-spot number (for liquid fuels), and observe flame conditions for these higher oxygen levels after boiler operation stabilizes.

---

[41] This tuning procedure is based on a tune-up procedure developed by KVD, Inc. for the USEPA.

[42] The smoke-spot number can be determined with ASTM Test Method D–2156 or with the Bacharach method.

[43] Typical minimum oxygen levels for boilers at high firing rates are: 0.5 to 3 percent for natural gas; and 2 to 4 percent for liquid fuels.

(D) *Step 4.* Decrease combustion air flow until the stack gas oxygen concentration is at the level measured in Step 2. From this level gradually reduce the combustion air flow, in small increments. After each increment, record the stack gas temperature, oxygen concentration, CO concentration (for gaseous fuels) and smoke-spot number (for liquid fuels). Also, observe the flame and record any changes in its condition.

(E) *Step 5.* Continue to reduce combustion air flow stepwise, until one of these limits is reached:

(*1*) Unacceptable flame conditions—such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability.

(*2*) Stack gas CO concentrations greater than 400 ppm.

(*3*) Smoking at the stack.

(*4*) Equipment-related limitations—such as low windbox/furnace pressure differential, built in air-flow limits, etc.

(F) *Step 6.* Develop an O_2/CO curve (for gaseous fuels) or O_2/smoke curve (for liquid fuels) similar to those shown in Figures 1 and 2 using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.

(G) *Step 7.* From the curves prepared in Step 6, find the stack gas oxygen levels where the CO emissions or smoke-spot number equal the following values:

Fuel	Measurement	Value
Gaseous	CO Emissions.	400 ppm.
#1 & #2 oils	Smoke-spot number.	number 1.
#4 oil	Smoke-spot number.	number 2.
#5 oil	Smoke-spot number.	number 3.
Other oils	Smoke-spot number.	number 4.

The above conditions are referred to as CO or smoke threshold, or as the minimum excess oxygen level. Compare this minimum value of excess oxygen to the expected value provided by the combustion unit manufacturer. If the minimum level found is substantially higher than the value provided by the combustion unit manufacturer, burner adjustments can probably be made to improve fuel and air mixing, thereby allowing operation with less air.

(H) *Step 8.* Add 0.5 to 2.0 percent to the minimum excess oxygen level found in Step 7 and reset burner controls to operate automatically at this higher stack gas oxygen level. This margin above the minimum oxygen level accounts for fuel variations, variations in atmospheric conditions, load changes, and nonrepeatability or play in automatic controls.

(I) *Step 9.* If the load of the combustion unit varies significantly during normal operation, repeat Steps 1–8 for firing rates that represent the upper and lower limits of the range of the load. Because control adjustments at one firing rate may affect conditions at other firing rates, it may not be possible to establish the optimum excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give best performance over the range of firing rates. If one firing rate predominates, settings should optimize conditions at that rate.

(J) *Step 10.* Verify that the new settings can accommodate the sudden load changes that may occur in daily operation without adverse effects. Do this by increasing and decreasing load rapidly while observing the flame and stack. If any of the conditions in Step 5 result, reset the combustion controls to provide a slightly higher level of excess oxygen at the affected firing rates. Next, verify these new settings in a similar fashion. Then make sure that the final control settings are recorded at steady-state operating conditions.

§ 52.2962 Enhanced in-use compliance program for light-and medium-duty vehicles.

(a) *General applicability.*

(1) Every new 1999 and later model year light-duty vehicle, light-duty truck, and medium-duty vehicle manufactured for sale, sold, offered for sale, introduced, or delivered for introduction to commerce, or imported into the State of California for sale or resale shall be covered by a certificate of conformity issued pursuant to paragraph (d) of this section. Medium-duty vehicles whose engines are covered by a certificate of conformity applicable to heavy-duty engines issued by the State of California pursuant to the California Code are exempted from this requirement, but must comply with the requirements of § 52.2966.

(2) Any manufacturer, dealer, or other person who violates paragraph (a)(1) of this section shall be subject to a civil penalty of not more than $25,000. Any such violation with respect to paragraph (a)(1) of this section shall constitute a separate offense with respect to each motor vehicle.

(3) Certain vehicle fleet operators, as defined in paragraph (g) of this section, are subject to the provisions contained in that paragraph.

(b) *Definitions and abbreviations.* The definitions and abbreviations of 40 CFR parts 86 and 88, § 52.2963, and the definitions contained in the Clean Air Act (42 U.S.C. 7401–7671q) apply to this section unless the term is defined in this section. If defined in this section, the definition in this section governs.

California emission standards means standards for the emission of pollutants from motor vehicles and engines set by the California Air Resources Board which have received waivers from the Administrator under section 209 of the Clean Air Act.

Composite non-methane hydrocarbon emission level means the combined exhaust and evaporative emission non-methane hydrocarbon level, expressed in g/mi (or g/km). Conversion factors are applied to measured evaporative emissions to generate the composite level and measured evaporative hydrocarbon levels are equated to evaporative non-methane hydrocarbon levels.

Enhanced ILEV means a vehicle for which the Administrator has issued the manufacturer a certificate of conformity designating the vehicle as an ILEV under 40 CFR 88.311–93 and as complying with the provisions of paragraph (d) of this section.

FIP I/M program means any motor vehicle inspection and maintenance program meeting the provisions of § 52.2963.

Full life means up to and including 100.0 percent of the full useful life mileage and age.

Half life means up to and including 50.0 percent of the full useful life mileage and age.

Light-duty truck means any motor vehicle rated at 6000 pounds GVWR or less which is designed primarily for purposes of transportation of property or is a derivative of such vehicle, or is available with special features enabling off-street or off- highway operation and use.

Medium-duty vehicle means any heavy-duty vehicle having a GVW of 14,000 pounds or less, or any motor vehicle having a GVW greater than 6000 pounds but less than 14,000 pounds.

New, when applied to motor vehicles, means a motor vehicle, the equitable or legal title to which has never been transferred to an ultimate purchaser. It is conclusively presumed that the equitable or legal title to a motor vehicle, other than a motorcycle, with an odometer reading of 7,500 miles or more, has been transferred to an ultimate purchaser, and that the equitable or legal title to a motor vehicle, other than a motorcycle, with an odometer reading of less than 7,500 miles has not been transferred to an ultimate purchaser.

Obvious abuse or tampering means the deliberate removal of the catalyst or evaporative emissions canister, turbocharging of a naturally aspirated engine, operation with less than one half the recommended level of oil in the engine, or damage to the engine or emission controls resulting from a vehicular accident.

(c) *Emissions standards and design specifications.*

(1) *Emission standards: light-duty vehicles and light-duty trucks.*

(i) The emissions standards for 1999 and later model year light-duty vehicles (LDVs) and light-duty trucks (LDTs) as measured under 40 CFR part 86, subpart B are as follows:

Class	Loaded vehicle weight (pounds)	Category	Full life composite non-methane hydrocarbons (grams/mile)	Oxides of nitrogen (grams/mile)	
				Half Life	Full Life
LDV	All	Enhanced	0.20	0.20	0.30
LDV	All	Transitional	0.29	0.40	0.60
LDT	0-3750	Enhanced	0.20	0.20	0.30
LDT	0-3750	Transitional	0.29	0.40	0.60
LDT	3751-5750	Enhanced	0.26	0.40	0.50
LDT	3751-5750	Transitional	0.33	0.70	0.90

(ii) For the 1999 model year only, the transitional standards specified in paragraph (c)(1)(i) of this section apply to up to 25 percent of a vehicle manufacturer's sales of LDVs, LDTs below 3751 pounds loaded vehicle weight and LDTs above 3750 pounds loaded vehicle weight. The sales in each of the above three vehicle categories is accounted for separately. The enhanced in-use standards apply to at least 75 percent of 1999 model year sales of these vehicles and to all 2000 and later model year sales.

(iii) Composite non-methane hydrocarbon (NMHC) emissions are determined according to the following equation:

$$\text{Composite NMHC Emissions (g/mi)} = \text{Exhaust (g/mi)} + \frac{\left[\text{Diurnal (g/test)} + \text{Hot soak (g/test)} \times \left(4.2 \frac{\text{trips}}{\text{day}}\right)\right]}{28.28 \frac{\text{miles}}{\text{day}}} + \text{Running Loss (g/mi)}$$

where:

(A) Exhaust=Exhaust NMHC emissions in g/mi using the test procedures specified in 40 CFR part 86, subpart B and as calculated at § 86.144–94(1) of this chapter, with the fuel specifications contained in paragraph (c)(1)(iv) of this section.

(B) Diurnal=Diurnal breathing loss emissions in grams using the test procedures specified in 40 CFR part 86, subpart B and as calculated per § 86.143–96 of this chapter, with the fuel specifications and test temperatures contained in paragraph (c)(1)(iv) of this section.

(C) Hot soak=Hot soak emissions in grams using the test procedures specified in 40 CFR part 86, subpart B and as calculated in § 86.143–96 of this chapter, with the fuel specifications and test temperatures contained in paragraph (c)(1)(iv) of this section.

(D) Running Loss=Running loss emissions in g/mi using the test procedures specified in 40 CFR part 86, subpart B and as calculated in § 86.143–96 of this chapter, with the fuel specifications and test temperatures contained in paragraph (c)(1)(iv) of this section.

(iv)(A) In testing the vehicle for both exhaust and evaporative emissions under 40 CFR part 86, subpart B, the test fuel used shall meet the specifications contained in paragraph 9(a)(1)(ii) of the California Exhaust Emission Standards and Test Procedures for 1998 and subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles, as referenced in § 1956.8 of Title 13 of the California code of Regulations.

(B) In testing the vehicle for diurnal, hot soak, and running loss emissions under 40 CFR part 86, subpart B, the following temperatures shall be used with no change in the specified tolerance about the mean temperatures:

(*1*) In testing diurnal emissions, the following sequence of temperatures shall be repeated three times and substituted for those specified in table 1 of appendix II to 40 CFR part 86:

Minute	Temperature (°F)	Minute	Temperature (°F)
0	65.0	780	101.1
60	66.6	840	95.3
120	72.6	900	88.8
180	80.3	960	84.4
240	86.1	1020	80.8
300	90.6	1080	77.8
360	94.6	1140	75.3
420	98.1	1200	72.0
480	101.2	1260	70.0
540	103.4	1320	68.2
600	104.9	1380	66.5

Minute	Temperature (°F)	Minute	Temperature (°F)
660	105.0	1440	65.0
720	104.2		

(2) In testing hot soak emissions, 105 °F shall be substituted for 95 °F in 40 CFR 86.138–96(e).

(3) In testing running loss emissions, 105 °F shall be substituted for 95 °F in 40 CFR 86.134–96(g)(1) (xii) and (xiv) of this chapter.

(v) NO_X emissions are determined in g/mi using the test procedures specified in 40 CFR part 86, subpart B and as calculated at 40 CFR 86.144–94(1), with the fuel specifications contained in paragraph (c)(1)(iv) of this section.

(vi) The exhaust HC and NO_X emissions standards for 1999 and later model year light-duty vehicles (LDVs) and light-duty trucks (LDTs) as measured over the IM240 transient mass emissions test specified in § 52.2963(i)(5) are as follows:

Class	Loaded vehicle weight (pounds)	Category	Full life total hydrocarbons (grams/mile)	Oxides of nitrogen (grams/mile)	
				Half life	Full life
LDV	All	Enhanced	0.20	0.30	0.45
LDV	All	Transitional	.34	.60	.90
LDT	0–3750	Enhanced	.20	.30	.45
LDT	0–3750	Transitional	.34	.60	.90
LDT	3751–5750	Enhanced	.29	.60	.75
LDT	3751–5750	Transitional	.44	1.05	1.35

(vii) For the 1999 model year only, the transitional standards specified in paragraph (c)(1)(iv)(A) of this section apply to those sales of LDVs and LDTs to which the transitional standards specified in paragraph (c)(1)(v) of this section apply. The enhanced in-use standards apply to all other 2000 and later model year sales of LDVs and LDTs.

(2) *Emission standards: medium-duty vehicles.*

(i) The emissions standards for 1999 and later model year medium-duty vehicles (MDVs) (excluding those MDVs powered by engines certified under the heavy-duty engine emissions standards contained in § 52.2966) as measured under 40 CFR part 86, subpart B are as follows:

Test weight (pounds)	Category	Full Life composite non-methane hydrocarbons (grams/mile)	Oxides of nitrogen (grams/mile)	
			Half life	Full life
0–3750	Enhanced	0.28	0.2	0.3
0–3750	Transitional	.35	.4	.6
3751–5750	Enhanced	.31	.4	.5
3751–5750	Transitional	.40	.7	1.0
5751–8500	Enhanced	.34	.6	.8
5751–8500	Transitional	.45	1.1	1.5
8501–10000	Enhanced	.37	.7	.9
8501–10000	Transitional	.50	1.3	1.8
10001–14000	Enhanced	.43	1.0	1.4
10001–14000	Transitional	.60	2.0	2.8

(ii) For the 1999 model year only, the transitional standards specified in paragraph (c)(2)(i) of this section apply to up to 25 percent of a vehicle manufacturer's sales of MDVs. The enhanced in-use standards apply to at least 75 percent of 1999 model year sales of MDVs and to all 2000 and later model year sales of MDVs.

(iii) Composite NMHC and NO_X emissions are determined according to paragraphs (c)(1)(iii) and (iv) of this section.

(iv) The exhaust HC and NO_X emissions standards for 1999 and later model year MDVs (excluding those MDVs powered by engines certified under the heavy-duty engine emissions standards contained in § 52.2966) as measured over the IM240 transient mass emissions test specified in § 52.2963(i)(5) are as follows:

Test weight (pounds)	Category	Full life total hydrocarbons (grams/mile)	Oxides of nitrogen (grams/mile)	
			Half life	Full life
0–3750	Enhanced	.24	.30	.45
0–3750	Transitional	.40	.60	.90
3751–5750	Enhanced	.31	.60	.75
3751–5750	Transitional	.51	1.05	1.50
5751–8500	Enhanced	.37	.90	1.20

Test weight (pounds)	Category	Full life total hydro-carbons (grams/mile)	Oxides of nitrogen (grams/mile)	
			Half life	Full life
5751–8500	Transitional	.62	1.65	2.25
8501–10000	Enhanced	.43	1.05	1.35
8501–10000	Transitional	.73	1.95	2.70
10001–14000	Enhanced	.57	1.50	2.10
10001–14000	Transitional	.95	3.00	4.20

(v) For the 1999 model year only, the transitional standards specified in paragraph (c)(2)(iv) of this section apply to those sales of MDVs to which the transitional standards specified in paragraph (c)(2)(i) of this section apply. The enhanced in-use standards specified in this paragraph apply to all other 2000 and later model year sales of MDVs.

(3) *Canister access requirement.* All 1999 and later model year LDV, LDTs, and MDVs (excluding those MDVs powered by engines certified under the heavy-duty engine emissions standards contained in § 52.2966) shall be designed and manufacturered such that enhanced I/M evaporative pressure and purge functional tests can be readily conducted (i.e., the evaporative vapor storage canister(s) can be easily and quickly accessed and the pressure and purge test equipment (described in § 52.2963(t) and (u)) can be easily and quickly attached without damaging the post-test integrity of the evaporative emission control system.

(d) *Application for certification.*

(1) A separate application for a certificate of conformity shall be made for each set of standards and each class of new motor vehicles or new motor vehicle engines. Such application shall be made to the Administrator by the manufacturer and shall be updated and corrected by amendment. The application shall meet all of the requirements set forth in 40 CFR 86.094–21, unless otherwise provided in the California application specified in paragraph (d)(2) of this section.

(2) The application shall contain a copy of the application for certification specified in § 1960.1 of title 13 of the California Code of Regulations.

(3) The application shall also demonstrate that throughout all testing conducted by the manufacturer in fulfilling the application for certification specified in § 1960.1 of title 13 of the California Code of Regulations, and such additional testing as may be necessary, that the vehicle(s) for which certification is being requested meet all the applicable emission standards and design specifications specified in paragraph (c) of this section.

(4) The applications shall also contain a statement by the manufacturer that the vehicle(s) for which certification is being requested will meet the emission standards specified in paragraph of this section over its full useful life (or half life, as applicable) in the absence of obvious abuse or tampering, as defined in paragraph (e)(iii)(B) of this section. Vehicles found to not do so under the provisions of paragraph (e) of this section will be subject to recall per the provisions of paragraph (e) of this section.

(e) *Enhanced in-use recall provisions.*

(1) Except as otherwise provided in paragraph (e) of this section, the provisions of subpart S or 40 CFR part 85, and the associated established practices of EPA, shall apply to the recall of vehicles subject to the requirements of this section.

(2) *Vehicle selection.* Vehicles shall be selected by EPA for purposes of recall testing from the portion of the vehicle population subject to enhanced inspection and maintenance testing described in § 52.2963. EPA may test vehicles at any time or mileage within their applicable useful life.

(3) *Vehicle testing.* (i) Selected vehicles will be tested unless EPA determines that a selected vehicle(s) has been subjected to obvious abuse or tampering.

(ii) For purposes of paragraph (e) of this section, obvious abuse or tampering includes the following conditions:

(A) The presence of less than one half of the recommended volume of motor oil in the engine crankcase;

(B) The deliberate removal of the catalyst or evaporative canister;

(C) The addition of a turbocharger to a naturally aspirated engine;

(D) The presence of damage to the engine or emission controls resulting from a vehicular accident; and

(E) Other factors which the Administrator may consider appropriate for determining the presence of obvious abuse or tampering.

(iii) The manufacturer may be present at the time of vehicle procurement and testing and request that a vehicle not be tested due to obvious abuse or tampering. The Administrator may request that such a request from a manufacturer be supported by appropriate documentation, though the final determination rests with the Administrator.

(iv) Vehicles that EPA determines have been subject to obvious abuse or tampering will be removed from the test sample.

(v) EPA will test vehicles in the condition in which the vehicles are received from the owner. No repair or maintenance will be conducted on the vehicle prior to testing.

(vi) Vehicles shall be tested according to the same test procedures prescribed in paragraph (c) of this section.

(4) (i) *Discretionary recall authority.* Based on the criteria contained in 40 CFR 85.1802, the Administrator may determine that a nonconformity with an applicable standard under paragraph (c) of this section exists for a vehicle engine family. In addition, the Administrator may make such a determination of nonconformity when the average emissions of the test vehicles for any pollutant exceeds the applicable recall emission standard specified in paragraph (c) of this section.

(ii) Any vehicle recall conducted by a manufacturer under paragraph (e) of this section shall apply to all vehicles of the affected engine family which have been sold in the State of California.

(5) (i) *Prohibitions.* Should the Administrator make a determination of nonconformity under paragraph (e)(4) of this section:

(A) The Secretary of State of California, the California Department of Motor Vehicles, its employees, and any other persons representing the State of California are prohibited from registering any vehicle covered by this nonconformity unless evidence is presented that the required remedies have been performed on that vehicle; and

(B) Operators of motor vehicles covered by this nonconformity are prohibited from registering the vehicle without first obtaining the required remedies for their vehicle.

(ii) The penalties contained in Section 43016 of the California Health and Safety Code for the failure by a vehicle owner to have needed repairs made to a recalled vehicle shall apply to the

failure by a vehicle owner to have needed repairs made to a recalled vehicle under paragraph (e) of this section.

(f) *I/M-based selective recall requirements.*

(1) *Liability for I/M-related repairs.*

(i) Except as noted in paragraphs (f)(1)(v) and (vi) of this section, the manufacturer of a vehicle shall be responsible for its repair sufficient for it to pass an emission inspection performed as part of a FIP I/M program, including the enhanced in-use I/M standards specified in paragraph (f)(2) of this section, and for obtaining official certification of the successful passage of the above emission inspection (i.e., repeat test) if:

(A) That vehicle has failed an emission inspection performed as part of a FIP I/M program for the pollutant for which the I/M based selective recall liability threshold has been exceeded in paragraph (f)(1)(i)(B) of this section; and

(B) At least one model year's sales of that vehicle's exhaust engine family has exceeded a liability threshold for either HC or NO_X emissions, as defined in paragraph (f)(4) of this section.

(ii) This liability shall begin 30 days after receipt of notification of exceedance of a liability threshold from the Administrator.

(iii) (A) The vehicle manufacturer shall be liable to remedy the defects and for the repairs necessary for the vehicle to pass all aspects of an emission inspection which is part of a FIP I/M program applicable to that vehicle at the time of the failure of the I/M emission inspection referred to in paragraph (f)(1)(i)(A) of this section, regardless of whether the liability threshold for only one of the two pollutants was exceeded or both were exceeded.

(B) At minimum, manufacturers must allow the repairs required under paragraph (f)(1)(i) of this section to be performed at any of its manufacturer authorized repair facilities. Nothing here shall be construed to limit the performance of such repairs to only manufacturer dealerships.

(iv) In performing the repairs conducted under this section, the manufacturer shall promptly schedule and expeditiously repair the vehicle. In doing so, the manufacturer shall provide a loaner vehicle of equivalent or better quality free of charge to the owner of the vehicle being repaired:

(A) During the period of time when the vehicle is at the manufacturer authorized repair facility whenever the repairs will require more than one day to complete, or

(B) Starting 14 days after the vehicle owner initially contacted the manufacturer authorized repair facility regarding the repair of the vehicle and continuing to the time the vehicle is delivered to the vehicle owner along with official certification that the vehicle has successfully passed the repeat emission inspection, if the vehicle has not already been so delivered by this time.

(v) (A) In lieu of performing the repairs required in paragraph (f)(1)(i) of this section, a manufacturer may purchase the vehicle and remove it from use in California.

(B) The manufacturer's responsibility for performing the repairs required in paragraph (f)(1)(i) of this section ends if the vehicle owner declines to sell the vehicle to the manufacturer at a price equal to Average Retail Value listed in the N.A.D.A. Official Used Car Guide published by the National Automobile Dealers Used Car Guide Co., 8400 Westpark Dr., McLean, VA 22102–9985 for the month containing the date of the emission inspection failure referred to in paragraph (f)(1)(i)(A) of this section and for the smallest geographical area covered by the above Guide which contains the area covered by the FIP I/M program.

(vi) *Exempted repairs.* (A) Manufacturers are not responsible for repairs to vehicles to which there has been obvious abuse or tampering, as defined in paragraph (e)(3)(i) of this section and determined by the FIP I/M program test provider.

(B) Manufacturers are not responsible for repairs of vehicles that have exceeded their useful life.

(2) *Applicable enhanced in-use I/M standards.*

(i) (A) The enhanced in-use I/M standards for exhaust HC emissions specified in paragraph (c) of this section shall be substituted for the exhaust HC emission standards specified in appendix 2 of § 52.2963 for all vehicles of an exhaust engine family if at least one model year's sales of that exhaust engine family has exceeded a liability threshold for HC emissions, as defined in paragraph (f)(4) of this section.

(B) The enhanced in-use I/M standards for NO_X emissions specified in paragraphs (c) of this section shall be substituted for the NO_X emission standards specified in appendix 2 of § 52.2963 for all vehicles of an exhaust engine family if at least one model year's sales of that exhaust engine family has exceeded a liability threshold for NO_X emissions, as defined in paragraph (f)(4) of this section.

(ii) This substitution shall begin 30 days after the date on which notification from the Administrator of the exceedance of the liability threshold is received by the manager of the affected I/M test facility.

(3) *Notification to Vehicle Owners.* Immediately following the failure of an emission inspection for a pollutant (i.e., HC or NO_X) by a vehicle for which the FIP I/M program test provider has received notification of exceedance of a liability threshold per paragraph (f)(2) of this section for that pollutant, the certifed emission inspector shall:

(i) Determine whether or not the vehicle has been obviously abused or tampered with, per paragraph (e)(3)(ii) of this section,

(ii) If the vehicle was not obviously abused or tampered with, inform the vehicle owner (or the vehicle operator present at the test) that the vehicle manufacturer is responsible for remedial repairs, and

(iii) Provide the vehicle owner with a written copy of the test results and the determination that the vehicle was not obviously abused or tampered with. This document shall be signed by the certified emission inspector and the manager or an assistant manager of the FIP I/M test facility.

(4) *Exceedance of an I/M-based selective recall liability threshold.*

(i) The liability threshold is 5.0 percent for vehicles that have not exceeded 50.0 percent of their useful life and 10.0 percent for vehicles that have not exceeded 100.0 percent of their full useful life.

(ii) An exhaust engine family is deemed to have exceeded the liability threshold for NO_X or HC if the NO_X or HC failure rate for any model year of that exhaust engine family, per paragraph (f)(5) of this section, exceeds the half- or full-life liability threshold at any time, after three months of data have been submitted for that model year's vehicles. Exceedance of the liability thresholds for HC and NO_X are determined independently.

(5) *Calculation of failure rates.*

(i) The failure rate (in percent) for a specific pollutant for each model year of each exhaust engine family will consist of the total number of failing vehicles for that pollutant divided by the total number of vehicles multiplied by 100, where:

(A) The total number of vehicles refers to the sum of all vehicles from a specific model year and exhaust engine family which have been tested in a FIP I/M program,

(B) The total number of failing vehicles includes those vehicles included under paragraph (f)(5)(i)(A) of this section which:

(*1*) At any time exceeded the applicable IM240 exhaust NO_X standard specified in paragraph (c)(1)(vi) or

(c)(2)(iv) of this section, as applicable, (considered a failure for NO_X); or

(2) At any time exceeded the applicable IM240 exhaust HC standard specified in paragraph (c)(1)(vi) or (c)(2)(iv) of this section, as applicable, or failed either the purge or pressure functional tests described in § 52.2963(t) and (u), respectively (considered a failure for HC).

(C) Separate failure rates for each pollutant will be calculated for vehicles which have not exceeded 50.0 percent of their full useful life and for vehicles which have not exceeded 100.0 percent of their full useful life.

(D) Failure rates shall be expressed as a percentage, rounded to one figure after the decimal.

(ii) On a monthly basis, the Administrator will calculate the HC and NO_X failure rates for each exhaust engine family and notify each vehicle manufacturer, as applicable, of the results for their engine families.

(iii) Within thirty days after a liability threshold for an exhaust family has been determined to be exceeded, the Administrator shall, by registered mail, notify the manufacturer of the affected vehicles and managers of enhanced I/M test facilities required to meet the requirements of § 52.2963.

(g) *Enhanced ILEV fleet program.*

(1) Fleet operators which control 10 or more vehicles which operate at any time in the South Coast Air Basin Nonattainment Area for Ozone as defined in 40 CFR 81.305 shall determine whether they are a covered fleet operator. This determination is to be made as follows:

(i) The fleet operator shall not count the following types of vehicles:

(A) Vehicles with a GVWR greater than 26,000 pounds;

(B) Law enforcement and other emergency vehicles;

(C) Nonroad vehicles;

(D) Vehicles garaged at a private residence that are not centrally fueled;

(E) Vehicles held for lease or rent to the general public;

(F) Vehicles held for sale by motor vehicle dealers (including demonstration vehicles); and

(G) Vehicles used for motor vehicle manufacturer product demonstrations and tests.

(ii) Fleet operators shall determine the number of vehicles not exempted in paragraph (g)(1)(i) of this section that can be centrally fueled (as defined in 40 CFR 88.302–94).

(iii) If a fleet operator determines under paragraph (g)(1)(ii) of this section that 10 or more non-exempt vehicles can be centrally fueled, then the fleet operator shall be considered to be a covered fleet operator.

(2) Except as provided in paragraph (g)(3) of this section, covered fleet operators acquiring vehicles to replace vehicles meeting the provisions of paragraph (g)(1) of this section, or acquiring additional vehicles which meet the same provisions, shall acquire a number of enhanced ILEVs equal to the number of such vehicles acquired multiplied by the appropriate percentage as follows:

(i) For model year 1999 light-duty vehicles, light-duty trucks, and medium-duty vehicles, 50 percent;

(ii) For model year 2000 and later light-duty vehicles, light-duty trucks, and medium-duty vehicles, 70 percent.

(3) *Enhanced ILEV purchase credits.* Covered fleet operators may satisfy the enhanced ILEV purchase requirements provided in paragraph (g)(2) of this section wholly or in part by redeeming an appropriate number of enhanced ILEV purchase credits. Enhanced ILEV purchase credits may be generated as follows:

(i) A covered fleet operator which purchases enhanced ILEVs in excess of the enhanced ILEV purchase requirement may receive one enhanced ILEV purchase credit for each excess vehicle; and

(ii) A covered fleet operator which purchases enhanced ILEVs earlier than required may receive one enhanced ILEV purchase credit for each such vehicle.

(iii) The Administrator shall issue a credit document or documents to a covered fleet operator which requests enhanced ILEV credit or credits and which provides evidence of the appropriate purchases.

(iv) The Administrator shall approve the reduction of any covered fleet operator's enhanced ILEV purchase requirement by a number equal to the number of credits presented to the Administrator for redemption, subject to confirmation of the legitimacy of the credit documents so presented.

(4) *Reporting.* Fleet operators which control 10 or more vehicles which operate at any time in the South Coast Air Basin Nonattainment Area for Ozone as defined in 40 CFR 81.305 shall submit the following information to the Administrator by January 1 of each year beginning January 1999:

(i) Total number of vehicles operated in the covered area;

(ii) Numbers of vehicles by class (e.g., LDV, LDT) and fueling characteristics (e.g., centrally fueled) acquired during the previous calendar year;

(iii) Numbers of vehicles by class and fueling characteristics expected to be acquired in the coming calendar year;

(iv) Numbers of enhanced ILEVs purchased during the previous calendar year and expected during the coming calendar year;

(v) Vehicle Information Numbers (VINs) and engine family designations (see 40 CFR 86.092–24) for each of the vehicles reported in paragraphs (g)(4)(ii) through (iv) of this section.

(vi) The identity of the responsible party which has control of vehicle acquisition decisions; and

(vii) The covered fleet operator's calculated minimum purchase requirement from paragraph (g)(2) of this section.

(5) *Violations.* The following shall be considered violations of the enhanced ILEV fleet program:

(i) Failure to submit required data to the Administrator;

(ii) Failure to meet the appropriate purchase requirements; or

(iii) Counterfeiting or commerce in counterfeit enhanced ILEV purchase credit documents.

(6) *Penalties.* Any person which the Administrator finds in violation of the provisions of paragraph (g)(4)(v) of this section shall be subject to a civil penalty of not more than $25,000.

§ 52.2963 Enhanced inspection/maintenance program.

(a) *Applicability of 40 CFR part 51, subpart S.* For the purposes of this section, except as otherwise provided, the definitions and requirements of 40 CFR part 51, subpart S (Inspection/Maintenance Program Requirements) apply.

(b) *Additional definitions.*

Centralized inspection network means a network of vehicle inspection facilities owned and operated by a single, identifiable entity, such as a state or other governmental entity, or an agreed upon agent of a state or other governmental entity.

Certificate of compliance means a serially numbered instrument (either paper-based or electronic) indicating that a vehicle has met the requirements of this section, either by passing all applicable emission tests, or by being granted a waiver (see "Waiver" in paragraph (b) of this section.

Certified emission inspector means a person who has successfully completed all necessary training and who is certified by the Administrator or his/her designee as qualified to perform emission inspections on subject vehicles. Such certification must be periodically renewed, and is subject to suspension and permanent revocation as a result of violating the requirements of this section.

Emission inspection means the full range of emission-related inspections a

vehicle is subject to as a result of participating in an I/M program, including the sampling and analysis of tailpipe exhaust, purge and pressure testing of the evaporative system, and any visual inspections for the presence and proper connection of specific emission control devices.

Emission inspection test report means an automated report of a vehicle's emission inspection results, coded to a specific vehicle through the use of unambiguous vehicle identifiers, such as the license plate number and vehicle identification number (VIN). The emission inspection test report is a separate document and distinguished from the certificate of compliance by virtue of the fact that a test report shall not be accepted as valid for registration purposes.

Enhanced I/M program means a program meeting the enhanced I/M performance standard as established under EPA's I/M rule (40 CFR 51.351).

Farm equipment means a vehicle designed or adapted and determined by the Administrator to be used exclusively for agricultural operations and only incidentally operated or moved upon highways.

Gross vehicle weight rating (GVWR) means the value specified by the manufacturer on the Federal weight certification label as the loaded weight of a single vehicle. For the purposes of the FIP's I/M program, California-certified vehicles shall be considered to fall under the same gross vehicle weight ratings as comparable, 49-state vehicles.

Heavy-duty vehicles means trucks weighing more than 8,500 pounds GVWR.

Light-duty trucks 1 (LDT1) means trucks weighing less than 6,000 pounds GVWR.

Light-duty trucks 2 (LDT2) means trucks weighing from 6,000 to 8,500 pounds GVWR.

Light-duty vehicles means passenger cars or multi-purpose vehicles weighing less than 6,000 pounds GVWR.

Onboard diagnostic device (OBD) means a system for monitoring the in-use emission performance of a vehicle which provides feedback to the driver concerning actual or potential malfunctions through the illumination of a malfunction indicator light (MIL). The event triggering MIL illumination is also stored on the OBD computer as a trouble code which can be downloaded at a vehicle testing or repair facility.

Oversight contractor(s) means a contractor or contractors who have been awarded a contract by the Administrator to conduct and report the results of overt and covert audits of the test provider(s) sites and personnel. The information generated by the oversight contractor shall be used by the Administrator to substantiate enforcement actions taken by EPA against the test provider and its employees.

Qualifying repairs means those vehicle repairs necessary to correct the deficiencies which resulted in a vehicle's failure of an emissions inspection and which count toward the minimum dollar amount required before a waiver may be issued. For those repairs where repair or replacement of emission-related parts requires replacement of other non-emission related equipment constructed as one indivisible unit by the manufacturer, the total replacement costs or repair costs may be counted toward qualifying repairs.

Recognized repair facility means a business engaged in the diagnosis and repair of automotive engines and related systems.

Recognized repair technician means a person who has received and has proof of formal training in the diagnosis and repair of automotive engines and related systems, or holds a valid license issued by the California Bureau of Automotive Repair, or is employed by a recognized repair facility primarily for the purpose of diagnosing and repairing automotive engines and their related systems.

Remote Sensing Devices (RSD) means a transportable system of devices designed for the remote gathering of vehicle emissions and identification data while vehicles are being operated on public roads.

Special mobile equipment means vehicles not designed or used primarily for the transportation of persons or property and only incidentally operated or moved over a highway, including ditch digging apparatus; well boring apparatus; earth moving and road construction and maintenance machinery, such as asphalt spreaders, bituminous mixers, bucket loaders, ditchers, graders, finishing machines, road rollers, scarifiers, earth moving carryalls, scrapers, power shovels and draglines; and self-propelled cranes and tractors, other than truck tractors. The term does not include house trailers; dump trucks; truck-mounted transit mixers, cranes or shovels; or other vehicles designed for the transportation of persons or property to which machinery has been attached.

Test provider(s) means one or more entities with whom the Administrator has entered into a legal agreement, for the purposes of providing vehicle emission testing and other FIP I/M program activities except those activities which would clearly constitute a conflict of interest or are otherwise impractical, such as overt and covert auditing of the testing element, program effectiveness evaluation, and enforcement. As part of this legal agreement, the test provider(s) would be reimbursed for operating expenses and allowed a reasonable profit by way of a test fee to be collected directly from motorists at the time of testing.

Transient test means a vehicle emission test in which exhaust emissions are sampled and analyzed under conditions simulating actual on-road driving conditions, including the use of loaded operation simulation, and a standardized driving cycle. For the purposes of the FIP I/M program, a transient test known as the IM240 shall be used for vehicle exhaust emissions testing.

Unsafe condition means a defect, malfunction or other condition of a vehicle which may expose an emission inspector to harm in the performance of an emission inspection of that vehicle. A vehicle which is presented for testing in an unsafe condition may be rejected from testing until such time as the factors contributing to the vehicle's unsafe condition have been corrected.

Vehicle model year means the date of manufacture of a vehicle as specified by the vehicle identification number (VIN), or, if this number is not available or cannot be interpreted for the year, the annual production period of the vehicle as designated by the manufacturer.

Waiver means a notation on the emission inspection certificate of compliance indicating that the requirement of passing the otherwise required reinspection test has been waived.

(c) *Subject vehicles.* Subject vehicles include all model year 1966 to 1998 gasoline-fueled vehicles to 19,500 pounds GVWR (including vehicles with engine-based certification), and all model year 1999 and newer vehicles of all fuel types to 14,000 pounds GVWR (excluding vehicles with engine-based certification from 8,500 to 14,000 pounds GVWR) which are:

(1) Registered in or required to be registered in a FIP I/M program area.

(2) Leased vehicles with registration or titling in the name of an equity owner other than the lessee or user where the motor vehicle is registered or required to be registered in a FIP I/M program area.

(3) Available for rent in a FIP I/M program area or used in a FIP I/M program area, regardless of where the vehicles are registered.

(4) part of a fleet registered in and/or primarily operated within a FIP I/M program area.

(5) Federally-owned vehicles operated within a FIP I/M program area, with the exception of tactical military vehicles.

(6) Vehicles owned, leased or operated by civilian and military personnel on Federal installations, except for vehicles belonging to or operated by visiting agency, employee or military personnel whose stays do not exceed a total of 60 calendar days per calendar year.

(d) *Exempted vehicles.* Exempted vehicles shall include vehicles operated or registered as one of the following:

(1) Special mobile equipment.

(2) Farm equipment.

(3) Motorcycles.

(4) Motorized pedalcycles.

(5) Vehicles repossessed by a financier or debt collector through the use of miscellaneous motor vehicle business registration plates. This vehicle exemption will no longer hold once a repossessed vehicle has been resold or leased or is otherwise being operated on a routine basis in the FIP I/M program area.

(e) *Prohibitions.* (1) The Secretary of State of California, the California Department of Motor Vehicles, its employees, and any other persons representing the State of California are prohibited from reregistering any subject vehicle registered in the name of an owner or lessee whose primary residence is located within one of the FIP I/M areas unless evidence is presented that the EPA Administrator or his/her designee has issued such a vehicle a certificate of compliance with or a waiver from the applicable requirements of this section.

(2) Operators of subject motor vehicles registered in the FIP I/M areas are prohibited from obtaining vehicle registration without first meeting all applicable FIP I/M program requirements.

(3) The test provider(s) and its employees, as part of an agreement with the Administrator, shall be prohibited from the intentional improper testing or retesting of vehicles subject to the FIP I/M program.

(f) *Commencement date.* The enhanced I/M program, as described in this section, will commence with 100 percent vehicle testing coverage on January 1, 1997. Given the lateness of this starting date, no phase-in of vehicle coverage shall be assumed, contrary to the provisions of 40 CFR 51.373.

(g) *Vehicle emission inspection cycle.*

(1) *Biennial inspection.* Vehicles subject to the current California I/M program which are registered in the FIP I/M areas shall be subject to the FIP I/M program and will be tested on the same biennial schedule as is currently used, with the exception that such vehicles shall go to official FIP I/M program test provider(s) for valid testing. New vehicles which are registered in the FIP I/M areas shall be tested in the next even numbered calendar year after the initial titling if the model year is even, or in the next odd numbered calendar year after the initial titling if the model year is odd, and shall be subject to regular FIP I/M testing every two years thereafter. Once a vehicle has been tested as part of the FIP I/M program, it will remain on the same biennial testing schedule until such time as the FIP I/M program is discontinued. The sale of a vehicle shall not change that vehicle's regularly scheduled testing date. Vehicles previously registered in California but outside the FIP I/M areas which move into a FIP I/M area shall be tested in time to meet the I/M requirement for their first registration as residents of a FIP I/M area, and shall be tested every two years thereafter.

(2) *Out-of-cycle inspection.* Vehicles otherwise subject to the FIP I/M program's requirements which are targeted as potential high emitters as a result of RSD detection must be presented for an enhanced I/M inspection within 30 days of notification of the failure (or sooner, if the regularly scheduled inspection deadline occurs first). If the vehicle fails this confirmatory test, it shall be subject at that time to the same repair, retest, and waiver requirements as apply to vehicles which fail the regularly scheduled biennial inspection. Failure to comply with this out-of-cycle testing requirement shall result in the assessment of a late fee to be collected prior to testing whenever the vehicle is next presented for regular testing. A late fee of $10 will be assessed for each full week past the testing deadline. Being subject to an out-of-cycle inspection does not change the deadline for the vehicle's regularly scheduled biennial inspection, unless it occurs within 30 days of the out-of-cycle test.

(h) *Notification of requirement for emission inspection.* A letter of notification shall be sent to subject vehicle owners or lessees such that the letter shall have been received by the individual owner or lessee no later than 45 days prior to the regularly scheduled test deadline and no later than 30 days prior to an out-of-cycle confirmatory test deadline. In the case of the out-of-cycle inspection requirement, the notification shall be sent by registered mail to ensure documentation of the owner or lessee's receipt of notification.

(i) *Emission inspection period.* The period during which a subject vehicle may be presented for an I/M inspection shall be stated on the emission inspection notification form along with the deadline for completing the inspection process. Subject vehicles presented for an initial inspection or reinspection after the time period shown on the emission inspection notification shall be charged a late fee of $10 for each full week that a vehicle is late. This late fee shall be collected prior to the initiation of testing.

(j) *Inspection failure.*

(1) If a subject vehicle fails any phase of the enhanced emission inspection, the vehicle owner shall have the vehicle repaired and submit the vehicle for retesting along with a repair form supplied by the test provider (to be completed by the vehicle repair provider). No reinspection shall occur without a completed repair form.

(2) If the subject vehicle fails the retest, and it otherwise meets the waiver requirements for enhanced I/M programs addressed under 40 CFR 51.360(a), the vehicle owner may apply for a waiver.

(k) *Enhanced I/M program requirements.* The FIP I/M program design shall include the following program elements:

(1) *Network type.* Testing shall be performed through a centralized system of official emission inspection stations which shall be operated by one or more test provider(s) under agreement with the Administrator.

(2) *Test-only.* Official emission inspection stations shall conduct vehicle emission testing only and shall not perform vehicle repairs, except to restore the vehicle to the as-received condition after testing (including the reattachment of hoses disconnected for the evaporative system check). Official emission inspection stations shall meet all the requirements for test-only stations established in 40 CFR 51.353.

(3) *Geographic coverage.* The FIP I/M program shall cover the same geographic areas within the Sacramento, Ventura and South Coast FIP areas as are covered by the existing California Smog Check program as of [*Insert date of publication of the final rule*]. (See 40 CFR part 52, subpart GGG, appendix A for a detailed listing of I/M FIP area coverage by zip code.)

(4) *Exhaust emission test type.* All 1966 and newer subject vehicles shall be tested using the IM240 transient mass emission test as specified by EPA guidance and regulation.

(5) *Emission control device visual inspection.* All 1971 and newer subject vehicles shall be visually inspected for the presence and proper connection of the air pump and positive crankcase

ventilation (PCV) systems. The visual inspection of these components shall be conducted in compliance with procedures established by EPA guidance and regulation.

(6) *Evaporative system tests.* All 1971 and newer subject vehicles shall be subject to an evaporative system pressure test and an evaporative system purge test conducted as specified by EPA guidance and regulation.

(7) *Onroad testing.* Onroad testing shall be conducted on approximately 10 percent of the subject fleet using RSD on an annual basis. Subject vehicles have been targeted by RSD as potential high-emitters shall be subject to out-of-cycle testing requirements as specified in paragraph (t) of this section.

(l) *Documentation of compliance for vehicles operated on Federal installations.* Federal installations located within the FIP I/M program area shall provide annual documentation of proof of compliance with paragraphs (c)(5) and (c)(6) of this section to EPA. This documentation shall be updated periodically, but at least once per inspection cycle. The installation shall use one of the following methods to establish proof of compliance:

(1) Presentation of a valid certificate of compliance with or waiver from the FIP I/M program or a comparable I/M program (i.e., one meeting the enhanced I/M performance standard as set forth in 40 CFR 51.351). In the event the FIP I/M program adopts an electronic-based instrument for certifying vehicle compliance, the test provider(s) shall make arrangements for issuing a special "Federal vehicle," paper-based certificate of compliance. Such a certificate of compliance shall clearly read "Not Valid for Vehicle Registration in the State of California" in a point size and location which will make it impossible to remove this message without destroying the certificate.

(2) Presentation of proof of vehicle registration for each vehicle operating on the grounds of the Federal installation which is already registered within the geographic area covered by the FIP I/M program.

(m) *Emission inspection criteria for vehicles operated with miscellaneous motor vehicle business registration plates or dealer registration plates.* A subject vehicle which displays a miscellaneous motor vehicle business registration plate or a dealer registration plate shall be exempt from the requirements for emission inspection until it reaches two years of age (based on model year) at which that time it shall be subject to emission inspection.

(n) *Repair technician training.* Repair technician training shall be provided to all qualified applicants. This training will include, at a minimum:

(1) Diagnosis and repair of malfunctions in computer controlled close-loop vehicles.

(2) Application of emission control theory and diagnostic data to the diagnosis and repair of failures of the transient emission test and the evaporative system function tests.

(3) Utilization of diagnostic information on systematic or repeated failures observed in the transient emission test and the evaporative system function tests.

(4) Generalized training on the various subsystems related to emission control.

(o) *Emission test procedures.* Emission tests and functional tests shall be subject to the following requirements:

(1) Flexibly fueled vehicles (i.e., those capable of operating both on gasoline and other fuels) shall at a minimum be subject to testing and shall be tested while operating in the gasoline mode unless the vehicle is never operated with gasoline.

(2) An initial test is the emission test that occurs the first time in a test cycle. The initial test shall be performed without repair or adjustment at the emission inspection station prior to the test, except as provided for in the evaporative system integrity test. An emission inspection performed after failure of the initial test in a test cycle shall be considered a retest.

(3) An official test, once initiated, shall be performed in its entirety regardless of intermediate outcomes except in the case of an invalid test condition or unsafe conditions.

(4) Tests involving measurements shall be performed with approved equipment that has been calibrated according to the quality control procedures contained in EPA guidance or regulation.

(5) Vehicles shall not be tested if the exhaust system is missing or leaking, or if the vehicle is in an unsafe condition.

(6) The vehicle owner or driver shall have access to an area in the inspection station which permits observation of the entire official inspection procedure. This access may be limited but it may not prevent full observation.

(7) In the inspection process, vehicles that have been altered from their original certified configuration shall be tested in the same manner as other subject vehicles, in accordance with the following:

(i) Vehicles with engines other than the engine originally installed by the manufacturer, or an identical replacement engine, shall be subject to the test procedures and standards for the chassis type and model year, regardless of the engine replacement, including visual equipment inspections for parts that are part of the original certified configuration and part of the normal inspection for such configuration. An exception may be made if the vehicle meets new certification standards for that chassis and model year.

(ii) Vehicles which are switched to a fuel type for which there is no certified configuration shall be tested according to the emission standards established for that vehicle type and model year. Emission control device requirements may be waived if the Administrator determines that the alternatively fueled vehicle configuration would meet the new vehicle standards for that model year without these devices.

(p) *Emission standards.* Subject vehicles shall be tested and passed or failed according to the IM240 cutpoints provided in appendix B of subpart GGG of this part.

(q) *Emission inspection test report.* The test provider(s) shall provide the vehicle owner or driver with a computer-generated emission inspection test report which includes the following:

(1) A vehicle description, including license plate number, vehicle title number, VIN, vehicle make and model and odometer reading.

(2) The date and time of the test.

(3) The name or identification number of the individuals performing the tests and the location of the test station and lane number.

(4) The type of tests performed, including emission tests, visual checks for the presence of emission control components, and functional, evaporative system checks.

(5) The applicable test standards.

(6) The test results, including exhaust concentrations and pass/fail results for each mode measured, pass/fail results for evaporative system checks, and which emission control devices inspected were passed, failed or not applicable.

(7) A statement indicating the availability of warranty coverage as required in section 207 of the Clean Air Act (42 U.S.C. 7525).

(8) A certification that tests were performed in accordance with this section.

(9) For vehicles that fail the tailpipe emission test, any available information on the possible causes of the specific pattern of high emission levels found during the test.

(10) For vehicles that fail the enhanced I/M test, a description of the

consumer complaint procedure, including a statement indicating that any administrative challenge regarding the performance or results of the test must be made by the vehicle owner or operator within 10 days of the failure of the emission inspection.

(r) *Retest.*

(1) *Procedure.* Vehicles that fail the initial test or a retest shall be retested after repair to determine if the repairs were effective for any portion of the inspection that was failed on the previous test. To the extent that repair to correct a previous failure could lead to failure of another portion of the test, that portion shall also be retested. Evaporative system repairs performed as a result of the vehicle's failing either the evaporative system purge or pressure test shall be cause for a complete retest covering all of the initial test requirements.

(2) *Prerequisites.* For a retest, the vehicle owner or driver shall present to the inspection station the emission inspection test report and a completed repair data form. If the repairs were performed by the owner or someone other than a recognized repair technician, the repair data form shall be completed by the person performing the repair. If the repairs were performed at a recognized repair facility, the repair data form completed by the repair facility shall be presented to the emission inspection station.

(3) *Content of repair data form.* The repair data form shall include the following:

(i) The repairs performed.

(ii) The cost of repairs.

(iii) The repair technician's number or name if the person who made the repairs does not have a license number issued by the California Bureau of Automotive Repair.

(iv) Any repairs recommended by the repair facility that were not performed.

(v) The name, address and telephone number of the repair facility.

(s) *Issuance of a waiver.* The emission inspection station shall issue a certificate of emission inspection with an indicator to show that the vehicle has received a waiver if all of the following are complied with:

(1) The subject vehicle has failed the initial emission inspection, qualifying repairs have been completed and the subject vehicle has failed the retest.

(2) Emission control devices, as originally equipped, are installed. Vehicles with emission devices which are obsolete and cannot be obtained through the original equipment manufacturer, aftermarket manufacturers or suppliers of used parts are exempt from this paragraph.

(3) The amount spent on qualifying repairs shall:

(i) Be at least $450 adjusted annually in January by the percentage by which the Consumer Price Index for the current year differs from the 1989 Consumer Price Index.

(ii) Include parts costs and labor costs paid for qualifying emission repair services performed on the vehicle if paid by the vehicle owner and if the qualifying repairs were performed by a recognized repair technician. For qualifying emission repair services performed on pre-1980 vehicles, by someone other than a recognized repair technician, parts costs but not labor costs shall be counted toward the minimum cost limit. For qualifying emission repair services performed on 1980 and newer vehicles, by someone other than a recognized repair technician, neither parts costs nor labor costs may be counted toward the minimum cost limit.

(iii) Be considered qualifying if they are appropriate to the cause of the test failure.

(iv) Exclude expenses which are incurred in the repair of emission control devices which are found to be tampered with, rendered inoperative, or not installed.

(v) Exclude costs recoverable under an emission warranty, insurance policy or prepaid maintenance agreement. These recoverable cost repairs shall be completed before necessary repair costs can be applied toward the waiver cost limitations. The operator of a vehicle within the statutory age and mileage coverage under section 207(b) of the Clean Air Act (42 U.S.C. 7525(b)) shall present a written denial of warranty coverage from the manufacturer or authorized dealer for this provision to be waived.

(vi) Exclude the fee for emission inspection.

(vii) Exclude charges for giving a written estimate of needed repairs.

(viii) Exclude charges for checking for the presence of emission control devices.

(ix) Exclude costs for repairs performed on the vehicle before the initial test failure.

(4) The vehicle owner or driver shall present the original of repair bills to the inspection station to demonstrate compliance with the qualifying dollar amount for that year. The bills shall:

(i) Include the name, address and phone number of the repair facility.

(ii) Describe the repairs that were performed.

(iii) State the labor and parts costs separately for each repair.

(5) Upon completion of waiver requirements and a visual check to determine that repairs were actually made, a certification of emission inspection, with a waiver indicator, shall be made for the subject vehicle.

(t) *Onroad testing.* Onroad testing of subject vehicles shall be conducted using RSD in each FIP I/M program area using a carbon monoxide (CO) cutpoint of 4 percent to screen for potential gross emitters. The onroad testing program will be aimed at identifying 10 percent of the subject fleet for follow-up, out-of-cycle confirmatory testing.

(1) *Failure of onroad emission test.* The owner or operator of a subject vehicle that fails an onroad emission test shall be notified by registered mail to report for an out-of-cycle confirmatory test. The notification of the need for confirmatory testing shall be received by the vehicle owner or lessee no later than 30 days prior to the confirmatory test deadline. If the subject vehicle does not have a valid emissions test waiver and fails the confirmatory test, the owner or operator shall have 30 days following the initial confirmatory test failure in which to have the failed vehicle repaired and retested. The vehicle owner or operator shall be notified of this obligation as part of the initial RSD-failure notification process.

(2) *Failure to produce proof of correction of onroad emission test failure.* If the owner of the subject vehicle fails to comply with a notice of RSD failure within 30 days of receiving the notice by registered mail, a late penalty will be assessed at the time the vehicle is presented for confirmatory testing, or at the time of the next regularly scheduled test, whichever comes first. The late penalty is a $10 fee for each full week beyond the 30-day deadline after initial notification of the need for confirmatory testing.

(3) *Failure to procure repairs and retest after initial confirmatory test failure.* If a subject vehicle fails an initial confirmatory test and the owner or lessee fails to procure the necessary repairs and retest within 30 days of the initial confirmatory test failure, a late penalty shall be assessed at the time the vehicle is presented for retesting, or at the time of the next regularly scheduled test, whichever comes first. The late penalty is a $10 fee for each full week beyond the 30-day deadline for receiving a passing retest or waiver after the initial confirmatory test failure.

(u) *Certified emission inspectors.*

(1) *General.* Personnel who perform emission inspections at each emission inspection station operated by the test provider(s) shall be certified by the Administrator as emission inspectors.

The emission inspection shall only be performed by certified emission inspectors.

(2) *Certified emission inspector requirements.* An inspector desiring to be certified shall:

(i) Be at least 18 years of age.

(ii) Have completed an emission inspection training course, approved by the Administrator, that includes, at a minimum, information on the following:

(A) The air pollution problem, including its cause and effects.

(B) The purpose, function and goal of the inspection program.

(C) Emission inspection regulations and procedures.

(D) Technical details of the test procedures and the rationale for their design.

(E) Emission control device function, configuration and inspection.

(F) Test equipment operation, calibration and maintenance.

(G) Quality control procedures and their purpose.

(H) Public relations.

(I) Safety and health issues related to the inspection process.

(iii) Passed a required written test addressing the above elements with a minimum of 80 percent correct test responses.

(iv) Demonstrated the ability to properly utilize test equipment and to follow other required procedures by means of a hands-on test addressing the complete emission inspection. The inability to properly conduct the test procedures shall constitute failure of the test.

(v) Renew the certification every 2 years under procedures established by the Administrator.

(3) *Identification.* While conducting inspections, a certified emission inspector shall have in his/her possession a currently valid inspector certification card issued by the Administrator.

(v) *Test provider(s) obligations and responsibilities.*

(1) *Personal liability.* The test provider(s) or those acting as agents of the test providers(s) shall assume full responsibility for:

(i) Conducting the business of the official emission inspection station honestly and in a manner consistent with this section, and making every reasonable effort to inspect all vehicles upon request.

(ii) Making official emission inspection regulations and supplements available for the use of certified emission inspectors and other employees involved in the emission inspection process.

(iii) Notifying EPA and the oversight contractor when a certified emission inspector is hired, resigns or is dismissed.

(iv) Maintaining emission inspection records for examination by EPA or the oversight contractor.

(v) Providing the vehicle emission inspection test report to motorists after testing and having the repair requirements stated on a form provided to the vehicle owner or operator.

(vi) Insuring full compliance with this section with respect to:

(A) Every emission inspection conducted at the emission inspection station.

(B) Every emission inspection waiver issued at the emission inspection station.

(C) Every certification of emission inspection made to and by each emission inspection station.

(D) Every provision of this section related to emission inspections performed by an employee of the emission inspection station.

(E) Assuring the proper maintenance and calibration of emission inspection equipment according to procedures established in EPA's high-tech procedures guidance.

(F) Completing and retaining emission equipment maintenance and calibration records as required by EPA.

(G) Placing emission equipment out of service when calibration cannot be performed.

(H) Maintaining computer records of each inspection.

(I) Making records available to EPA or the oversight contractor during periodic station audits.

(2) *Emission test data.* The requirements for data collection and transmission shall be as specified in the agreement between the Administrator and the test provider(s).

(3) *Repair performance monitoring.* The test provider(s) shall be responsible for collecting and maintaining emission repair information concerning subject vehicles that have failed the emission inspection and have been returned for a retest. The particulars of this requirement will be detailed in the agreement between the EPA Administrator and the test provider(s).

(w) *Quality control.*

(1) *Quality control requirements for test provider(s).* Quality control measures shall be implemented by the test provider(s) and shall ensure that emission measurement equipment is calibrated and maintained according to the procedures in this section and in the agreement between the EPA Administrator and the test provider(s). Inspection, calibration records and control charts shall be accurately created and recorded and maintained as prescribed in this section and in the agreement between the Administrator and the test provider(s).

(2) *General requirements.* General requirements for quality control practices for test equipment shall be as follows:

(i) The practices described in this section, in the agreement and in 40 CFR part 51, subpart S, appendix A (relating to calibrations, adjustments and quality control), and EPA's high-tech procedures document shall be followed.

(ii) Preventive maintenance on inspection equipment shall be performed on a periodic basis, as provided by in the agreement between the Administrator and the test provider(s) consistent with the equipment manufacturer's requirements.

(iii) To assure quality control, computerized analyzers shall automatically record quality control check information, lockouts, attempted tampering with test equipment and circumstances which require a service representative to work on the equipment.

(iv) To assure test accuracy, equipment shall be maintained according to demonstrated good engineering practices.

(v) Computer control of quality assurance checks and quality control charts shall be used whenever possible.

(3) *Requirements for transient exhaust emission testing equipment.* Calibration and maintenance procedures for transient exhaust emission testing equipment shall be conducted as specified in EPA guidance and regulation.

(4) *Requirements for the purge analysis system.* Calibration and maintenance procedures for the purge analysis system shall be conducted as specified in EPA guidance and regulation.

(5) *Requirements for evaporative system pressure test equipment.* Calibration and maintenance procedures for evaporative system pressure test equipment shall be conducted as specified in EPA guidance and regulation.

(x) *Quality assurance.*

(1) *Performance audits.* The oversight contractor(s) will conduct performance audits on a periodic basis to determine whether inspectors are correctly performing the tests and other required functions.

(i) Performance audits shall be of two types:

(A) Overt performance audits which shall include the following:

(*1*) A check for appropriate document security.

(2) A check to see that required recordkeeping practices are being followed.

(3) A check for licenses or certificates and other required display information.

(4) Observation and written evaluation of each inspector's ability to properly perform an inspection.

(B) Covert performance audits which shall include the following:

(1) Remote visual observation of inspector and inspection station personnel performance, which may include the use of binoculars or video cameras.

(2) Site visits using covert vehicles presented for inspection.

(3) Other activities deemed appropriate by the EPA Administrator.

(ii) The test provider(s) and the employees of the test provider(s) shall make available information requested by the oversight contractor(s) and shall fully cooperate with the oversight contractor's personnel who conduct the audits and other authorized EPA representatives or agents.

(2) *Document security.* Measures shall be taken to maintain the security of documents and/or instrumentation by which compliance with the inspection requirements is established.

(y) *Penalties for test provider(s).* The test provider(s) shall assume full responsibility, with or without actual knowledge, for the complete operation of an official emission inspection station, including the actions of emission inspectors. Failure to comply with the appropriate provisions of this section or the provisions prescribed in the agreement between the Administrator and the test provider(s) will be considered sufficient cause for imposing civil penalties for violation of the applicable implementation plan or damages under the contract, as applicable. In addition thereto, intentional violations may be subject to criminal prosecution where they meet the grounds for prosecution under any federal criminal statute.

(z) *Penalties for emission inspectors.*

(1) An emission inspector shall assume full responsibility for his/her acts as an emission inspector. Failure to comply with the appropriate provisions of this section will be considered sufficient cause for suspension of an emission inspector's certification. In addition, intentional violations may also be subject to criminal prosecution where they meet the grounds for prosecution under any federal criminal statute. After providing the emission inspector with an opportunity for a hearing, the Administrator may impose suspensions or penalties upon the emission inspector for the following categories of offenses:

(i) Category 1.

(A) Issuance or possession of altered, forged, stolen or counterfeit certificates of emission inspection.

(B) Furnishing, lending, giving, selling or receiving a certificate of emission inspection without inspection.

(C) Fraudulent recordkeeping.

(D) Fraudulent inspection.

(ii) Category 2.

(A) Improper recordkeeping.

(B) Improper inspection.

(C) Improper assigning of certificate of emission inspection.

(2) *Duration of suspension.*

(i) Category 1.

(A) First offense: 1 year.

(B) Second offense: permanent.

(ii) Category 2.

(A) First offense: 3 months.

(B) Second offense: 6 months.

(C) Third offense: 1 year.

(3) *Multiple violations.* Violations affecting more than one vehicle will be treated as separate violations.

(4) *Opportunity for an EPA hearing.* Except for a penalty or sanction imposed directly under the terms of the agreement between the EPA Administrator and the test provider(s), a person charged with a violation of this section shall have the right to request a hearing regarding the charges.

§ 52.2964 Importation of vehicles into California.

(a) The State of California may not permit California residents to register for the first time in California any vehicle that was previously registered in another state, unless that vehicle was originally certified to the FIP's durable vehicle standards for its class.

(b) California residents may not own and keep a car in California that is currently registered in another state.

(c) As an exception to paragraphs (a) and (b) of this section, the State of California may allow recent immigrants to California (defined as residents of California for less than three months) to register a car, over 7500 miles, that they had previously registered for at least three months in another state while a resident of that state.

(d) *Implementation date.* This program shall be implemented on January 1, 1999.

§ 52.2965 Requirements for engines past their useful life.

(a) *General applicability.* Heavy-duty on-highway engines certified to applicable engine standards contained in § 52.2966(c) and (d) and nonroad engines certified to applicable engine standards contained in § 52.2975 (c) and (d) shall be subject to the provisions contained in this section.

(b) *Definitions and abbreviations.* The definitions and abbreviations of parts 86 and 89 of this chapter, the definitions contained in § 52.2966(b), and the definitions contained in the Clean Air Act apply to this section unless a term is also defined in this section.

Engine configuration means a complete set of engine and emissions control system parts, components, specifications, calibrations, and other items deemed necessary by a engine configuration certifier to restore an engine to its original configuration or another configuration meeting applicable recall emissions standards.

Useful life renewal means the period in years and miles or hours specified by the engine configuration certifier over which the engine configuration certifier assumes recall liability for engines of the certified configuration.

(c) *Owner requirements.* An owner of a vehicle or equipment equipped with an engine subject to the provisions of this section, at all times must be able to demonstrate either:

(1) That the engine in the vehicle or nonroad equipment being registered is within its original useful life, or

(2) That the engine in the vehicle or nonroad equipment being registered is within the useful life renewal period as defined by the certifier of the engine's configuration pursuant to paragraph (d) of this section. The owner shall make this demonstration by presenting the useful life renewal certificate furnished by the engine configuration certifier pursuant to paragraph (f) of this section. Failure to provide such demonstration at time of vehicle or equipment registration shall result in the denial of vehicle or equipment registration.

(d) *Useful life renewal.* The certifier of an engine configuration shall define the useful life renewal period in years and miles or hours over which the engine configuration certifier accepts liability for an engine(s) that does not conform to applicable recall standards.

(e) *Useful life renewal certificate.* (1) The certifier of an engine configuration shall provide to the owner a certificate with each engine that is restored to the certified engine configuration. The certificate shall contain the following:

(i) The useful life renewal period;

(ii) For on-highway engines, the effective date and the odometer mileage of the useful life renewal period; For nonroad engines, the effective date and hours; and

(iii) The vehicle or equipment identification number.

(2) The engine configuration certifier shall designate an office or officer to

receive a copy of completed certificates. The certificates shall be stored in an adequately organized and indexed file or the information required by paragraph (e)(1) of this section shall be entered into a database completely and stored. The certificate or information in the database shall be stored for a period not less than the useful life renewal period.

(f) *Engine configuration certification.* Engine configuration certifiers shall demonstrate certification compliance as follows:

(1) *Test procedure and emission results.* Certification emissions testing of engine configurations shall be conducted using new engine certification testing procedures specified in § 52.2966(e) for on-highway heavy-duty engines and § 52.2975(e) for nonroad engines. Certification emissions testing must be carried out using representative production equipment as provided in paragraph (f)(2) of this section. The test results must demonstrate that engines restored to the engine configuration being certified will comply with the applicable recall standards over the useful life renewal period.

(2) *Emissions test engine selection.* The test engine shall be an engine representative of the engine family and that is at or beyond the end of its original useful life.

(3) To demonstrate compliance with the applicable recall standards, the test engine shall be restored to the engine configuration being certified in accordance with the instructions that are to be followed when restoring actual in-use engines. No other maintenance or adjustments shall be performed on the test engine.

(4) *Test fuel.* The engine configuration shall be certified using the same fuel used for new engine certification as specified in § 52.2966 (f) for heavy-duty on-highway engines and § 52.2975 (f) for nonroad engines.

(5) *Component selection.* Where replacement components are used to restore an engine to the configuration being certified, certification shall be based upon tests utilizing representative production parts and components selected in a random manner.

(6) *Replacing original equipment parts.* Changes to an engine shall not result in the permanent removal or rendering inoperative of any original equipment emission related part other than the part(s) being replaced. Furthermore, engine changes shall not cause or contribute to an unreasonable risk to the public health, welfare or safety, or result in any additional range of parameter adjustability or accessibility to adjustment than that of the vehicle or equipment manufacturer's emission related part.

(7) *Effects on engine on-board diagnostic system.* Changes to an engine shall not alter or render inoperative any feature of the on-board diagnostic system incorporated by the engine manufacturer. The engine configuration being certified may integrate with the existing diagnostic system if it does not alter or render inoperative any features of the system.

(g) *In-use recall.* Engines restored to an engine configuration certified pursuant to paragraph (f) of this section within its useful life renewal period, shall be subject to the recall provisions contained in § 52.2966(g).

(h) *Notification of intent to certify.* (1) Prior to the issuance of any useful life renewal certificate, notification of the intent to certify must be approved by the MOD Director.

(2) All notifications shall include:

(i) Identification and description of the candidate engine configuration to be certified, including a list of replacement parts and part numbers;

(ii) Identification of the engine family including make(s), engine model(s), model year(s), engine size(s) and all other specific configuration characteristics;

(iii) Identification and description of any emissions related component(s) not being replaced and rationale as to why its replacement is unnecessary;

(iv) All results and documentation of tests and procedures used by the engine configuration certifier as evidence of compliance with applicable recall emission standards;

(v) A description of the test replacement part selection criteria used, and a statement that the replacement parts used for certification testing is representative production equipment consistent with paragraph (f)(1)(v) of this section;

(vi) A description of the test engine selection criteria used, and rationale that supports the technical judgment of the engine configuration certifier that the engine meets the requirements of paragraphs (f)(1)(ii) and (f)(1)(iii) of this section;

(vii) Results of durability testing and an engineering analysis showing that the emissions performance of engines can be expected to be maintained over the useful life renewal period;

(viii) A copy of any written installation instructions that are to be used and a copy of the warranty to be provided to the owner;

(ix) A copy of the written instructions for proper maintenance and use of the engine during the useful life renewal period;

(x) A copy of the useful life renewal certificate to be provided to the owner pursuant to paragraph (e) of this section;

(xi) A statement of commitment and willingness to comply with all the relevant terms and conditions of this section;

(xii) A statement by the engine configuration certifier that changes done to an engine to bring it to the engine configuration being certified will not cause a substantial increase to engine emissions in any normal driving mode not represented during certification testing; and

(xiii) The office or officer of the engine configuration certifier authorized to receive correspondence regarding certification requirements pursuant to this subpart.

(3) The notification shall be signed by an officer of the engine configuration certifier attesting to the accuracy and completeness of the information supplied in the notification.

(4) Notification to the Agency shall be by certified mail or another method by which date of receipt can be established.

(5) Two complete and identical copies of the notification and any subsequent industry comments on any such notification shall be submitted by the engine configuration certifier to: MOD Director, MOD (6405J), Attention: Engine Configuration Certification, 401 "M" Street SW, Washington, DC 20460.

(i) [Reserved].

(j) *Objections to certification.* (1) At any time prior to certification, the MOD Director may notify the engine configuration certifier that such its engine configuration shall not be certified pending further investigation. The basis upon which this notification shall be made may include, but not be limited to, information or test results submitted by the engine configuration certifier including:

(i) The test procedure used to demonstrate compliance with the applicable recall standards does not meet the requirements of paragraph (f) of this section;

(ii) Use of the candidate engine configuration could cause or contribute to an unreasonable risk to public health, welfare or safety in its operation or function;

(iii) Installation of the candidate replacement parts requires procedures or materials which would likely cause such parts to be improperly installed under normal conditions or would likely result in an engine being misadjusted; or

(iv) Information and/or data required to be in tbe notification of intent to

certify as provided by paragraph (h) of this section have not been provided or may be inadequate.

(2) The engine configuration certifier must respond in writing to the statements made in the notification by the MOD Director, or the MOD Director shall withdraw the notification of intent to certify.

(3) The MOD Director may, at his or her discretion, allow oral presentations by the engine configuration certifier.

(4) If notification has been provided to an engine configuration certifier pursuant to paragraph (j) of this section, the MOD Director shall, after reviewing all pertinent data and information, render a decision and inform the engine configuration certifier in writing as to whether such engine configuration may be certified and, if so, under what conditions the engine configuration may be certified. The written decision shall include an explanation of the reasons therefor.

(i) The decision by the MOD Director shall be provided to the engine configuration certifier after receipt of all necessary information by the certifier or interested parties, or of the date of any oral presentation regarding the certification, whichever occurs second.

(ii) Within 20 days of receipt of a decision made pursuant to paragraph (j)(4)(i) of this section, any party may file a written appeal to the Office Director. The Office Director may, in his or her discretion, allow additional oral or written submissions, prior to rendering a final decision.

(iii) If no party files an appeal with the Office Director within 20 days, then the decision of the MOD Director shall be final.

(iv) The Office Director shall make a final decision regarding the certification of engine configuration after receipt of all necessary information by the engine configuration certifier or from the date of any oral presentation, whichever occurs later.

(k) *Changes after certification.* The engine configuration certifier shall recertify any engine configuration which was certified pursuant to paragraph (f) of this section and to which modifications are made affecting emissions or the capability of the engine to meet any other requirement of this section.

(l) *Labeling requirements.* (1) All engine configurations certified pursuant to this section shall contain a label affixed to the rebuilt engine that states:

(i) Identification of the engine configuration;

(ii) The useful life renewal period provided by the certifier pursuant to paragraph (d) of this section;

(iii) A place for the certifier to record the date and the mileage of the useful life renewal period. The label containing the information must be made durable and readable for at least the useful life renewal period; and

(iv) The statement:

Certified to EPA In-Use Recall Emissions Standards

contains:

(2) The certifier shall ensure that all of the information that is entered on the label supplied by the engine configuration certifier pursuant to paragraph (l)(1) of this section is accurate and complete and that the label is securely affixed to the engine, upon the completion of all activities necessary to bring the engine to the certified configuration.

(3) The package in which any replacement parts are contained, or an insert as described in paragraph (j)(4) of this section, must have the following information conspicuously placed thereon:

(i) The statement "Certified by (name of engine configuration certifier) to EPA In-use Recall Emission Standards"; and

(ii) The engine family for which the parts are certified.

(4) The package in which the parts are contained must include the following information provided on a written insert:

(i) The engine family for which the parts are certified, unless such information is provided as specified in paragraph (j)(2) of this section;

(ii) A list of all of the parts and identification numbers for the parts included;

(iii) The instructions for proper installation of the parts;

(iv) A description of the maintenance necessary to be performed on the engine during its useful life renewal period.

(m) *Maintenance and submittal of records by engine configuration certifiers.*

(1) For each certified engine configuration, the engine configuration certifier must establish, maintain and retain for 5 years from the date of certification the following adequately organized and indexed records:

(i) Detailed production drawings showing all dimensions, tolerances, performance requirements and material specifications and any other information necessary to completely describe the engine configuration;

(ii) All data obtained during testing of the engine configuration and subsequent analyses based on that data, including the mileage and the vehicle or engine configuration determinants;

(iii) All information used in determining the engine for which the replacement parts or components are represented as being equivalent from an emissions standpoint to the original equipment parts being replaced;

(iv) A description of the quality control plan used to monitor production and assure compliance of in-use engines with the applicable requirements;

(v) All data taken in implementing the quality control plan, and any subsequent analyses of that data; and

(vi) All in-service data, analyses performed by the engine configuration certifier and correspondence with rebuilders, vendors, distributors, consumers, retail outlets or engine manufacturers regarding any design, production or in-service problems associated with 25 or more engines of the same engine configuration.

(2) The records required to be maintained in paragraph (m)(1) of this section shall be made available to the Agency upon the written request of the MOD Director.

(n) *Decertification.*

(1) The MOD Director may notify a engine configuration certifier that the Agency has made a preliminary determination that a certain engine configuration should be decertified.

(i) Such a preliminary determination may be made if there is reason to believe that the engine configuration has failed to comply with the requirements of this section. Information upon which such a determination will be made includes but is not limited to the following:

(A) The engine configuration was certified on the basis of emissions tests, and the procedures used in such tests were not in substantial compliance with a portion or portions of the test procedures required to be used pursuant to paragraph (e)(1) of this section; or

(B) Use of the certified engine configuration is causing emissions to exceed any in-use recall emission standard; or

(C) Use of the engine configuration causes or contributes to an unreasonable risk to public health, welfare or safety or severely degrades driveability operation or function; or

(D) The engine configuration has been modified in a manner requiring recertification pursuant to paragraph (k) of this section; or

(E) The engine configuration certifier has not established, maintained or retained the records required pursuant to paragraph (m)(1) of this section or fails to make the records available to the MOD Director upon written request pursuant to paragraph (m)(2) of this section.

(ii) Notice of a preliminary determination to decertify shall contain:

(A) A description of the noncomplying engine configuration;

(B) The basis for the MOD Director's preliminary decision; and

(C) The date by which the certifier must:

(*1*) Terminate the issuance of useful life renewals; or

(*2*) Make the necessary change (if so recommended by the Agency); or

(*3*) Request an opportunity in writing to dispute the allegations of the preliminary decertification.

(2) If the engine configuration certifier requests an opportunity to respond to the preliminary determination, the manufacturer and other parties interested in the MOD Director's decision whether to decertify the engine configuration shall, within 15 days of the date of the request, submit written presentations, including the relevant information and data, to the MOD Director. The MOD Director, in his or her discretion, may provide an opportunity for oral presentations.

(i) Any interested party may request additional time to respond to the information submitted by the engine configuration certifier. The MOD Director upon a showing of good cause by the interested party may grant an extension of time to reply up to 30 days.

(ii) The engine configuration certifier may have an extension of up to 30 days to reply to information submitted by interested parties. Notification of intent to reply shall be submitted to the MOD Director within 10 days of the date information from interested parties is submitted to the MOD Director.

(3) If a engine configuration certifier has disputed the allegations of the preliminary decisions, the MOD Director shall, after reviewing any additional information, notify the engine configuration certifier of his or her decision whether the engine configuration may continue to be sold as certified. This notification shall include an explanation upon which the decision was made and the effective date for decertification, where appropriate.

(4) Within 20 days from the date of a decision made pursuant to paragraph (n)(3) of this section, any adversely affected party may appeal the decision to the Office Director.

(i) A petition for appeal to the Office Director must state all of the reasons why the decision of the MOD Director should be reversed.

(ii) The Office Director may, in his or her discretion, allow additional oral or written testimony.

(iii) If no appeal is filed with the Office Director within the permitted time period, the decision of the MOD Director shall be final.

(5) If a final decision is made to decertify an engine configuration under paragraph (n)(4) of this section, the engine configuration certifier shall notify his immediate customers that, as of the date of the final determination, the engine configuration in question has been decertified. The engine configuration certifier shall offer to replace engines of the decertified engine configurations in the customer's inventory with certified replacement engines or, if unable to do so, shall at the customer's request repurchase such inventory at a reasonable price. The immediate customers must stop selling the engines once the certifier has notified the customer that the engine configuration has been decertified.

(6) Notwithstanding the requirements of paragraph (n)(5) of this section, an engine purchased by an owner prior to decertification, shall be considered certified pursuant to this section.

§ 52.2966 Enhanced in-use compliance heavy-duty engine and vehicle program.

(a) *General applicability.* New 1999 model year and later heavy-duty vehicles and engines, other than medium-duty vehicles certified to the standards contained in § 52.2962, that are registered exclusively in California or that are offered for sale in California, shall meet the standards and requirements specified in paragraphs (c) through (h) of this section, and in § 52.2965. Other state and federal requirements may also apply to these vehicles and engines. Heavy-duty vehicles that are registered in California and that are also registered in other states shall be subject to the requirements specified in paragraph (h) of this section.

(b) *Definitions and abbreviations.* The definitions and abbreviations of parts 86 and 88 of this chapter and the definitions contained in the Clean Air Act apply to this section unless a term is also defined in this section. *New,* when applied to motor vehicles, means a motor vehicle, the equitable or legal title to which has never been transferred to an ultimate purchaser. It is conclusively presumed that the equitable or legal title to a motor vehicle, other than a motorcycle, with an odometer reading of 7,500 miles or more, has been transferred to an ultimate purchaser, and that the equitable or legal title to a motor vehicle, other than a motorcycle, with an odometer reading of less than 7,500 miles has not been transferred to an ultimate purchaser.

(c) *Emission standards.* For the purposes of certification and recall testing, exhaust emissions shall not exceed the following:

(1) *Non-methane hydrocarbons.* 0.2 to 0.6 grams per brake horsepower-hour, as measured under transient operating conditions.

(2) *Oxides of nitrogen.* 1.5 grams per brake horsepower-hour, as measured under transient operating conditions.

(d)(1) For the purposes of certification and recall testing, evaporative hydrocarbon emissions shall not exceed the applicable federal heavy-duty engine evaporative emissions standards described in 40 CFR part 86.

(2) Manufacturers' applications for certification shall include test results or an engineering evaluation demonstrating compliance with the inherently low evaporative emission requirements of § 88.311–93(a)(1)(ii) and (a)(2) of this chapter. Diurnal emission levels shall be adjusted to reflect corresponding results for a nominal 20 gallon fuel tank volume. This demonstration may be based on a diurnal temperature excursion of 65°F to 105°F and California certification fuel rather than the EPA conditions and test fuel.

(e) *Test procedures.* (1) The exhaust emission standards set forth in paragraph (c) of this section refer to the exhaust emissions collected under the conditions and measured in accordance with the procedures set forth in 40 CFR part 86, subpart N, except as specified in paragraph (f) of this section. Assembly line testing procedures are those set forth in 40 CFR part 86, subpart K, except as specified in paragraph (f) of this section.

(2) The evaporative standards set forth in paragraph (d)(1) of this section refer to the evaporative emissions collected under the conditions and measured in accordance with the procedures set forth in 40 CFR part 86, subpart M, except as specified in paragraph (f) of this section.

(f) *Test fuels.* All certification, assembly line, and recall testing performed on vehicles and engines covered under this section shall use the fuels provided for by California as found in the California regulations. Testing performed to demonstrate compliance with the inherently low evaporative emission requirements of paragraph (d)(2) of this section may, as an alternative, be conducted with fuels meeting the federal specifications of 40 CFR part 86. Assembly line and recall testing shall use the same type of fuel as used in certification testing.

(g) *Recall program.* (1) Engines certified to the standards set forth in this section shall be subject to the recall provisions described in this paragraph.

For purposes of recall testing under this section, the term "engine" includes all emissions control systems.

(2) The recall provisions for light-duty vehicles contained in § 52.2962(e) shall apply to engines subject to the provisions of this paragraph as well, with appropriate references to applicable standards and test procedures, except that:

(i) Engines shall be selected by EPA for purposes of recall testing from the vehicle population of the entire state rather than only from areas subject to enhanced inspection and maintenance testing; and

(ii) The provisions of § 52.2965 shall also apply.

(h) *Fleet averaging program.* (1) *General applicability.* The requirements of this program apply to all heavy-duty vehicles of over 19,500 pounds GVWR that are registered in California.

(2) Effective January 1, 2000, any person who owns one or more heavy-duty vehicles of over 19,500 pounds GVWR that are registered in California shall submit the following information on each of these affected fleet vehicles to EPA by January 31st of every calendar year. The submittal shall reflect the owner's affected fleet as it existed on January 1st of the same calendar year. Owners may combine their affected vehicles with those of other vehicle owners for the purposes of this program. Required information per affected vehicle:

(i) Vehicle license number;

(ii) Engine model year;

(iii) Engine identification number; and

(iv) GVWR.

(3)(i) The results of the following Fleet Average Emissions (FAE) calculations contained in Tables 2966–1 and 2966–2 shall be submitted concurrently with the per vehicle information specified in paragraph (h)(2) of this section; separate calculations shall be performed, and results submitted, for affected vehicles of GVWR between 19,501–33,000 pounds and for affected vehicles of over 33,000 pounds GVWR:

TABLE 2966–1.—CALCULATION OF MEDIUM HEAVY-DUTY VEHICLE FLEET NO_X EMISSIONS

Model year grouping	A: No. of vehicles in affected fleet (19500–33000 pounds GVWR)	B: Per vehicle NO_X emissions (tons)	C: Total NO_X emissions from model year grouping (C=A×B)
1999 and later		× 0.071	
1998		× 0.19	
1991–1997		× 0.24	
1988–1990		× 0.28	
1984–1987		× 0.24	
Pre-1984		× 0.51	

D: Total Fleet Emissions for all Model Year Groupings, (sum of numbers in Column C)
E: Total Number of Affected Vehicles (19500–33000 pounds GVWR) in Fleet, (sum of numbers in Column A)
F: Fleet Average Emissions (FAE), (F=D÷E)

TABLE 2966–2.—CALCULATION OF HEAVY HEAVY-DUTY VEHICLE FLEET NO_X EMISSIONS

Model year grouping	A: No. of vehicles in affected fleet (>33000 pounds GVWR)	B: Per vehicle NO_X emissions (tons)	C: Total NO_X emissions from model year grouping (C=A×B)
1999 and later		× 0.28	
1998		× 0.74	
1991–1997		× 0.93	
1988–1990		× 1.12	
1984–1987		× 0.95	
Pre-1984		× 1.99	

D: Total Fleet Emissions for all Model Year Groupings, (sum of numbers in Column C)
E: Total Number of Affected Vehicles (>33000 pounds GVWR) in Fleet, (sum of numbers in Column A)
F: Fleet Average Emissions (FAE), (F=D÷E)

(ii) The submittal shall also include the name and address of each owner of vehicles included in the calculations, and a designated mailing address for subsequent EPA correspondence.

(4) The fleet owner, or owner group, shall compare the calculated Fleet Average Emissions with the Baseline Emission Level (BEL) in Table 2966–3 applicable to the calendar year for which the calculation applies (that is, the calendar year in which the submittal is due), and shall calculate the fleet averaging program surcharge according to the following equation:

$$\text{Surcharge}=\$10{,}000\times(\text{FAE}-\text{BEL}\times(\text{Number of Affected Vehicles})$$

This calculation shall be performed separately for vehicles in the 19,501 to 33,000 pound GVWR range, if the fleet contains any such vehicles, and in the over 33,000 pound GVWR range, if the fleet contains any such vehicles. If the calculated surcharge is less than zero for either category of vehicles, the surcharge for that category of vehicles

shall be set to zero. The sum of the surcharges for the two categories of vehicles shall be paid concurrently with the submittal of information described in paragraphs (h)(2) and (3) of this section.

TABLE 2966–3.—HEAVY-DUTY VEHICLE BASELINE EMISSION LEVELS (BEL)

Calendar year	BEL for vehicles 19,501–33,000 pounds GVWR	BEL for vehicles >33,000 pounds GVWR
2000	0.28	1.1
2001	0.26	1.02
2002	0.24	0.94
2003	0.22	0.87
2004	0.20	0.80
2005	0.19	0.74
2006	0.17	0.68
2007	0.16	0.62
2008	0.15	0.57
2009	0.13	0.52
2010	0.13	0.49
2011	0.12	0.47
2012	0.11	0.45
2013	0.11	0.43
2014	0.10	0.41
2015	0.098	0.39
2016	0.093	0.37
2017	0.089	0.35
2018	0.086	0.34
2019	0.083	0.33
2020	0.080	0.31
2021	0.077	0.30
2022	0.075	0.29
2023	0.072	0.29
2024 and later	0.071	0.28

(5) Within 30 days of receipt of an adequate owner's submittal, including sufficient payment, EPA shall send a certificate of compliance to the designated mailing address. The certificate shall indicate the license numbers of the vehicles to which it applies. Inadequate owners' submittals, including insufficient payment of fees, shall be returned to the designated mailing address, along with an explanation of why the submittal was found inadequate, within 30 days of receipt. Resubmittals by owners shall be responded to by EPA within 30 days of receipt.

(6) Certificates of compliance shall be valid only through March 1st of the calendar year following the year in which they are issued. Expiration dates shall be indicated on the certificates.

(7) Effective March 15, 2000, no vehicle subject to the requirements of the fleet averaging program shall be allowed to register in California without proof of compliance in the form of a valid certificate covering the subject vehicle, unless the vehicle has not previously been subject to the requirements of this program because it is a new vehicle or had not been previously registered in California.

§§ 52.2967–52.2968 [Reserved]

§ 52.2969 Nonroad vehicles and engines, on-highway motorcycles.

(a) *Applicability.* All provisions of this section will apply to nonroad vehicles and engines and on-highway motorcycles manufactured after December 31, 1995 and manufactured for sale, sold, offered for sale, introduced or delivered for introduction into commerce, or imported in the State of California.

(b)(1) *Compression-ignition Engines at or above 37 kW.* EPA will finalize national rules for new compression-ignition engines at or above 37 kW by May 1994 which will achieve a cumulative 37 percent NO_X emission reduction from the fleet of uncontrolled compression-ignition engines in this category.

(2) *Additional measures.* If EPA fails to publish a national rule which achieves the cumulative 37 percent reduction in NO_X emissions from compression-ignition engines described in paragraph (b)(1) of this section, EPA will promulgate additional compression-ignition engine control measures applicable to such engines in the State of California or the FIP areas. These additional measures will cumulatively achieve the targeted 37 percent reduction.

(c)(1) *Spark-ignition Engines at or Below 19 kW.* EPA will finalize national Phase 1 and 2 rules for new spark-ignition engines at or below 19 kW which will achieve a cumulative 90 percent VOC emission reduction from the fleet of uncontrolled spark-ignition engines in this category. A Phase 1 rule will be finalized by May 1995 and a Phase 2 rule will be finalized by May 1997.

(2) *Additional measures.* If EPA fails to publish Phase 1 and 2 national rules which achieve a cumulative 90 percent reduction in VOC emissions from spark-ignition engines described in paragraph (c)(1) of this section, EPA will promulgate tighter standards for all users of such engines and/or fees for commercial users of such engines in the State of California or in the FIP areas. These additional measures will cumulatively achieve the targeted 90 percent reduction.

(d)(1) *Spark-ignition Marine Engines.* (i) EPA will finalize national rules for new spark-ignition marine engines by November 1995 which will achieve a cumulative 50–60 percent VOC emission reduction from the fleet of uncontrolled spark-ignition marine engines in this category. The national regulations shall be phased in commencing with model year 1998 and later spark-ignition outboard, sterndrive, and inboard engines and all model year 1999 and later personal watercraft spark-ignition engines that are sold, manufactured for sale, offered for sale, introduced or delivered for introduction into commerce or imported into the State of California.

(ii) A marine engine is any nonroad engine which is used on a "vessel" as defined in 1 U.S.C. 3.

(2) *Additional measures.* If EPA fails to publish a national rule which achieves a cumulative 50–60 percent reduction in VOC emissions from spark-ignition marine engines described in paragraph (d)(1) of this section, EPA will promulgate a fee schedule for users of such spark-ignition marine engines in the FIP areas. The additional measures will cumulatively achieve the targeted 50–60 percent reduction.

(e) *On-highway motorcycles and engines used in nonroad motorcycles.*

(1) *General applicability.* This regulation applies to new gasoline and methanol fueled on-highway motorcycles and nonroad motorcycles manufactured after December 31, 1995 and manufactured for sale, sold, offered for sale, introduced or delivered for introduction into commerce, or imported into the State of California, including motorcycles with engine displacements less than 3.1 cubic inches (50 cc).

(2) *Definitions.*

Nonroad motorcycle means any motorized land vehicle designed for transporting person or property and which has two wheels, or three or more wheels and a curb mass less than or equal to 680 kilograms; it does not include devices regulated by the State of California as other classes of motor vehicles or devices regulated by EPA as other classes of nonroad engines nor does it include devices designed solely for operation on rails.

On-highway motorcycle means any motor vehicle with a headlight, taillight, and stoplight and having: two wheels, or three wheels and a curb mass less than or equal to 680 kilograms.

(3) *Emission standards applicable in California for 1996 and later model year on-highway motorcycles and nonroad motorcycles.*

(i) Exhaust emissions from 1996 and later model year on-highway motorcycles and nonroad motorcycles subject to this paragraph shall not exceed:

(A) Hydrocarbons or Organic material hydrocarbon equivalent: 0.8 grams per vehicle kilometer.

(B) Carbon monoxide: 12 grams per vehicle kilometer.

(C) Oxides of nitrogen: 0.8 grams per vehicle kilometer.

(ii) The standards set forth in paragraph (a) of this section refer to the exhaust emitted over driving schedules set forth in 40 CFR part 86, subpart F and measured and calculated in accordance with those procedures.

(iii) No crankcase emissions shall be discharged into the ambient atmosphere from any on-highway motorcycle subject to this subpart.

(iv) Evaporative emissions from on-highway motorcycles shall not exceed 2.0 grams diurnal and hot soak according to State of California procedures referenced in 13 CCR 1976.

(4) On-highway motorcycles and nonroad motorcycles subject to this paragraph shall be subject to the definitions and requirements of 40 CFR 86.401 through 86.544, except as otherwise provided in this paragraph (e).

§ 52.2970 Civil aircraft operations.

(a) *Definitions.* [Reserved]

(b) *Commercial aviation control measures.*

(1) *Applicability.* The provisions of § 52.2970(b) shall apply to all commercial aircraft operators with aircraft operations in the South Coast, Ventura, and Sacramento control areas as defined in 40 CFR 81.305.

(2) *Specific provisions.*

(i) Environmental performance targets.

(A) Commercial aircraft operators subject to the provisions of this section per paragraph (b)(1) of this section shall operate aircraft in the control areas at emission rates not to exceed those presented in Tables 2970–1 and 2970–2.

TABLE 2970–1.—EXAMPLE NO_X ENVIRONMENTAL PERFORMANCE TARGETS FOR COMMERCIAL AVIATION IN THE SOUTH COAST AIR BASIN

Control period	Environmental performance target
1990	0.162 pounds/PEU.
2001	0.128 pounds/PEU.
2002	0.113 pounds/PEU.
2003	0.100 pounds/PEU.
2004	0.086 pounds/PEU.
2005	0.073 pounds/PEU.
2005 +	0.073 pounds/PEU.

TABLE 2970–2.—EXAMPLE VOC ENVIRONMENTAL PERFORMANCE TARGETS FOR COMMERCIAL AVIATION IN THE SOUTH COAST AIR BASIN

Control period	Environmental performance target
1990	0.087 pounds/PEU.
2001	0.068 pounds/PEU.
2002	0.061 pounds/PEU.
2003	0.053 pounds/PEU.
2004	0.046 pounds/PEU.
2005	0.039 pounds/PEU.
2005 +	0.039 pounds/PEU.

(ii) *Reporting.*

(A) *Compliance plan.* [Reserved]

(B) *Baseline report.* [Reserved]

(C) *Annual report.*

(*1*) Each commercial aircraft operator subject to paragraph (b)(2)(i)(A) of this section shall submit annual reports to the Administrator on covered activity and emissions as defined in paragraph (b)(2)(ii)(C)(*3*) of this section.

(*2*) Annual reports submitted pursuant to paragraph (b)(2)(ii)(C)(*1*) of this section shall be submitted no later than March 1 of each calendar year describing covered aircraft operations during the ozone season of the preceding calendar year pursuant to the information requirements in paragraph (b)(2)(ii)(C)(*3*) of this section. The first annual report shall be submitted no later than March 1, 2000 describing covered aircraft operations during the calendar year 1999.

(*3*) Annual reports submitted pursuant to paragraph (b)(2)(ii)(C)(*1*) of this section shall include the following information. For each flight operating in the control areas during the ozone season of each area: Flight number; aircraft type and model; engine type and model; taxi/idle time by engine; APU operating time; number of passengers carried; and weight of non-passenger cargo. In addition, annual reports shall include the following information for all airports in the control areas at which the reporting operator had aircraft operations: GSE population by type; and GSE by fuel type, engine size, emission control level, and annual ozone season use hours. The annual ozone seasons for each of the three FIP areas are:

(*i*) Sacramento—May through October.

(*ii*) Ventura—April through October.

(*iii*) South Coast—March through October.

(*4*) Commercial aircraft operators submitting annual reports pursuant to paragraph (b)(2)(ii)(C)(*1*) of this section shall calculate their total annual ozone season emissions of VOC and NO_X in pounds and include this information in the annual report. EPA-approved methods for calculating aircraft emissions shall be used for determining VOC and NO_X emissions during the control period.

(*5*) Commercial aircraft operators submitting annual reports pursuant to paragraph (b)(2)(ii)(C)(*1*) of this section shall calculate their annual ozone season environmental performance in pounds of VOC per passenger equivalent unit and pounds of NO_X per passenger equivalent unit and include this information in the annual report. The following calculations shall be used to determine annual environmental performance:

(*i*) *For VOC,* [control period VOC emissions] divided by [(number of passengers carried during control period) + (weight of non-passenger cargo carried during control period divided by 200)]

(*ii*) *For NO_X,* [control period NO_X emissions] divided by [(number of passengers carried during control period) + (weight of non-passenger cargo carried during control period divided by 200)]

(*6*) The accuracy of all information submitted pursuant to this section shall be certified according to the requirements of paragraphs (b)(2)(ii)(D)(*1*) through (*4*) of this section.

(*7*) A commercial aircraft operator subject to the provisions of this section who fails to submit an annual report as required under paragraphs (b)(2)(ii)(C)(*1*)–(*6*) of this section will be subject to enforcement as described in paragraphs (b)(2)(vii) of this section.

(D) *Certification.*

(*1*) All permit applications submitted pursuant to this regulation shall be signed as follows:

(*i*) *For a corporation* by a responsible corporate officer. For the purposes of this regulation, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

(*ii*) *For a partnership or sole proprietorship* by a general partner or the proprietor, respectively.

(*2*) All annual reports and other supplemental information submitted pursuant to this regulation shall be signed by a person described in paragraph (b)(2)(ii)(D)(*1*) of this section, or by a duly authorized representative of that person. For the purposes of this regulation, a person is a duly authorized representative if:

(*i*) The authorization is made in writing by a person described in paragraph (b)(2)(ii)(D)(*1*) of this section;

(*ii*) The authorization specifies an individual or a position having responsibility for the overall operation of the regulated sources, or an individual or a position having overall responsibility for environmental matters for the company; and

(*iii*) The written authorization is submitted to the Administrator.

(*3*) If an authorization submitted under paragraph (b)(2)(ii)(D)(*2*) of this section is no longer accurate because of personnel changes or changes in authority, a new authorization satisfying the requirements of paragraph (b)(2)(ii)(D)(*2*) of this section must be submitted to the Administrator prior to or together with any reports or supplemental information signed by an authorized representative.

(*4*) Any person signing a document under paragraph (b)(2)(ii)(D) (*1*) or (*2*) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(*iii*) *Compliance determination.*

(A) Compliance with paragraph ((b)(2)(i)(A) of this section shall be determined annually, using information provided in the annual report submitted pursuant to paragraphs (b)(2)(ii)(C)(*1*) through (*6*) of this section, by comparing the reported pounds-per-PEU environmental performance to the relevant environmental performance standard from Tables 2970–1 and 2970–2.

(B) Commercial aircraft operators whose reported pounds-per-PEU environmental performance exceeds the relevant environmental performance standard shall pay an emissions fee calculated according to the provisions of paragraph (b)(2)(iv)(B) of this section.

(iv) *Emissions fee.*

(A) Emissions fees imposed on a commercial aircraft operator pursuant to paragraph (b)(2)(iii)(B) of this section will be calculated using emissions and activity data reported by that operator in the annual submitted under paragraph (b)(2)(ii)(C)(*1*) of this section. The provisions of this section apply separately for VOC and NO_X emissions.

(B) Emissions fees will be based on the quantity of pollutants emitted in excess of the emission rates presented in Tables 2970–1 and 2970–2, calculated as follows:

(*1*) The applicable emission rate from Tables 2970–1 and 2970–2 is multiplied by the operator's reported Passenger Equivalent Unit (PEU) control period total to determine the operator's total emission quantity target for the relevant year.

(*2*) This total emission quantity target is subtracted from the operator's reported emissions for the relevant year to determine the quantity of pollutants emitted in excess of the total emission quantity target.

(*3*) This excess quantity of pollutants is subject to the emissions fee described in paragraph (b)(2)(iv)(C) of this section.

(C) *Emissions fee rate.* [Reserved]

(D) Emissions fees paid pursuant to the provisions of this section must be remitted along with the relevant annual report submitted under paragraph (b)(2)(ii)(C)(*1*) of this section.

(E) A commercial aircraft operator subject to the requirements of this section who fails to pay fees as required under paragraphs (b)(2)(iv) (A) through (D) of this section will be subject to enforcement as described in paragraph (b)(2)(vii) of this section.

(v) *Recordkeeping.* Commercial aircraft operators subject to the provisions of paragraphs (b)(2) (i) through (iv) of this section shall collect and record all information necessary to demonstrate compliance with the requirements of paragraph (b)(2)(i) of this section and maintain the information for a period of three (3) years. The information shall be collected and recorded each day of the control period beginning in 1999.

(vi) *Exemptions.* [Reserved]

(vii) *Enforcement.* [Reserved]

(c) *General aviation control measures.*

(1) *Applicability.* The provisions of § 52.2970 (c) shall apply to all general aviation operations in the South Coast, Ventura, and Sacramento control areas as defined in 40 CFR 81.305.

(2) *Specific provisions.*

(i) All general aviation aircraft subject to paragraph (c)(1) of this section shall pay a fee for each operation during the control period beginning in 2001, except for those aircraft operations exempted pursuant to paragraph (c)(1)(v) of this section.

(ii) For the purpose of this section, general aviation operations subject to this fee are defined as take-offs from airports located in the control areas.

(iii) *Reporting.*

(A) *General aviation operation certificate.*

(*1*) All airports with general aviation operations subject to paragraph (c)(1) of this section must obtain a General Aviation Operation Certificate.

(*2*) All airports with general aviation operations subject to paragraph (c)(1) of this section shall submit to the Administrator an application for a general aviation operation certificate.

(*3*) This application shall include the following information:

(*i*) Airport name;

(*ii*) Airport location, including latitude and longitude;

(*iii*) Number of general aviation operations in 1999;

(*iv*) Number of general aviation aircraft based at the airport; and

(*v*) Services provided at the airport.

(*4*) This application shall be submitted to the Administrator no later than March 20, 2000.

(*5*) The accuracy of all information submitted pursuant to this section shall be certified according to the requirements of paragraph (c)(2)(iii)(C) of this section.

(*6*) Airports with general aviation operations in the absence of a general aviation operation certificate after January 1, 2001 will be subject to enforcement as described in paragraph (b)(2)(vii) of this section.

(B) *Monthly general aviation activity reports.*

(*1*) All airports subject to paragraph (c)(2)(iii)(A) of this section shall submit to the Administrator monthly general aviation activity reports for the control period.

(*2*) Monthly general aviation activity reports shall include the following information:

(*i*) Airport name as indicated on the General Aviation Operation Certificate;

(*ii*) Total number of general aviation operations for the reported month; and

(*iii*) For each general aviation operation during the reported month, the aircraft FAA registration number ("N" number).

(*3*) Monthly general aviation activity reports shall be submitted no later than the tenth day of the following month. The first report shall be submitted no later than February 10, 2001 covering general aviation operations in January 2001.

(*4*) The accuracy of all information submitted pursuant to this section shall be certified according to the requirements of paragraph (c)(2)(iii)(C) of this section.

(*5*) Failure to submit a monthly general aviation activity report as required in this section will be subject to enforcement as described in paragraph (c)(2)(vii) of this section.

(C) *Certification.* [Reserved]

(iv) *Fee Rate.* [Reserved]

(v) *Fee Collection.* [Reserved]

(vi) *Exemptions.*

(A) *Atypical operations.* [Reserved]

(B) *Other exemptions.* [Reserved]

(vii) *Enforcement.* [Reserved]

§ 52.2971 Locomotives.

(a) *General provisions.*

(1) *Applicability.* (i) The provisions of paragraphs (a)(2)(i), (a)(2)(ii), (a)(2)(iii), (a)(4)(i), (a)(4)(ii) and (a)(4)(iii) of this section, shall apply specifically to all locomotives operating in California.

(ii) The provisions of paragraphs (a)(2)(iv), (a)(2)(v), (a)(4)(iv), (a)(4)(v), (b), (c) and (e) of this section shall apply to all locomotives located in the "control area" defined as the South Coast Air Basin ozone nonattainment area in 40 CFR 81.305.

(2) *Compliance dates.* The dates for compliance with the requirement of this section are as follows:

(i) January 1, 2000 for locomotives manufactured before January 1, 2000 and after January 1, 1973, and remanufactured on or after January 1, 2000 for compliance with the standard in paragraph (a)(4)(i) of this section.

(ii) January 1, 2000 for locomotives manufactured between January 1, 2000 and December 31, 2004 at the time of manufacture and at each remanufacturing on or after January 1, 2000 for compliance with the standard in paragraph (a)(4)(ii) of this section.

(iii) January 1, 2005 for locomotives manufactured after January 1, 2005 at the time of manufacture and at each remanufacturing on or after january 1, 2005 for compliance with the standard in paragraph (a)(4)(iii) of this section.

(iv) January 1, 2007 for railroads operating in the control area for compliance with the standard in paragraph (a)(4)(iv) of this section.

(v) January 1, 2010 for railroads operating in the control area for compliance with the standard in paragraph (a)(4)(v) of this section.

(3) *Definitions.*

Administrator means the Administrator of the Environmental Protection Agency or his/her authorized representative.

Engine used in a locomotive means either an engine placed in the locomotive to move other equipment, freight, or passenger traffic, or an engine mounted on the locomotive to provide auxiliary power.

Locomotive means a self-propelled piece of on-track equipment (other than equipment designed for operation both on highways and rails, specialized maintenance equipment, and other similar equipment) designed for moving other equipment, freight, or passenger traffic.

Railroad company means any company or organization that operates one or more locomotives.

(4) *Emissions standards.*

(i) NO_X emissions from a locomotive manufactured before January 1, 2000 and after January 1, 1973, following remanufacturing on or after January 1, 2000, shall comply with a standard such that the emissions from the locomotive average 8 g/bhp-hr or less.

(ii) NO_X emissions from a locomotive manufactured on or after January 1, 2000 and before January 1, 2005 shall comply with a NO_X standard of 6.5 g/bhp-hr.

(iii) NO_X emissions from a locomotive manufactured on or after January 1, 2005 shall comply with a NO_X standard of 5.5 g/bhp-hr.

(iv) NO_X emissions from locomotives owned or operated by a railroad company and operated in the South Coast shall average 5.5 g/bhp-hr or less effective January 1, 2007.

(v) NO_X emissions from locomotives owned or operated by a railroad company and operated in the South Coast shall average 4 g/bhp-hr or less effective January 1, 2010.

(5) *Test methods and procedures.* Test methods and procedures which will be adopted for the national locomotive emission control program shall apply in this South Coast Locomotive FIP. The applicable reference for the national locomotive emission control program will be provided when promulgated.

(6) *Enforcement.*

(i) *Inspections.* All sources subject to provisions of this section shall be subject to unannounced inspections by representatives of EPA pursuant to section 114 of the Clean Air Act (42 U.S.C. 7401–7671q).

(ii) *Information requests.* Documentation maintained by all sources, facilities, and persons subject to paragraph (c) of this section must be sufficient to demonstrate compliance with all the requirements of paragraph (b) of this section and must be provided to representatives of EPA in response to information requests pursuant to section 114 of the Clean Air Act.

(iii) *Testing.* All sources subject to provisions of this section shall be subject to testing by representatives of EPA pursuant to section 114 of the Clean Air Act.

(iv) Failure to comply with any provisions of this section is a violation of the applicable implementation plan for purposes of section 113 of the Clean Air Act.

(b) *Compliance.*

(1) *Average emission rate.* Immediately following the end of each year, each railroad company shall calculate its average emission rate in the control area for the preceding year as follows:

$$LEV = \frac{\sum_{i=1}^{n}(EL_i \times FU_i)}{\sum_{i=1}^{n} FU_i}$$

Where:

LEV=RR Company Annual Emission Level

EL_i=Emission level of each locomotive (i) owned or operated by the railroad company in g/bhp-hr

FU_i=Fuel used by each locomotive (i) owned or operated by the railroad company in gallons

n=Number of locomotives/engines the company owns

i=The ith locomotive of the company's locomotive fleet

(2) *Labelling.* All locomotive or locomotive engines that are designated to operate in the South Coast subject to the requirements of this section shall have labels affixed such that the labels clearly identify the locomotive and locomotive engine as being a designated South Coast locomotive or locomotive engine. The locations and sizes of the labels shall be as follows:

(i) Each locomotive shall display two labels measuring 15 inches (38 centimeters) by 15 inches (38 centimeters). One label shall be attached to each side of the locomotive in a location that will allow the label to be visible from outside of the locomotive. The labels shall be permanently attached to a part of the locomotive necessary for normal operation, and not to parts of the locomotive that can be easily removed. The labels shall consist of the green letters "SC" set upon a white background. Each letter shall be 13 inches (33 centimeters) high by 6 inches (15 centimeters) wide.

(ii) A permanent legible label shall be affixed to the engine in a position in which it will be readily visible after installation in a locomotive and shall be attached to an engine part necessary for normal engine operation and not normally requiring replacement during engine life. The labels shall have dimensions of 6 inches (15 centimeters) x 6 inches (15 centimeters)and shall contain the green letters "SC" set upon a white background. Each letter shall be 4 inches (10 centimeters) high by 2 inches (5 centimeters) wide.

(c) *Reporting and recordkeeping.* Each owner or operator of a locomotive emission source which is subject to the limitations of this section, shall submit to the administrator by April 1, of each

calendar year, beginning in 2007, a certification of compliance with this section for the previous calendar year. This certification shall include:

(1) A declaration that the company is in compliance with all the requirements of this section, and

(2) Documentation of the methods used to meet the NO_X fleet emission average required in paragraph (a)(4) of this section.

(3) Each owner or operator of locomotive emission sources which is subject to the limitations of this section shall collect and record all information necessary to demonstrate compliance with this section. These records shall be maintained for a period of 5 years. The information shall be collected and recorded for each year starting in 2007.

(d) *Testing and monitoring.* The Administrator may require, at any time, any owner or operator of a locomotive emission source subject to the limitations of this section to perform tests using the applicable test methods defined in the national locomotive emission control program when finalized, to demonstrate compliance with the limitations of this section.

(e) *Fees and noncompliance penalties.*

(1) Railroad companies that own and/or operate a locomotive within the confines of the South Coast which is designated as a South Coast locomotive engine shall pay an annual fee for each locomotive engine they operate in the South Coast. [Such fee is to be developed in this rulemaking.]

(2) Any engine that EPA finds operating in the South Coast that is not properly identified as a designated South Coast locomotive or without proper maintenance shall be fined an amount not to exceed $25,000 per day of improper operation.

(3) A noncompliance penalty for each ton of emissions produced by a railroad company above its emission cap as provided for in paragraph (a)(4) of this section, shall be assessed at a rate of $10,000 per ton of emissions.

§ 52.2972 Military aircraft operations. [Implementing program described in section III(D)(4)(e)(2)(c) of the Supplementary Information section.]

§ 52.2973 Ships and ports. [Implementing program described in Section III(D)(4)(e)(iv) of the Supplementary Information section.]

§ 52.2974 [Reserved]

§ 52.2975 Enhanced in-use compliance program for nonroad engines over 37 kw.

(a) *General applicability.* (1) New 1999 model year and later nonroad engines, except those exempted in paragraph (a)(2) of this section, that are operated in the Los Angeles-South Coast Air Basin, Ventura, or in the Sacramento Metropolitan ozone nonattainment areas as defined in 40 CFR 81.305 shall meet the requirements specified in paragraphs (c) through (g) of this section, in paragraph (j) of this section, and in § 52.2965. Other state and federal requirements may also apply to these engines. Owners of nonroad engines of any model year, except those exempted in paragraph (a)(2) of this section, that are operated in the Los Angeles-South Coast Air Basin, Ventura, or Sacramento Metropolitan ozone nonattainment areas as defined in 40 CFR 81.305 shall meet the requirements specified in paragraphs (h) and (j) of this section.

(2) *Exempted nonroad engines.* The following nonroad engines are exempted from the requirements of this section:

(i) Engines rated below 37 kw;

(ii) Compression-ignition engines used in marine applications that have a rated speed at maximum torque of 1200 RPM or less;

(iii) Spark-ignition engines used in marine applications;

(iv) Engines used in aircraft as defined in § 87.1(a) of this chapter;

(v) Engines used in underground mining equipment and regulated by the Mining Safety and Health Administration (MSHA) in 30 CFR parts 7, 31, 32, 36, 56, 70, and 75; and

(vi) Engines used to propel locomotives, as defined in § 85.1602 of this chapter.

(3)(i) *Labeling requirements.* (A) For 1999 and later model year nonroad equipment, the equipment manufacturer shall affix a label meeting the requirements of paragraph (j) of this section to every piece of nonroad equipment operated, stored, or transported in the South Coast Air Basin, in Ventura County, or in the Sacramento Metropolitan ozone nonattainment areas as defined in 40 CFR 81.305, except those pieces of equipment and associated engines exempted in paragraphs (a)(2) and (a)(3)(ii) of this section.

(B) For 1998 and earlier model year nonroad equipment, effective March 15, 2000, a label meeting the requirements of paragraph (j) of this section shall be affixed to every piece of nonroad equipment operated, stored, or transported in the South Coast Air Basin, in Ventura County, or in the Sacramento Metropolitan ozone nonattainment areas as defined in 40 CFR 81.305, except those pieces of equipment and associated engines exempted in paragraph (a)(2) and (a)(3)(ii) of this section.

(ii) *Labeling exceptions.* The labeling requirements of paragraph (a)(3)(i) of this section do not apply to:

(A) Equipment stored on the premises of an equipment dealer or leaser, unless such location is on or adjacent to a site at which work is being done that could gainfully employ the equipment; and

(B) Equipment transported through or out of the FIP area that is not unloaded from its carrier while in the FIP area.

(b) *Definitions and abbreviations.* The definitions and abbreviations of § 52.2966 and parts 86 and 89 of this chapter, and the definitions contained in the Clean Air Act apply to this section unless the term is defined in this section.

(c) *Exhaust emission standards.* For the purposes of certification, assembly line, and recall testing, exhaust emissions from nonroad engines to which these requirements apply shall not exceed the following:

(1) *Non-methane hydrocarbons.* 1.2 grams per brake horsepower-hour, as measured under steady-state operating conditions.

(2) *Oxides of nitrogen.* (i) For engines operated in the South Coast Air Basin or in Ventura County: 1.5 grams per brake horsepower-hour, as measured under steady-state operating conditions.

(ii) For engines operated in the Sacramento Metropolitan ozone nonattainment areas as defined in 40 CFR 81.305: 2.5 grams per brake horsepower-hour, as measured under steady-state operating conditions.

(d) *Evaporative emission requirements.* Manufacturers' applications for certification shall include test results or an engineering evaluation demonstrating compliance with the inherently low evaporative emission requirements of § 88.311–93 (a)(1)(ii) and (a)(2) of this chapter. Diurnal emission levels shall be adjusted to reflect corresponding results for a nominal 20 gallon fuel tank volume. This demonstration may be based on a diurnal temperature excursion of 65 °F to 105 °F and California certification fuel rather than the EPA conditions and test fuel.

(e) *Test procedures.* The exhaust standards set forth in paragraph (c) of this section refer to the exhaust emitted over the operating schedule set forth in the Federal nonroad regulations, and measured and calculated in accordance with the procedures set forth in the Federal nonroad regulations. Assembly line testing procedures are those set forth in 40 CFR part 86, subpart K, except as specified in paragraph (f) of this section.

(f) *Test fuels.* All certification, assembly line, and recall testing

performed as described in paragraph (e) of this section shall use the fuels provided for by California as found in the California nonroad regulations. Testing performed to demonstrate compliance with the inherently low evaporative emission requirements of paragraph (d) of this section may, as an alternative, be conducted with fuels meeting the federal specifications of 40 CFR part 86. Assembly line and recall testing shall use the same type of fuel as used in certification testing.

(g) *Recall program.* (1) Engines certified to the standards set forth in paragraphs (c) and (d) of this section shall be subject to the recall provisions of part 89, subpart H of this chapter and the associated established practices of EPA, except as otherwise provided in paragraph (g) of this section.

(2) For purposes of the recall testing under this section, the term "engine" includes all emissions control systems.

(3) The recall provisions for light-duty vehicles contained in paragraphs (e) (3), (4), and (5) of this section shall apply to engines subject to the provisions of paragraph (g) of this section as well, with appropriate references to applicable standards and test procedures, except that:

(i) Engines shall be selected by EPA for the purposes of recall testing from the equipment population of the South Coast, Ventura, and Sacramento nonattainment areas; and

(ii) The prohibitions on registering vehicles contained in paragraph (e)(5)(i) of this section shall apply to equipment used in the South Coast, Ventura, and Sacramento nonattainment areas;

(h) *Fleet averaging program.*

(1) *General Applicability.* The requirements of this program apply to owners of equipment equipped with a nonroad engine that is operated in the South Coast Air Basin, in Ventura County, or in the Sacramento Metropolitan ozone nonattainment areas as defined in 40 CFR 81.305, except those pieces of equipment and associated engines exempted in paragraph (a)(2) of this section.

(2) Effective January 1, 1999, any person who owns one or more pieces of equipment described in paragraph (h)(1) of this section shall submit the following information on each such piece of equipment to EPA by January 31st of every calendar year. The submittal shall reflect the owner's affected fleet as it existed on January 1st of the same calendar year. Owners in the South Coast Air Basin and Ventura County may combine their affected equipment with that of other equipment owners in the South Coast Air Basin and Ventura County for the purposes of this program.[44] Required information per affected piece of equipment:

(i) Type of equipment and equipment class as specified in Table 2975–1;

(ii) Engine model year;

(iii) Engine serial number;

(iv) The NO_X certification level (for 1999 and later model year engines only);

(v) The useful life renewal certificate as described in § 52.2965(d) (for 1999 and later model year engines beyond their original useful life period only); and

(vi) Proof that remedial actions have been performed by an authorized party for any engine subject to a recall action as described in paragraph (g) of this section.

TABLE 2975–1.—NONROAD EQUIPMENT CLASSES

Class	Equipment types
I	Wood splitters.
II	Sprayers.
	Swathers.
	Other agricultural equipment.
	Combines.
	Chippers/stump grinders.
	Balers.
III	Tractors/loaders/backhoes.
	Concrete/industrial saws.
	Forklifts.
	Rough terrain forklifts.
	Other material handling equipment.
	Paving equipment.
	Agricultural tractors.
	Concrete pavers.
	Asphalt pavers.
IV	Rollers.
	Other general industrial equipment.
	Other construction equipment.
	Aircraft support equipment.
	Cranes.
	Bore/drill rigs.
V	Graders.
	Crawler tractors.
	Sweepers/scrubbers.
	Crushing/process equipment.
	Skidders.
	Terminal tractors.
	Excavators.
	Off-highway tractors.
	Rubber-tired loaders.
VI	Feller/bunchers.
	Rubber-tired dozers.
	Scrapers.
VII	Off-highway trucks.

(3)(i) The results of the following Fleet Average Emissions (FAE) calculations contained in Table 2975–2 shall be submitted concurrently with the information specified in paragraph (h)(2) of this section; separate calculations shall be performed, and results submitted, for each equipment class specified in Table 2975–1:

TABLE 2975–2.—CALCULATION OF NONROAD FLEET NO_X EMISSIONS FOR A GIVEN EQUIPMENT CLASS

Model year grouping	A: Pieces of affected equipment in equipment class	B: Per engine emissions from table 2975–3 (tons)	C: Total NO_X emissions from model year grouping (C=A×B)
1999 and later			
1998			
1997			
1996			
Pre-1996			

D: Total Fleet Emissions for all Model Year Groupings, (sum of numbers in Column C)
E: Total Pieces of Affected Equipment for the Given Equipment Class, (sum of numbers in Column A)
F: Fleet Average Emissions (FAE), (F=D÷E)

[44] Owners in the Sacramento ozone nonattainment area may combine their affected equipment with that of other equipment owners in the Sacramento ozone nonattainment area for the purposes of this program.

TABLE 2975–3.—PER ENGINE EMISSIONS

Model year grouping	Per engine emissions by class (tons)						
	I	II	III	IV	V	VI	VII
1999+							
1.5 g/bhp-hr2.5 g/bhp-hr	0.0062	0.027	0.047	0.090	0.16	0.32	0.89
2.5 g/bhp-hr	0.010	0.045	0.079	0.15	0.27	0.53	1.49
1998	0.028	0.12	0.22	0.41	0.75	1.47	4.11
1997	0.037	0.17	0.35	0.41	0.75	1.47	4.11
1996	0.037	0.17	0.35	0.70	1.25	1.47	4.11
Pre-1996	0.037	0.17	0.35	0.70	1.25	2.10	7.09

(ii) The submittal shall also include the name and address of each owner of nonroad equipment included in the calculations, and a designated mailing address for subsequent EPA correspondence.

(4) By January 1, 2000 and every year thereafter, the fleet owner, or owner group, shall compare the calculated Fleet Average Emissions (FAE) with the Baseline Emission Level (BEL) in Table 2975–4 (for equipment in the South Coast Air Basin or in Ventura County) or Table 2975–5 (for equipment in the Sacramento ozone nonattainment area), applicable to the appropriate equipment class and calendar year for which the calculation applies (that is, the BEL for the calendar year in which the submittal is due), and shall calculate the fleet averaging program surcharge according to the following equation:

$$\text{Surcharge}_n = \$10{,}000 \times (\text{FAE} - \text{BEL}) \times \begin{pmatrix} \text{Number of} \\ \text{Pieces of} \\ \text{Affected} \\ \text{Equipment} \end{pmatrix}$$

where n is the class of equipment as indicated in table 2975–1.

This calculation shall be performed separately for each equipment class as specified in Table 2975–1. If the calculated surcharge is less than zero for any equipment class, the surcharge for that equipment class shall be set to zero. The sum of the surcharges for all of the equipment classes shall be paid concurrently with the submittal of information described in paragraphs (h) (2) and (3) of this section.

TABLE 2975–4.—SOUTH COAST AND VENTURA BASELINE EMISSION LEVELS

Calendar year	Class specific baseline emission level (tons)						
	I	II	III	IV	V	VI	VII
1999	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2000	0.035	0.16	0.32	0.62	1.12	1.86	6.15
2001	0.033	0.15	0.30	0.59	1.05	1.75	5.77
2002	0.031	0.14	0.28	0.55	0.99	1.65	5.41
2003	0.029	0.14	0.27	0.52	0.92	1.54	5.05
2004	0.027	0.13	0.25	0.48	0.86	1.44	4.70
2005	0.026	0.12	0.23	0.45	0.80	1.34	4.35
2006	0.024	0.11	0.21	0.41	0.74	1.25	4.02
2007	0.022	0.10	0.20	0.38	0.68	1.15	3.70
2008	0.021	0.094	0.18	0.35	0.63	1.06	3.40
2009	0.019	0.087	0.17	0.32	0.57	0.98	3.11
2010	0.017	0.080	0.15	0.29	0.53	0.90	2.84
2011	0.016	0.074	0.14	0.27	0.48	0.83	2.60
2012	0.015	0.068	0.13	0.24	0.44	0.76	2.37
2013	0.014	0.062	0.12	0.22	0.40	0.70	2.16
2014	0.013	0.057	0.11	0.20	0.37	0.64	1.97
2015	0.012	0.053	0.098	0.19	0.33	0.59	1.80
2016	0.011	0.049	0.090	0.17	0.31	0.55	1.65
2017	0.010	0.045	0.083	0.16	0.28	0.51	1.52
2018	0.0093	0.042	0.077	0.15	0.26	0.47	1.40
2019	0.0088	0.039	0.071	0.13	0.24	0.44	1.30
2020	0.0082	0.037	0.066	0.13	0.23	0.42	1.21
2021	0.0078	0.035	0.062	0.12	0.21	0.39	1.13
2022	0.0074	0.033	0.058	0.11	0.20	0.37	1.07
2023	0.0070	0.031	0.055	0.10	0.19	0.36	1.01
2024	0.0068	0.030	0.052	0.099	0.18	0.34	0.97
2025	0.0065	0.029	0.050	0.096	0.17	0.33	0.94
2026	0.0064	0.028	0.049	0.093	0.17	0.33	0.92
2027	0.0063	0.028	0.048	0.092	0.17	0.32	0.91

TABLE 2975–4.—SOUTH COAST AND VENTURA BASELINE EMISSION LEVELS—Continued

Calendar year	Class specific baseline emission level (tons)						
	I	II	III	IV	V	VI	VII
2028	0.0062	0.027	0.047	0.091	0.16	0.32	0.90
2029 and later	0.0062	0.027	0.047	0.090	0.16	0.32	0.89

TABLE 2975–5.—SACRAMENTO NONROAD FLEET BASELINE EMISSION LEVELS CLASS SPECIFIC BASELINE EMISSION LEVEL

Calendar Year	Class specific baseline emission level (tons)						
	I	II	III	IV	V	VI	VII
2000	0.035	0.16	0.32	0.63	1.12	1.87	6.19
2001	0.033	0.16	0.31	0.60	1.06	1.78	5.85
2002	0.032	0.15	0.29	0.56	1.01	1.69	5.52
2003	0.030	0.14	0.27	0.53	0.95	1.60	5.20
2004	0.029	0.13	0.26	0.50	0.89	1.51	4.88
2005	0.027	0.12	0.24	0.47	0.84	1.42	4.57
2006	0.026	0.12	0.23	0.44	0.79	1.34	4.27
2007	0.024	0.11	0.21	0.41	0.73	1.25	3.98
2008	0.023	0.10	0.20	0.38	0.68	1.18	3.71
2009	0.021	0.098	0.19	0.36	0.64	1.10	3.46
2010	0.020	0.092	0.17	0.33	0.59	1.03	3.22
2011	0.019	0.086	0.16	0.31	0.55	0.97	3.00
2012	0.018	0.081	0.15	0.29	0.52	0.91	2.79
2013	0.017	0.076	0.14	0.27	0.48	0.86	2.61
2014	0.016	0.072	0.13	0.25	0.45	0.81	2.44
2015	0.015	0.068	0.12	0.24	0.42	0.77	2.29
2016	0.014	0.064	0.12	0.22	0.40	0.73	2.16
2017	0.014	0.061	0.11	0.21	0.38	0.69	2.04
2018	0.013	0.058	0.10	0.20	0.36	0.66	1.94
2019	0.013	0.056	0.10	0.19	0.34	0.64	1.85
2020	0.012	0.054	0.095	0.18	0.33	0.61	1.77
2021	0.012	0.052	0.091	0.17	0.31	0.59	1.70
2022	0.011	0.050	0.088	0.17	0.30	0.58	1.64
2023	0.011	0.049	0.085	0.16	0.29	0.56	1.59
2024	0.011	0.048	0.083	0.16	0.29	0.55	1.56
2025	0.011	0.047	0.081	0.16	0.28	0.54	1.53
2026	0.010	0.046	0.080	0.15	0.28	0.53	1.51
2027	0.010	0.046	0.079	0.15	0.27	0.53	1.50
2028	0.010	0.046	0.078	0.15	0.27	0.53	1.49
2029 and later	0.010	0.045	0.078	0.15	0.27	0.53	1.49

(5) Within 30 days of receipt of an adequate owner's submittal, including sufficient payment, EPA shall send a certificate of compliance to the designated mailing address. The certificate shall indicate the serial numbers of the engines to which it applies. Inadequate owners' submittals, including insufficient payment of fees, shall be returned to the designated mailing address, along with an explanation of why the submittal was found inadequate, within 30 days of receipt. Resubmittals by owners shall be responded to by EPA within 30 days of receipt.

(6) Certificates of compliance shall be valid only through March 1st of the calendar year following the year in which they are issued. Expiration dates shall be indicated on the certificates.

(7) Effective January 1, 2000, no piece of nonroad equipment that is equipped with an engine of model year 1998 or earlier, except equipment and associated engines exempted in paragraph (a)(2) of this section, shall be allowed to be registered unless it was included in the 1999 information submittal specified in paragraph (h)(2) of this section.

(8) Effective January 1, 1999, no piece of nonroad equipment that is equipped with an engine of model year 1999 or later, except equipment and associated engines exempted in paragraph (a)(2) of this section, shall be allowed to be registered for use in the FIP areas without proof that it meets the enhanced in-use compliance program engine standards of paragraphs (c) and (d) of this section.

(i) [Reserved]

(j) *Label specifications.* (1) For new 1999 and later model year nonroad engines, the equipment manufacturer shall affix a permanent 12 inch by 14 inch white label to each piece of nonroad equipment. The label shall be applied to the exterior of the equipment at the highest location, and shall be affixed in such a manner that it is readily visible from the ground. The label shall contain the following information lettered in the English language in block letters and numerals which shall be of a color that contrasts with the background of the label:

(i) The label heading: Enhanced In-use Compliance Program—Nonroad Engine;

(ii) The prominent statement: _____Model Year;

(iii) The serial number of the engine powering the nonroad equipment;

(iv) The nonroad equipment class as specified in Table 2975–1; and

(v) The NO_X standard, in grams per brake horsepower-hour, to which the engine is certified.

(2) For 1998 and earlier model year nonroad engines, the equipment owner shall affix a permanent label, that is provided by EPA to the equipment owner along with the certificate of

compliance described in paragraph (h)(5) of this section, to the appropriate piece of nonroad equipment specified on the label. The label shall be permanently affixed to the exterior of the equipment at the highest location, and shall be affixed in such a manner that it is readily visible from the ground. The equipment owner shall apply the most recent label directly over the previously existing labels for that piece of equipment.

§§ 52.2976–52.2998 [Reserved]

§ 52.2999 Employee commute options program rule (Sacramento).

(a) Applicability.

This section applies to all employers in the Sacramento ECO program area as defined in paragraph (c) of this section who employ 100 or more employees at a work location unless exempted under the provisions of paragraph (d)(2) of this section.

(b) *Purpose.* The purpose of this section is to reduce work trips by requiring employers of 100 or more employees to implement work trip reduction plans designed to attain an average passenger occupancy (APO) target which is 25% over the average occupancy for all peak period work trips in the area. This section will increase the average vehicle occupancy (AVO) of work-related trips and reduce the number of work-related trips and miles traveled.

(c) *Definitions.*

For the purposes of this section, the following definitions shall apply:

Administrator means the Administrator of the U.S. Environmental Protection Agency or a designated and delegated representative.

Average passenger occupancy (APO) means the average passenger occupancy of commuting vehicles arriving at an employer's work location during the peak travel period. The APO is equal to the number of employees arriving at the location during the peak travel period divided by the number of vehicles in which employees arrive at the same location during the peak travel period.

Average passenger occupancy survey (APO survey) means the survey of employees' commute patterns required to be conducted at a work location by employers in accordance with paragraph (h) of this section.

Average vehicle occupancy or *AVO* means the average occupancy of all commuting vehicles arriving at all work locations within the Sacramento ECO Program Area during the peak travel period.

Carpool means a group of two to eight employees commuting to and from work by means of a vehicle.

Clean Air Act means the Federal Clean Air Act, as amended (42 U.S.C. 7401 et seq.)

Commute alternative means the mode of travel between a person's place of residence and place of employment, which is other than in a motor vehicle occupied by one person. Commute alternatives include, but are not limited to, public transportation, carpools, vanpools, buspools, ferries, bicycling, and walking, which may be used independent of or in conjunction with compressed work week schedules, telecommuting and like measures. For purposes of this section, telecommuting is considered a commuting alternative.

Compliance plan means the specific plan an employer is required to submit before March 1, 1997 and subsequently implement demonstrating that the employer will reach the APO target before March 1, 1999.

Compressed work week means a schedule in which employees work 35 or more hours in fewer than five work days or more than 70 hours in fewer than ten work days. Compressed work week refers to schedules that include but are not limited to: "4 day-40 hour", "3 day-36 hour", 9 day-80 hour", "9 day-72 hour" schedules, and other work schedules that reduce the number or frequency of required commute trips.

Employee means a partner or limited partner in a partnership, or any person employed by an employer, in a full-time or part-time, permanent, temporary or contract position, excluding volunteers, who either reports to work or is assigned primarily to a work location 80 or more hours per 28-day period for at least two months in any four consecutive months. A contract position is one in which the employee reports to the work location for a period of at least two months and whose work hours and assignments are defined by the employer at any time after the effective date of this section.

Employee transportation coordinator (ETC) means an employee appointed by an employer to develop, implement, monitor, and market a trip reduction program at a work location as required in this section.

Employer means any person(s), trust, firm, business, joint stock company, corporation, partnership, association, non-profit agency or corporation, educational institution, school district, hospital or other health care facility, or federal, state, city or county government department, agency, or district, or subdivision or instrumentality thereof, or any other special purpose public agency or district that employs 100 or more employees reporting to a single work location. A city or county is a single employer for purposes of this section, not individual departments or agencies of the city or county. Individual departments or agencies of the State of California and the federal government are separate employers for the purposes of this section.

Highest ranking responsible officer means the president, executive or managing director, other chief executive or operating officer, or other highest ranking employee located at a work location, who has primary responsibility for the operation and management of that work location.

Maintenance plan means the plan an employer who achieves the APO target implements after that date to maintain the APO target at the work location.

Peak travel period means the time period between the hours of 6 a.m. and 10 a.m. inclusive, Monday through Friday.

Plan means any plan an employer is required to submit to the Administrator in accordance with paragraph (i) of this section. Specific plans an employer may submit under this section include initial compliance plans, update plans, or maintenance plans.

Public transportation means rail passenger service, motorbus regular route service, paratransit service, and motorbus charter service or other transportation services available to the traveling public whose purpose is to carry passengers between two or more locations. Chauffeured limousines and taxi cabs are not considered public transportation for purposes of this section.

Sacramento ECO program area means the Sacramento ozone nonattainment area as defined in 40 CFR 81.305.

Telecommuting means a strategy in which an employee substitutes the location at which work is performed for an entire day. Work otherwise assigned to be done at the work location is instead done at the employee's residence.

Transportation management association (TMA) means a nonprofit organization that coordinates local commuter transportation services, including but not limited to public transportation, vanpools, carpools, bicycling and pedestrian modes, as well as strategies such as alternative work hours; and provides other similar services for corporations, employees, developers, individuals, and other groups.

Travel demand management (TDM) means a system of actions whose purpose is to alleviate traffic-related problems through improved management of vehicle trip demand. Primarily directed at commuter travel,

TDM actions are structured to reduce the dependence on and use of single occupant vehicles.

Update plan means the plan submitted by an employer who has not achieved the APO target by March 1, 1999 showing what additional actions the employer will implement to achieve the target APO within 1 year.

Vanpool means a group of nine to fifteen employees, including the driver, commuting to and from their work location using a vehicle that is used and maintained for the primary purpose of ridesharing.

Vehicle means a highway vehicle powered by a gasoline or diesel internal combustion engine used for commuting purposes with the exception of public transportation, vanpools and vehicles used to convey disabled persons as described in paragraph (g)(4)(viii) of this section.

Work location or *location* means an area, building, or grouping of buildings in actual physical contact or separated only by a private or public roadway or other private or public right-of-way that does not represent an impassable barrier to bicycle or pedestrian travel located within the Sacramento ECO Program Area under the ownership, operation, or control of the same employer. Businesses operated separately and distinctly shall be considered separate work locations even if they are owned by the same employer and are physically located in the same or adjacent buildings.

(d) Employer requirements and exemptions.

(1) *Overview of employer requirements.* This section requires the following seven actions of all subject employers. An employer failing to undertake any or all of these actions shall be considered in violation of this section and shall be subject to penalties in accordance with paragraph (l) of this section.

(i) Register with the Administrator as an employer subject to the provisions of this section (paragraph (f) of this section).

(ii) Designate an Employee Transportation Coordinator (ETC) at each work location (paragraph (i) of this section).

(iii) Conduct an annual APO survey of employees at each work location to determine employees' commute patterns and report the results of the survey to the Administrator (paragraph (h) of this section).

(iv) Develop and submit to the Administrator by March 1, 1997 and in subsequent years as required by this section, compliance, update, or maintenance plans that describe activities to be implemented at the location under an employee commute option (ECO) program (paragraph (i) of this section).

(v) Implement the program outlined in the compliance, update, or maintenance plan (paragraph (i) of this section).

(vi) No later than March 1, 1999, increase the average passenger occupancy (APO) at each location by not less than 25 percent over the average vehicle occupancy (AVO) for the Sacramento ECO program area (paragraph (g) of this section).

(vii) Maintain the target APO after achieving it.

(2) *Exemptions.* An employer that meets any of the criteria described in paragraph (d)(2) (i) or (ii) of this section may apply to the Administrator for an exemption from the requirements of this section. Requests for exemptions shall be made in writing and shall be signed by the highest ranking responsible officer at the work location.

(i) Any employer that employs 100 or more employees at a single work location, but has fewer than 33 employees reporting to work during the peak travel period may apply to the Administrator for an exemption from the requirements of this section.

(ii) Any employer whose employee population at a work location decreases to fewer than 100 employees for a 12 month period, calculated as a monthly average, may apply to the Administrator for an exemption from the requirements of this section. The employer must submit documentation demonstrating an employee population of less than 100.

(e) *Employer notification.*

The Administrator will notify employers individually and by published notice of the requirements of this section.

(1) *Individual notification of employers.* By May 1, 1995 or 90 days after final promulgation of this section whichever is later, the Administrator shall notify employers known to be subject to this section by certified mail of their obligations under this section. The notification letter shall outline the procedure for employer registration and be accompanied by a standard registration form described in paragraph (f) of this section. In each year after the initial notices are mailed, The Administrator shall send notices to any employer known to be added to the employer list since the previous notification mailing.

(2) *General notification of employers.* Not later than May 1, 1995 or 90 days after final publication of this section whichever is later and annually thereafter, the Administrator shall publish notice and information concerning Sacramento employers' obligations under this section. The notice shall provide information on how employers can obtain required forms from EPA and shall establish a date by which employers must return a completed form to the Administrator. The Administrator shall publish the notice beginning on the date of the first individual notification mailings and shall run the notice for at least three days over a two week period in Sacramento regional newspapers. Also, the Administrator shall publish the notice in the first **Federal Register** released after the date of the first notification mailings.

(3) Failure to receive an individual notification as provided for in paragraph (e)(1) of this section shall not relieve any employer of the obligation to meet all applicable requirements of this section.

(f) *Employer registration.*

(1) *Registration deadlines.*

(i) By the due date specified in the notification mailing and as published in the public notice (see paragraph (e) of this section), each employer who received by certified mail the standard registration form shall submit a completed standard registration form to the Administrator. Notwithstanding that an employer may not have been mailed or received notice from the Administrator, an employer is required to complete the registration form and submit the completed form to the Administrator by the deadline specified in the published notice. Copies of the registration form may be obtained upon request from the EPA.

(ii) Any employer that receives a notification packet must respond even if the employer believes it is not subject to this section. An employer that does not meet the definition of employer under this section is not required to submit the standard registration form, but instead must submit an ECO program return card included in the notification packet indicating the reason for non-applicability. The Administrator may request the employer to submit additional documentation to verify an employer's non-applicable status.

(iii) An employer who is not subject to this section at the time the first notices are mailed, but subsequently becomes an employer subject to this section, shall submit a registration form to the Administrator within 60 days of becoming subject to this section.

(iv) An employer that moves its work location within the Sacramento ECO program area after registering with the Administrator must submit a new

registration form within 60 days after the date of the relocation.

(2) *Completion and submittal of registration form.*

(i) Each employer who is subject to this section or who receives by certified mail a standard registration form shall complete a standard registration form for each work location in the Sacramento ECO Program Area. The form must be signed by the highest ranking responsible officer at the location who shall attest to the accuracy of the information reported. An employer shall provide the following information on the form:

(A) The name of the employer and address of the work location;

(B) The name and telephone of the highest ranking responsible officer at the location;

(C) Designation of the location as a single site, headquarters, or branch;

(D) The total number of employees at the location and the number assigned to report to the work location during the peak travel period; and

(E) The name, telephone number, and address (if different from that named in paragraphs (f)(2)(i) (A) and (B) of this section) of the employee transportation coordinator (ETC) at the location to receive APO survey and compliance plan forms and who will serve as the employer's contact with the EPA.

(ii) An employer with more than one location in the Sacramento ECO Program Area shall complete a separate registration form for each work location, but individual registration forms may be submitted together. The employer shall designate an ETC for EPA to contact at each location. Notwithstanding this provision, an employer may designate a single contact person to receive APO survey and compliance plan forms for all work locations.

(g) *Average Passenger Occupancy (APO) target.*

(1) *Designation of target APO.* The CAA has established average passenger occupancy (APO) at a work location as the performance measure for determining an employer's compliance. The APO performance target is 125 percent of the average vehicle occupancy (AVO) for the Sacramento ECO Program Area. Given a baseline AVO of 1.11, the target APO for the Sacramento ECO Program Area is 1.38.

(2) *Deadline for compliance with the target APO.* Not later than March 1, 1999, each employer is required to increase the APO at the employer's work location during the peak travel period to the target APO. An employer that has achieved the target APO is required to maintain the location APO at a level at least as high as the target APO, but is not required to increase its APO beyond the target APO. Each employer shall annually document achievement of the target APO at each work location through the APO survey described in paragraph (h) of this section, and report the location's compliance with the target APO to the Administrator in the maintenance plan, as required by paragraph (i) of this section.

(h) *Average Passenger Occupancy (APO) survey requirements.*

(1) *Notice of requirement to survey.* Within 180 days of receiving completed registration forms from employers, but not later than March 1, 1996, the Administrator shall notify each employer of the requirement to conduct an APO survey and to develop and implement a compliance plan in accordance with the requirements of paragraph (h)(1)(i) of this section. The notice shall include copies of the required APO survey and compliance plan forms. Failure of an employer to receive such notification shall not relieve any employer of the obligation to comply with all applicable obligations of this section. Employers not receiving such forms may request them from EPA by contacting the Region IX office.

(2) *Requirement to survey.* For the purpose of documenting the work location APO, each employer shall conduct annual APO surveys of the commute patterns of the employees who arrive at its work location during the peak travel period. An employer with more than one location in the Sacramento ECO Program Area shall conduct a survey at each location.

(3) *Survey procedure.* An employer shall conduct an APO survey of all employees assigned to report to the work location during the peak travel period using the following procedure, except as provided in paragraph (h)(3)(iii) of this section:

(i) Except as provided below, an employer shall use the standard APO survey form provided by the EPA. The APO survey form is designed to collect information on the commute patterns of employees and to allow the employer to calculate the work location APO as described in this paragraph. The standard form shall be used without alteration. If the employer's individual survey form has been submitted to and approved by the Administrator prior to administration of the survey, the Administrator may permit the employer to use this pre-approved form as a substitute for the standard APO survey form. The Administrator shall not approve any survey form that could be expected, in the Administrator's judgement, to produce different survey results than if the standard form had been used. An employer is permitted to attach additional survey forms to the standard form if desired, without prior approval of the Administrator.

(ii) Employers shall choose a typical week in which to conduct the APO survey. A week shall not be considered typical if it:

(A) Includes a holiday observed by the employer;

(B) Immediately follows a week in which a holiday was observed on Friday or precedes a week in which a holiday will be observed on Monday;

(C) Is a week during which the employer holds a rideshare fair or other intensive information promotion related to the ECO program;

(D) Is a week in which the location has a partial or complete shutdown of its operation; or

(E) Is a week with any other anomalous change or fluctuation in the number of employees reporting to the work location.

(iii) An employer shall survey all employees arriving at or scheduled to report to the work location during the peak travel period in the survey week. An employer with 400 or more employees arriving at a single location during the peak travel period may survey a random sample of those employees if approved by the Administrator. All employees selected for the random sample must be accounted for either by the survey data, or a documented leave of absence. Any employee designated for the random sample that does not respond to the survey must be counted as arriving in a single occupancy vehicle. Employers desiring to conduct a random sample survey shall submit the following information to the Administrator: a sampling process and statistical methodology that will produce reliable and valid results consistent with a 95 percent confidence level; and, documentation that the person or persons conducting the survey have the qualifications to ensure the survey will be conducted in a statistically valid manner. The Administrator shall grant or deny approval for the random sample survey within 30 days of receipt of the methodology.

(iv) An employer shall achieve an APO survey response rate of at least 75 percent of all employees assigned to report to the work location during the peak travel period. An employer that fails to achieve at least a 75 percent response rate on any APO survey shall repeat the survey until the required response rate is achieved. If the response rate is less than 90% but 75% or greater, all non-respondents shall be

treated as single occupant vehicle commuters. If the response rate is 90% or greater, non-respondents shall be treated as having the same commute behavior as that of the average of the respondents.

(v) An employer may use its own staff to conduct the APO survey or arrange with a market research or transportation consultant, local government, TMA, or other entity outside the employer to conduct the survey.

(4) *Calculating work location APO.* An employer shall demonstrate its compliance with this section by documenting achievement of the target APO specified in paragraph (g) of this section.

(i)(A) An employer shall calculate the APO for its work location from the results of the APO survey as follows:

$$\text{Work location APO} = \frac{\text{Number of employees arriving}}{\text{Number of vehicles arriving}}$$

where:

Employees arriving is: total number of employees arriving at the location between 6 a.m. and 10 a.m., Monday through Friday of the survey week, and

Vehicles arriving is: total number of vehicles in which employees arrive at the location between 6 a.m. and 10 a.m., Monday through Friday of the survey week.

(B) To illustrate the calculation of APO, the following example is provided:

	Mon.	Tue.	Wed.	Thur.	Fri.	Total week
No. Employees	205	198	201	202	194	1,000
No. Vehicles	165	170	180	175	170	860

$$\text{Location APO} = \frac{\text{1,000 Employees Arriving}}{\text{860 Vehicles Arriving}} = 1.16$$

(ii) Calculation of location APO shall count employees arriving at the location during the peak travel periods, Monday through Friday of the survey week as follows:

(A) Each employee that arrives at the location during the peak travel period shall be counted as one employee arriving for each of the days Monday through Friday of the survey week that the employee reports to the location, regardless of the length of time the employee remains at the location.

(B) Each employee that telecommutes all day from the employee's home shall be counted as one employee arriving for each day the employee telecommutes.

(C) Each employee that works a compressed work week shall be counted as one employee arriving for each day the employee works and for each compressed work week day off.

(iii) For calculation of APO, the count of vehicles arriving shall include:

(A) Passenger cars and trucks, with fewer than nine employees; and

(B) Motorcycles and mopeds.

(iv) The following shall be counted as zero vehicles arriving:

(A) Vanpools with nine or more employees;

(B) Public or private buses, trains, or other mass transportation vehicles and;

(C) Bicycles and other non-motorized vehicles.

(v) An employee that works a compressed work week or telecommutes the entire day at home shall be counted as arriving at the work location in a zero vehicle on the day he or she does not report to the work location.

(vi) An employee that is dropped off at the work location by another employee or employees commuting to their work location or locations shall be counted as arriving in a share of a vehicle proportional to the number of occupants in the vehicle. An employee that is dropped off at the work location by a person not traveling to his or her work location shall be counted as arriving in a single occupant vehicle.

(vii) An employee that commutes in a commute alternative for 50 percent or more of the total length of his or her work trip or in a commute alternative for 10 or more one-way miles, whichever is less, shall be counted as arriving in that commute alternative in the APO calculation.

(viii) An employer shall not count employees who have disabilities which require the use of a single-occupant vehicle (or a chauffeured vehicle) for commuting or their vehicles in the APO calculation.

(ix) An employee that does not respond to the APO survey as described in paragraph (h)(3)(iv) of this section shall be considered for purposes of the APO calculation to have arrived at the work location in a single-occupant vehicle and be counted as one employee arriving in one vehicle, unless the response rate of the survey is 90 percent or above.

(5) *Reporting of APO survey results.* An employer shall tabulate the APO survey results and report the results to the Administrator on a standard form provided by the EPA. An employer shall submit the APO survey results as a component of the compliance plan in accordance with paragraph (i) of this section. In years in which the employer is required to document and provide its work location APO to the Administrator but is not required to submit a plan, survey results shall be submitted as an APO survey report.

(6) *Required components of APO survey reports.* A complete APO survey report submittal will consist of the following elements:

(i) Completed APO survey report, prepared on standard forms provided by the EPA; and

(ii) A letter signed by the highest ranking responsible officer at the work location or report preparer, if different from the employer, who attests to the accuracy of the information included in the report.

(i) *Compliance, update, and maintenance plans.*

(1) *Requirements.* Each employer shall prepare and implement compliance, update, or maintenance plans in accordance with the procedures and schedules established in this section.

(2) *Plan submittal schedule.* Each employer shall submit compliance, update, or maintenance plans, as described in paragraph (i)(3) and (4) of this section respectively, to the Administrator in accordance with the following schedule.

(i) Not later than March 1, 1997, each employer shall prepare and submit to the Administrator a compliance plan for each work location. An employer that becomes subject to this section after March 1, 1997 shall be given a minimum of 180 days from the date it registers with the Administrator, as required by paragraph (f) of this section, to prepare and submit a compliance plan. This employer further shall not be required to demonstrate achievement of the target APO until two years following submittal of the compliance plan.

(ii) Not later than March 1, 1999, each employer who has not achieved the target APO shall prepare and submit to the Administrator an update plan for each work location as described in paragraph (i)(4) of this section. An employer that fails to meet the target APO by March 1, 1999 shall be subject

to the penalty for failure to reach the target APO as of March 1, 1999.

(iii) Not later than March 1, 1999, each employer who has achieved the target APO shall prepare and submit to the Administrator a maintenance plan. If an employer determines that no additional measures are needed to maintain the APO target, the original compliance plan may be referenced to meet this requirement. Additional update plans demonstrating achievement and maintenance of the target APO may be required later if an employer is not in compliance with the target APO.

(iv) An employer that moves its work location within the Sacramento ECO Program Area, desires to modify the elements of its compliance plan, or experiences a change in its work location operations that could reasonably be expected to affect the appropriateness or effectiveness of an approved compliance, update, or maintenance plan, shall submit a revised plan within 90 days of the change.

(3) *Components of a plan.*

(i) An employer shall prepare a plan using a standard plan form developed by the EPA. The plan will include all information required by the standard plan form, including the following information:

(A) The name of the employer, address of the work location, and name, title, and signature of the Employee Transportation Coordinator (ETC) at the work location appointed by the employer;

(B) The results of the most recent APO survey and a description of the procedure used to conduct the APO survey;

(C) A description of the physical and transportation service characteristics of the work location, and demographic, work, and travel-related characteristics of the employee population;

(D) A description of ECO strategies currently implemented that provide commute alternative incentives to employees at the work location and additional ECO strategies the employer will implement at the work location; an employer desiring advice and suggestions on ECO strategies should refer to resource materials provided by the EPA.

(E) Activities planned by the employer to implement the ECO program and a time schedule for implementation of the program;

(F) A description of the process by which the employer will periodically monitor and review progress toward the APO target.

(ii) Each employer shall provide information included in paragraphs (i)(3)(i) (A) through (F) of this section in the compliance plan to establish a baseline against which future years can be compared. Beginning with the 1999–2000 update plan and for any subsequent update plan, an employer that has not achieved the target APO shall update any changes to the information under paragraphs (i)(3)(i) (A) through (F) of this section and provide the following:

(A) A discussion of the employer's "good faith efforts", described in paragraph (k)(4) of this section, to achieve the target APO;

(B) An explanation of why the ECO strategies included in the last plan did not produce the target APO; and

(C) A discussion of how the employer plans to achieve the APO target within one year.

(4) *Required additional elements of plan submittals.* A complete compliance plan submittal to the Administrator shall include of the following additional elements:

(i) An executive summary plan that shall consist of a cover sheet that includes information described in paragraphs (i)(3)(i) (A) and (B) of this section, and a summary of information described in paragraphs (i)(3)(i) (C) through (F) of this section, and paragraph (i)(3)(ii) of this section as appropriate;

(ii) A letter signed by the highest ranking responsible officer at the work location who shall attest that the employer will implement the plan as described, retain all ECO documents on file, as required by paragraph (i)(7) of this section, and make such documents available for review by the Administrator or an agent designated by the Administrator;

(iii) A letter signed by the highest ranking responsible officer at the work location or plan preparer, if different from the employer, who shall attest to the correctness of the information included in the plan.

(5) *Alternative plan preparers.* An employer may contract with a transportation planning consultant, TMA or outside entity to prepare or assist in preparation of a compliance plan or report. The use of an outside entity for this purpose shall not, however, remove or reduce the responsibility of the employer with regard to any of the requirements of this section.

(6) *Requirement for an ETC.* An employer shall designate an employee transportation coordinator (ETC) at each work location with 100 or more employees to administer the ECO program at that work location.

(7) *Document recordkeeping.* An employer shall maintain copies of all documents prepared or used in the document preparation by the employer or by other entities acting on behalf of the employer in accordance with this section in the office of the ETC for a period not less than four years from the date the documents were first generated. These documents shall include, but not be limited to documents related to:

(i) Conduct of the APO survey;

(ii) Calculation of work location APO;

(iii) Preparation of compliance, update, and maintenance plans and APO survey reports;

(iv) Program implementation, including all organizational policies and procedures; and

(v) Program monitoring and evaluation.

(j) *Plan certification.* Prior to submittal to the Administrator, plans shall be certified as to completeness. Notwithstanding this provision, an employer that submits a revised or maintenance plan in accordance with paragraph (i)(2)(iv) or paragraph (k)(1) of this section shall not be required to have the plan certified prior to its submittal to the Administrator.

(1) *Plan Certifiers.* The Administrator shall designate an organization or organizations as plan certifiers for the Sacramento ECO program area.

(i) The Administrator will provide the Air Districts in the Sacramento ECO area with the first opportunity to become designated certifiers for employer plans for employers in the geographic areas for their jurisdiction. In addition to certifying plans for completeness, the Air Districts may provide, if they so choose, a recommendation regarding the approvability of plans.

(ii) Should any or all of the Air Districts in the Sacramento area decline the opportunity to become designated certifiers, the Administrator will designate another organization or organizations to certify plans.

(2) *Plan certification criteria.* In assessing whether a plan can be certified, the certifier shall consider the following criteria:

(i) The completeness of the plan based on the presence of all required components of plan submittals as described in paragraphs (i)(3) and (4) of this section.

(ii) The accuracy of the work location APO computation;

(iii) Consistency with this section.

(3) *Certification procedures.*

(i) A certifier shall review the plan utilizing EPA approved training and the

criteria described in paragraph (j)(2) of this section. The certifier may contact the employer to clarify questions related to the plan or to request reasonable additional documentation from the employer.

(ii) If the certifier deems the plan to meet the certification criteria, the certifier shall certify the plan and return it to the employer for submittal to the Administrator. Plans not meeting the certification criteria shall be returned to the employer with an explanation of the reasons the plan was returned, indication of the sections of the plan that are unacceptable, and an indication of where corrections are necessary in order to make the plan meet certification requirements. The employer shall revise its plan as appropriate and re-submit the revised plan to the certifying agency.

(iii) It is the responsibility of an employer to allow adequate time for certification. Failure of the certifier to certify the employer's plan in time to allow submittal of the plan to the Administrator prior to the deadline shall not excuse the employer from this obligation. Notwithstanding this provision, however, an employer that submits a certifiable plan to a certifier at least 90 days prior to the plan submittal deadline shall not be considered in violation of the plan submittal deadline until 60 days after the scheduled submittal date to the Administrator.

(k) *Plan review and approval.*

(1) Plan review and approval schedule. The Administrator will strive to approve or disapprove plans within 90 days of receipt of a plan. An employer whose plan is returned shall have 60 days from the date of return to revise and resubmit the plan to the Administrator. The employer shall not be required to have the plan recertified prior to re-submittal to the Administrator.

(2) Plan review guidelines. The Administrator shall review and approve plans based on the following criteria:

(i) The presence of all required plan sections and minimum plan requirements, as described in paragraph (i) of this section;

(ii) The accuracy of the APO calculation, in accordance with the formula provided in paragraph (h) of this section; and,

(iii) A demonstration of plan certification, in accordance with the procedures defined in paragraph (j) of this section.

(iv) The appropriateness of the commute alternatives proposed in the plan to the location and employee population;

(v) The appropriateness of the ECO program services and incentives selected by the employer to the commute alternatives;

(vi) The likely effectiveness of the ECO strategies in producing the target APO by the scheduled deadline;

(vii) The ability of the proposed implementation schedule to ensure ECO strategies included in the plan are implemented in a timely and thorough manner; and

(viii) The ability of the proposed monitoring process to allow a timely and effective review of the employer's progress toward the target APO.

(l) *Enforcement and penalties.*

(1) *Noncompliance.* An employer shall be subject to civil or criminal penalties according to 42 U.S.C. 7413 (section 113 of the Clean Air Act) for violations of any provisions of this section. Upon determining that a violation has occurred, the Administrator shall issue the employer a notice of violation. Penalties for continued noncompliance may accrue from the date of the notice of violation.

(2) *Penalties.* The Administrator may assess civil penalties of up to $25,000 per day of violation. Penalties under this section will be assessed according to criteria in 42 U.S.C. 7413(e). These criteria include:

(i) The size of the business;

(ii) The economic impact of the penalty on the business;

(iii) The violator's compliance history and good faith efforts to comply;

(iv) The duration of the violation;

(v) Prior payment of penalties for similar violations;

(vi) The economic benefit of noncompliance; and

(vii) The seriousness of the violation.

(3) *Work location audits.* To verify implementation of work location programs, the Administrator shall have the authority to conduct or cause to be conducted audits of an employer's location. The employer shall provide the Administrator access to all records pertaining to the development, implementation, and administration of the ECO program described in the employer's plan, and access to employees at the location.

(4) *Good faith effort.* A good faith effort will be taken into account when penalties are determined. The Administrator may consider any or all of the following criteria in assessing an employer's good faith effort:

(i) Did management at the location demonstrate significant commitment to implementation of the program and institute written employee policies that encouraged the use of commute alternatives?;

(ii) Did the employer assess the transportation needs and interests of employees through employee surveys or other techniques?;

(iii) Did the employer periodically review its progress toward the target APO, at a minimum through conduct of an APO survey of its employees in the second program year (1996–1997), and through other actions designed to assess the continuing appropriateness of the employer's ECO program services and incentives?;

(iv) If the employer's 1997–1998 APO survey showed the APO increase was less than 50 percent of that needed to achieve the target APO, did the employer increase and or modify its program to include appropriate contingency strategies?;

(v) Did the employer seek advice from the EPA, a TMA, a transportation consultant, or other entity with TDM experience, prior to September 1, 1998, regarding desirable future actions to increase APO?;

(vi) Did the employer have strategies like those known to be implemented by others like it?; and

(vii) Did the APO at the work location increase a reasonable amount compared to other employers with similar work location characteristics and employee populations?

(m) *Extensions.*

(1) *Deadline extensions.* An employer that, for reasons beyond its control, is unable to meet a deadline established in this section may petition the Administrator for an extension of the deadline. All requests shall be submitted in writing and signed by the highest ranking responsible officer at the site. The Administrator will strive to rule on extensions of scheduled deadlines within 30 days from receipt of the request. Extensions may be considered for hardship circumstances or other unusual circumstances that may make it impossible to meet the deadlines established in this section. Requests for deadline extensions must be filed in the following manner.

(i) A request for an extension of the deadline to register as an employer shall be submitted not less than 45 days in advance of the deadline for registration.

(ii) A request for extension of the deadline to submit a plan or APO survey report shall be submitted not less than 90 days in advance of the deadline.

§ 52.3000 General permit requirements (Sacramento).

(a) *Purpose.* This section provides an orderly procedure for the review of new sources of air pollution and the orderly review of the modification of existing sources through the issuance of permits.

(b) *Definitions.* When used in this section, § 52.3001, New Source Review, and § 52.3002, Emissions Reduction Credit Authorization, the following terms have the meanings given below.

Actual emissions means measured, or estimated if measurement is not possible, emissions which most accurately represent the emissions from an emissions unit. Fugitive emissions associated with the emissions unit shall be included in the actual emissions of the emissions unit.

Actual emissions reductions means reductions of emissions from an emissions unit. Actual emission reductions shall be calculated pursuant to paragraphs (d)(12) and (13) of § 52.3001, New Source Review, and authorized pursuant to section § 52.3002, Emissions Reduction Credit Authorization, and shall meet all of the following criteria:

(1) The emissions reductions shall be real, enforceable, quantifiable, and permanent.

(2) The emissions reductions shall be surplus emissions reductions in excess of any emissions reduction which is:

(i) Required or encumbered by any laws, rules, regulations, agreements, or orders; or

(ii) Attributed to a control measure noticed for workshop in the district, or proposed or contained in a State Implementation Plan or Federal Implementation Plan; or

(iii) Proposed or contained in the district air quality attainment plan for attaining the annual reductions required by the Clean Air Act.

(3) Emission reductions attributed to a proposed control measure contained in the District Air Quality Attainment Plan (AQAP) may be re-eligible as an offset emission reduction only if such measure has been removed from the AQAP during the next AQAP update.

(4) Source shutdowns and curtailments may not be given emission reduction credit in the case of non-attainment pollutants, including precursors, if the shutdown or curtailment occurred prior to the date of application unless:

(i) The crediting of shutdown emissions complies with the most recent emission trading policy of the EPA, and

(ii) The proposed new source or modification is a replacement, and the shutdown or curtailment occurred after August 7, 1977, and

(iii) The shutdown or curtailment was claimed by the affected facility as a credit within 180 days of the last date of operation, or

(iv) The district has met statutory planning mandates and air quality improvement milestones.

Actual interruptions of electrical power means when electrical service is interrupted by an unforeseeable event.

Actual operating days means any day of operation which results in the emission of an affected pollutant from the emissions unit.

Administrative permit amendment means an amendment to an Authority to Construct which:

(1) Corrects a typographical error; or

(2) Identifies a minor administrative change at the stationary source; for example, a change in the name, address, or phone number of any person identified in the permit; or

(3) Requires more frequent monitoring or reporting by a responsible official of the stationary source; or

(4) Transfers ownership or operational control of a stationary source, provided that, prior to the transfer, the EPA receives a written agreement which specifies a date for the transfer of permit responsibility, coverage, and liability from the current to the prospective permittee.

Ambient air quality standards means state and federal ambient air quality standards for the purpose of submittal to the EPA for inclusion in the California State Implementation Plan. All references in this section, § 52.3001, and § 52.3002 to ambient air quality standards shall be interpreted as National Ambient Air Quality Standards.

Applicable requirements means air quality requirements with which a facility must comply pursuant to the State Implementation Plan, the Federal Clean Air Act as amended in 1990 and implementing regulations, other provisions of the United States Code, and the Code of Federal Regulations.

Authority to construct means a preconstruction permit authorizing construction prior to the start of construction and conforming to the requirements of § 52.3001, New Source Review.

Authorized means emission reduction credits (ERCs) which have been evaluated by the EPA to verify that they are quantifiable, enforceable, permanent and surplus at the time of use. Authorization of the ERCs must occur both prior to approval of, and concurrent with, the application for use of the ERCs as offsets pursuant to § 52.3001, New Source Review.

Banking means the system of quantifying, adjusting, certifying, recording, and storing ERCs for future use and transfer. Procedures for banking ERCs are described in applicable district banking rules.

Begin actual construction means initiation of physical, on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in the method of operation, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

Best available control technology (BACT) means:

(1) For any emissions unit, an emission limit based on the most stringent of the following:

(i) The most effective emission control device, emission limit, or technique, singly or in combination, which has been required or used for the type of equipment comprising such an emissions unit unless the applicant demonstrates to the satisfaction of the EPA that such limitations required on other sources have not been demonstrated to be achievable.

(ii) Any alternative basic equipment, fuel, process, emission control device or technique, singly or in combination, determined to be technologically feasible and cost-effective by the EPA.

(iii) For replacement equipment only, the emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source.

(2) In making a BACT determination for a nonattainment pollutant, the EPA may consider the overall effect on other nonattainment pollutants. In some cases the lowest emission rates may be required for one or more nonattainment pollutants at the cost of not achieving the lowest emission rate for other nonattainment pollutants. The EPA shall discuss these considerations in the Preliminary Decision prepared pursuant to the provisions of § 52.3001(d)(3).

(3) Under no circumstances shall BACT be determined to be less stringent than the emission control required by an applicable provision of district, state or federal laws or regulations unless the applicant demonstrates to the satisfaction of the EPA that such limitations are not achievable.

Best available retrofit control technology (BARCT) means an emission limitation that is based upon the maximum degree of reduction achievable, taking into account environmental, energy, and economic

impacts by each class or category of source. The criteria for BARCT are specified in "California Clean Air Act Guidance for the Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology," California Air Resources Board, April 1990.

California Environmental Quality Act (CEQA) means the California Environmental Quality Act, Public Resources Code, Section 21000, et seq.

Cargo carriers means trains dedicated to a specific source and marine vessels while docked at a specific source.

Certified means emission reduction credits which have been evaluated under the requirements of a district banking rule.

Commence means that the owner or operator has all of the necessary permits or approvals required under state and federal air quality control laws, district rules and regulations, and those air quality control laws and regulations which are part of the California State Implementation Plan or any applicable Federal Implementation Plan, and has:

(1) Begun, or caused to begin, a continuous program of on-site construction of the source, to be completed in a reasonable time; or

(2) Entered into binding agreements or contractual obligations which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

Complete application means an application for an Authority to Construct a new or modified emission unit that, on the basis of the criteria of 40 CFR part 70.5(c) of the Federal Operating Permit Program and the applicable requirements of this section, contains adequate information for the EPA to evaluate the application for compliance with the applicable requirements of this section. Such determination shall be made after receipt of payment of an application filing fee, as determined by the EPA, that reflects the costs to the EPA to review the application and issue permits.

Construction means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

Contiguous property means two or more parcels of land with a common boundary or separated solely by a public roadway or other public right-of-way.

Cost-effective means a cost per unit of emissions reduction which is lower than or equivalent to the maximum unit costs, for the regulated pollutant or source category, of the same emission reduction through the use of Best Available Control Technology, calculated in current year dollars in accordance with methodology and criteria specified in the EPA OAQPS Control Cost Manual (EPA 450/3–90–006).

District means the local air pollution permitting agency with jurisdiction within the area in which this section applies. "District" may also refer to the geographic area in which the local permitting agency has jurisdiction.

Emission decrease means any modification which would result in a decrease of actual emissions. The emission decrease shall be calculated by subtracting the proposed emissions from the historic actual emissions.

Emission reduction credits (ERC) means reductions of actual emissions from an emission unit that are registered with the district in accordance with the requirements of a district banking rule.

Emissions limitation means one or a combination of permit conditions specific to an emissions unit which restricts its maximum emissions, at or below the emissions associated with the maximum design capacity. An emissions limitation shall be:

(1) Contained in the latest Authority to Construct and contained in or enforceable by the latest district or federal permit to operate for the emission unit; and

(2) Enforceable on a daily basis or quarterly basis pursuant to provisions of § 52.3001(d)(7)(ii). Emission limitations should be stated in a manner consistent with testing procedures. Emission limitations may be expressed as enforceable design, operational, or equipment standard pursuant to provisions of § 52.3001(d)(7)(iii); and

(3) No less stringent that the applicable emission standards given at 40 CFR part 60, Standards of Performance for New Stationary Sources, and 40 CFR part 61, National Emission Standards for Hazardous Air Pollutants.

Emissions unit means an identifiable operation or piece of process equipment such as an article, machine, or other contrivance which controls, emits, may emit, or results in the emissions of any regulated air pollutant or hazardous air pollutant (HAP), directly or as fugitive emissions. An emissions unit shall not include the open burning of agricultural biomass.

Enforceable means verifiable and legally binding. Enforceable, for the purposes of federal requirements, means all federally enforceable limitations and conditions enforceable by the EPA, including NSPS; NESHAP; requirements within any applicable State Implementation Plan; any permit requirement established pursuant to 40 CFR 52.21, 40 CFR 51.160 through 166, or 40 CFR 70.

EPA means an official of the U.S. Environmental Protection Agency, or his or her authorized representative.

ERC certificate means a document identifying the quantity and type of ERCs issued by the district pursuant to a banking rule to the source identified on the Certificate.

Fugitive emissions means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

Halogenated hydrocarbons means the following: 1,1,1-trichloroethane, methylene chloride, 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113), 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114), chloropentafluoroethane (CFC-115), pentafluoroethane (HFC-125), 1,1,2,2-tetrafluoroethane (HFC-134), tetrafluoroethane (HFC-134a), 1,1-dichloro-1-fluoroethane (HCFC-141b), 1-chloro-1,1-difluoroethane (HCFC-142b), 1,1,1-trifluoroethane (HFC-143a), chlorodifluoromethane (HCFC-22), trifluoromethane (HFC-23), 1,1-difluoroethane (HFC-152a), and the following four classes of perfluorocarbon compounds: Cyclic, branched, or linear, completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers, with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine. Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

Hazardous air pollutant (HAP) means any air pollutant listed pursuant to section 112(b) of the Clean Air Act as amended (42 U.S.C. 7401 *et seq.*).

Historic actual emissions means:

(1) The actual emissions for the existing emissions unit averaged over the consecutive two-year period

immediately preceding the date of application for authorized emission reduction credits. If the last two years are unrepresentative of normal source operations as determined by the EPA, then any two consecutive years of the last five years that represent normal source operation may be used.

(2) If, at any time during the two-year period, actual emissions exceeded the allowed or permitted emission levels, then actual emissions shall be reduced to reflect emission levels that would have occurred if the unit were in compliance with all applicable limitations and rules.

(3) Where an emissions unit has been in operation for less than two years, a shorter averaging period of at least one year may be used, provided that the averaging period is representative of the full operational history of the emissions unit. If an emissions unit has been in operation for less than one year, then the historic actual emissions shall be zero.

Historic potential emissions means emissions based on the potential to emit of the emissions unit prior to modification. In determining the potential to emit, daily emissions limitations shall be treated as part of an emissions unit's design only if the limitations are representative of normal operations, of in the facility has provided offsets form previous permitting actions. If there are no enforceable limiting conditions, an emissions unit's potential to emit shall be limited to the unit's historic actual emissions. For a new emissions unit, historic potential emissions are equal to zero. For the purposes of the above determination, "normal operations" is defined as the usual or typical daily operating of an emissions unit resulting in actual emissions which are at least 80% of the specific limits contained in the emission unit's authority to construct or permit to operate.

Lake Tahoe air basin means that portion of Placer County within the drainage area naturally tributary to Lake Tahoe including said lake, plus that area in the vicinity of the head of the Truckee River described as follows (as established pursuant to section 39606 of the Health and Safety Code of the State of California and as described in Title 17, California Code of Regulations, section 60113 [b]): Commencing at the point common to the aforementioned drainage area crestline and the line common to Townships 15 North and 16 North, Mount Diablo Base and Meridian (M.D.B. & M.), and following that line in a westerly direction to the northwest corner of section 3, Township 15 North, Range 16 East, (M.D.B. & M.), thence south along the west line of Sections 3 and 10, Township 15 North, Range 16 East, M.D.B. & M., to the intersection with the drainage crestline, thence following the said drainage area boundary in a southwesterly, then northeasterly, direction to and along the Lake Tahoe Dam, thence following the said drainage area crestline in a northeasterly, then northwesterly, direction to the point of beginning. This Lake Tahoe Air Basin is delineated on an official map on file at the California Air Resources Board Headquarters Office.

Major stationary source means any stationary source which emits or has the potential to emit 25 tons per year or more of NO_X or 25 tons per year or more of ROC. In addition, any physical change occurring at a stationary source not otherwise qualifying as a major stationary source, which would constitute a major stationary source by itself makes the source a major stationary source.

Major modification means a modification to a major stationary source which, when aggregated with all other increases in potential to emit over the period of five consecutive years before the application for modification, and including the calendar year of the most recent application, results in an increase in the potential to emit greater than 25 tons per year of NO_X or 25 tons per year of ROC.

Modification means any physical change, change in method of operation (including change in fuel characteristics), change in hours of operation, or change in production rate, which:

(1) For an emissions unit:

(i) Would necessitate a change in permit conditions; or

(ii) Is not specifically limited by a permit condition; or

(iii) Results in an increase, a decrease, or no change in emissions which are not subject to an emissions limitation.

(2) For a stationary source:

(i) Is a modification of its emissions unit; or

(ii) Is an addition of any new emissions unit.

The following shall not be considered a modification: a change in ownership; routine maintenance and repair; a reconstructed stationary source or emissions unit which shall be treated as a new stationary source or emissions unit, not as a modification; and the addition of a continuous emission monitoring system.

Mountain Counties air basin means (as established pursuant to Section 39606 of the Health and Safety Code of the State of California and as described in Title 17, California Code of Regulations, section 60111 [i]), all of Placer County except that portion included in the Lake Tahoe Air Basin, defined by 17 CCR 60113(b), and that portion included in the Sacramento Valley Air Basin, defined by 17 CCR 60106(k).

Non-permitted emissions means those emissions of an regulated pollutant which are not required to obtain a permit pursuant to this section. Non-permitted emissions may include emissions from mobile sources, indirect sources, and exempt equipment.

Nonattainment pollutant means any pollutant and its precursors that have been designated "nonattainment" by the EPA in the **Federal Register**.

Offset means the use of an emission reduction credit to compensate for an emission increase of an regulated pollutant from a new or modified source subject to the requirements of § 52.3001, New Source Review.

Permanent means only permanent reductions in emissions can be authorized as emission reduction credit. For stationary sources, permanence shall be assured for sources subject to federal requirements through federally enforceable changes in source permits.

PM_{10} means particulate matter with an aerodynamic diameter smaller than or equal to a nominal 10 microns as measured by an applicable reference test method or methods found acceptable by the EPA.

Portable equipment means equipment which is periodically relocated and is not operated more than a total of 180 days at any one location in the district within any continuous 12-month period.

Potential to emit means the maximum daily physical and operational design capacity to emit an air pollutant during each calendar quarter. Any limitation on the physical or operational design capacity, including emission control devices and restrictions on hours of operation, or on the type or amount of material combusted, stored, or processed, may be considered as part of the design only if the limitation, or the effect it would have on emissions, is incorporated into the Authority to Construct as an enforceable permit condition as daily emissions limitations. Fugitive emissions associated with the emissions unit or stationary source shall be included in the potential to emit of the emissions unit or stationary source.

Precursor means a pollutant that, when emitted into the atmosphere, may undergo either a chemical or physical change which then produces another pollutant for which an ambient air quality standard has been adopted, or

whose presence in the atmosphere will contribute to the violation of one or more ambient air quality standards. The following precursor-secondary air contaminant relationships shall be used for the purposes of this section, § 52.3001 and § 52.3002:

Precursor	Secondary air contaminant
Reactive organic compound.	(1) Photochemical oxidants (ozone). (2) Organic fraction of PM_{10}.
Nitrogen oxides	(1) Nitrogen dioxide. (2) Nitrate fraction of PM_{10}. (3) Photochemical oxidants (ozone).

Proposed emissions means emissions based on the potential to emit for the new or modified emissions unit.

Quantifiable means the ability to estimate emission reductions in terms of both their amount and characteristics. The same method of estimating emissions shall be used to quantify the emission levels before and after the reduction.

Quarterly means calendar quarters beginning in January, April, July, and October.

Quarterly emissions limitation means one or a combination of permit conditions specific to an emissions unit which restricts its maximum emissions, in pounds per quarter, at or below the emissions associated with the maximum design capacity. A quarterly emissions limitation must be:

(1) Contained in the latest Authority to Construct and contained in or enforceable by the latest Permit to Operate for the emission unit; and

(2) Enforceable on a quarterly basis.

Reactive organic compound means any compound containing carbon except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and halogenated hydrocarbons.

Real means actually occurring, implemented, and not artificially devised.

Reasonably available control technology (RACT) means the lowest emission limitation that a particular source is capable of meeting by the application of emission control technology that is reasonably available considering technical and economic feasibility. The criteria for RACT are specified in "California Clean Air Act Guidance for the Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology," California Air Resources Board, April 1990 and in the General Preamble to Title I, April 16, 1992.[45]

Reconstructed source means any stationary source or emissions unit undergoing physical modification where the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable, entirely new stationary source or emissions unit. Fixed capital cost means the capital that is needed to provide all the depreciable components. A reconstructed source shall be treated as a new stationary source or emissions unit.

Register means a document maintained pursuant to a district banking rule which records all ERC deposits, withdrawals, transfers, and transactions.

Regulated air pollutant means any pollutant that is emitted into or otherwise enters the ambient air, and for which the EPA has adopted an emission limit, standard, or other requirement. Regulated air pollutants include:

(1) Oxides of nitrogen and volatile organic compounds;

(2) Any pollutant for which a national ambient air quality standard has been promulgated pursuant to section 109 of the Clean Air Act;

(3) Any pollutant subject to a new source performance standard promulgated pursuant to section 111 of the Clean Air Act;

(4) Any ozone-depleting substance specified as a Class I (chlorofluorocarbons) or Class II (hydrofluorocarbons) substance pursuant to Title VI of the Clean Air Act;

(5) Any pollutant subject to a standard or requirement promulgated pursuant to section 112 of the Clean Air Act, including:

(i) Any pollutant listed pursuant to section 112(r) of the Clean Air Act (Prevention of Accidental Releases), which shall be considered a "regulated air pollutant" upon promulgation of the list.

(ii) Any hazardous air pollutant subject to a standard or other requirement promulgated by the EPA pursuant to section 112(d) or adopted by the district pursuant to 112(g) and (j) of the Clean Air Act which shall be considered a "regulated air pollutant" for all sources or categories of sources upon promulgation of the standard or requirement or 18 months after the standard or requirement was scheduled to be promulgated pursuant to section 112(e)(3) of the Clean Air Act.

(iii) Any HAP subject to a district case-by-case emissions limitation determination for a new or modified source, prior to the EPA promulgation or scheduled promulgation of an emissions limitation, which shall be considered a "regulated air pollutant" when the determination is made pursuant to section 112(g)(2) of the Clean Air Act. In case-by-case emissions limitation determinations, the HAP shall be considered a "regulated air pollutant" only for the individual source for which the emissions limitation determination was made.

Replacement equipment means:

(1) *Routine replacement*: The replacement or modification of emission units(s) where the replacement unit(s) serves the identical function as the unit(s) being replaced, and the maximum rating and the potential to emit any pollutant will not be greater from the new or modified emissions unit(s) than the replaced unit(s), when the emissions unit(s) is operated at the same permitted conditions. The EPA will determine, on a case-by-case basis, whether a project to replace an emissions unit in whole or part with functionally equivalent equipment is a routine repair, commonly made in the industry. Projects intended to extend the expected useful life of the unit may not be considered routine replacements.

(2) *Identical replacement*: The total or partial replacement of an emissions unit where the replacement is the same as the original unit in all respects except for serial number.

Responsible official means an individual with the authority to certify that a source complies with all applicable requirements, including the conditions of permits issued to sources. A "responsible official" means one of the following:

(1) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decisionmaking functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the EPA; or

(2) For a partnership or sole proprietorship, a general partner or the proprietor, respectively; or

[45] Proposed rule published in the **Federal Register** of April 16, 1992 (57 FR 13498).

(3) For a municipality, state, federal, or other public agency, either a principal executive officer or a ranking elected official; or

(4) For an acid rain unit subject to Title IV (Acid Deposition Control) of the Clean Air Act, the "responsible official" is the designated representative of that unit for any purposes under Title IV.

Sacramento Valley air basin means that portion of Placer County which lies west of Range 9 east, Mount Diablo Base and Meridian (M.D.B. & M.), as established pursuant to section 39606 of the Health & Safety Code of the State of California and as described in title 17, California Code of Regulations, § 60106(k).

Shutdown means the earlier of either the permanent cessation of emissions from a source or an emission unit or the surrender of that unit's or source's operating permit.

Startup means the setting in operation of a stationary source or emission unit for any purpose.

Stationary source (source or facility) means any building, structure, facility, or emissions unit which emits or may emit any regulated pollutant directly or as fugitive emissions.

(1) The terms "building," "structure," "facility," or "emissions unit" include all pollutant-emitting activities which:

(i) Belong to the same industrial grouping; and

(ii) Are located on one property or on two or more contiguous properties; and

(iii) Are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.

(2) Pollutant-emitting activities shall be considered as part of the same industrial grouping if:

(i) They belong to the same two-digit standard industrial classification code under the system described in the 1987 Standard Industrial Classification Manual; or

(ii) They are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material.)

(3) The emissions within district boundaries of cargo carriers associated with the stationary source shall be considered emissions from the stationary source to the extent that emission reductions from cargo carriers are proposed as offsets.

Surplus means emission reductions that are in excess of any emissions reduction which is:

(1) Required or encumbered by any laws, rules, regulations, agreements, or orders; or

(2) Attributed to a control measure noticed for workshop in the district, or proposed or contained in a State Implementation Plan or Federal Implementation Plan; or

(3) Proposed or contained in a district air quality attainment plan for attaining reductions required by the Clean Air Act.

Temporary source means emission sources such as pilot plants, and portable facilities that will be terminated or located outside the district after less than a cumulative total of 90 days of operation in any 12 continuous months, and the emissions resulting from the construction phase of a new source.

Title V permits means permits issued, denied, renewed, amended, or reopened pursuant to the Clean Air Act as amended in 1990 (42 U.S.C. 7401 *et seq.*), and 40 CFR part 70, "State Operating Permit Programs."

Total reduced sulfur compounds means the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide and dimethyl disulfide.

(c) *Standards.*

(1) *Authority to construct.* Any person building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance ROC or NO_X, shall obtain authorization for such construction from the EPA as specified in paragraph (e)(3) of this section, prior to beginning actual construction. An Authority to Construct shall remain in effect until it expires or the application is cancelled. An Authority to Construct shall expire no later than two years following the date of permit issuance, unless the applicant has commenced construction prior to that date. If the applicant has commenced construction, the Authority to Construct shall remain in effect for the life of the emissions unit(s), unless the EPA has taken action to modify or revoke it.

(i) An Authority to Construct shall be valid beyond two years if:

(A) Commencement of construction has occurred; and

(B) Construction is completed in a reasonable period of time, as determined by the EPA.

(ii) If a written request to extend the Authority to Construct is received by the EPA prior to the expiration of the Authority to Construct, an extension may be granted for up to two years at the discretion of the EPA.

(iii) The EPA shall be notified of the anticipated date of initial startup or operation of any permitted article, machine, equipment or other contrivance. Such notice shall be made no less than 30 days prior to the startup date.

(iv) The EPA shall be notified of the actual date of initial startup within five days after such date.

(2) *Standards for granting applications.*

(i) The EPA shall deny an Authority to Construct except as provided in § 52.3001, New Source Review, if the applicant does not show that every article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, is so designed, controlled, equipped, and operated with such air pollution control equipment that it may be shown to operate without emitting or without causing to be emitted air contaminants in violation of these rules and regulations or of such state or federal statutes as may be enforceable by the EPA on the date the application is deemed complete.

(ii) The EPA shall require enforceable emission limitations as permit conditions in Authorities to Construct to assure compliance with all analyses performed for the issuance of the permit, including the permanence of surplus actual emissions reductions applied for use as internal reductions or authorized emission reduction credits in accordance with § 52.3001, New Source Review, and § 52.3002, Emissions Reduction Credit Authorization.

(iii) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable requirements, including applicable provisions of the California State Implementation Plan or any applicable Federal Implementation Plan, district rules and regulations, or state or federal law.

(3) *Provision of sampling and testing facilities.* In addition to the monitoring and testing required to comply with state or federal laws or regulations, the EPA may, upon reasonable written notice or before an Authority to Construct is granted, require the applicant or the owner or operator of any article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants, or the use of which may eliminate, reduce, or control the issuance of air contaminants to:

(i) Provide and maintain such facilities as are necessary for sampling and testing purposes in order to secure information that will disclose the nature, extent, quantity or degree of air contaminants discharged into the atmosphere from the equipment in question. In the event of such a requirement, the EPA shall notify the

applicant in writing of the required size, number and location of sampling holes; the size and location of the sampling platform; the access to the sampling platform; and the utilities for operating the sampling, testing, and air monitoring equipment. Such platform and access shall be constructed in accordance with the applicable General Industry Safety Orders of the State of California.

(ii) Provide and maintain sampling and monitoring apparatus to measure emissions of air contaminants when the EPA has determined that such apparatus is available and should be installed.

(A) Continuous emission monitoring systems at a minimum shall be installed when required, and to the performance specifications required by § 52.3001.

(B) A violation of emission standards of these rules, as shown by the stack-monitoring system, shall be reported by the owner or operator to the EPA within 96 hours, or such earlier time as may be required by any permit issued pursuant to this section.

(C) In the event of a breakdown of monitoring equipment, the owner or operator shall notify the EPA within 48 hours and shall initiate repairs. The owner or operator shall inform the EPA of the intent to shutdown any monitoring equipment at least 24 hours prior to the event.

(iii) If the EPA determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of a numerical emission standard infeasible, the EPA may instead prescribe a design, operational, or equipment standard. In such cases, the EPA may require the installation or modification of process monitoring devices such that the design characteristics or equipment will be properly maintained, or that the operational conditions will be properly performed, so as to continuously achieve the assumed degree of control. To the extent applicable, reporting requirements for process monitors shall be the same as for continuous emission monitoring systems.

(iv) A person operating or using a stack monitoring system shall, upon written notice from the EPA, provide a summary of the data obtained from such systems. This summary of the data shall be in the form and manner prescribed by the EPA. The summary of data shall be available for public inspection at the office of the Air Pollution Control District. Records from the monitoring equipment shall be kept by the owner or operator for a period of five years, during which time they shall be available to the EPA in such form as directed.

(5) *Transfer.* An Authority to Construct shall not be transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another. In the event any person contemplates or desires to make any such transfer as herein above described, said person shall make an application for authorization in accordance with paragraph (e)(3) of this section.

(6) *Performance testing.* Within 60 days after achieving the maximum production rate or the maximum rate of emissions to which the source is limited by enforceable conditions, but not later than 180 days after initial startup of such source, or as otherwise required by the EPA to determine continuous compliance with emission limitations or to confirm emission reductions claimed, the owner or operator of such source shall conduct performance test(s) in accordance with methods and under operating conditions as are approved by the EPA and furnish the EPA a written report of the results of such performance test(s).

(i) Such test(s) shall be at the expense of the owner or operator.

(ii) Testing shall be conducted with the source(s) of emissions operating at maximum capacity or other rate conforming to the maximum rate of emissions to which the source(s) are limited by enforceable condition(s).

(iii) The EPA may monitor such tests and may also conduct performance tests.

(iv) The owner or operator of a source shall provide the EPA 15 days prior notice of the performance test to afford the EPA the opportunity to have an observer present.

(v) The EPA may waive the requirement for performance tests if the owner or operator of a source has demonstrated by other means to the EPA's satisfaction that the source is being operated in compliance with all local, state and federal regulations which are part of the California State Implementation Plan or any applicable Federal Implementation Plan.

(d) *Exemptions.*

(1) *General.* The exemptions contained in this section shall not apply to an otherwise exempt piece of equipment which is part of a process that requires a permit. An Authority to Construct shall not be required for the equipment listed in paragraphs (d)(2) to (11) of this section unless an emissions unit is:

(i) Subject to New Source Performance Standards; or

(ii) Subject to National Emission Standards for Hazardous Air Pollutants; or

(iii) An emissions unit or stationary source for which emission reduction credits have been requested or granted in accordance with § 52.3002, Emissions Reduction Credit Authorization; or

(iv) Any emissions unit that, in combination with other emissions units at the source, would cause the source to exceed the offset trigger as specified in § 52.3001.

(2) *Vehicles.*

(i) Vehicles used to transport passengers or freight, but not including any article, machine, equipment or other contrivance mounted on such a vehicle that would otherwise require a permit under the provisions of this section and §§ 52.3001 and 52.3002.

(ii) Locomotives, airplanes and watercraft used to transport passengers or freight. This exemption shall not apply to equipment used for dredging of waterways or equipment used in pile driving adjacent to or in waterways, nor to the emissions from watercraft while docked at a stationary source.

(3) *Combustion and heat transfer equipment.*

(i) Internal combustion engines with a manufacturer's maximum continuous rating of 50 brake horsepower or less or gas turbine engines with a maximum heat input rate of 3,000,000 British Thermal Units (Btu) per hour or less at ISO standard day conditions (288 degrees Kelvin, 60% relative humidity, and 101.3 kilopascals pressure). The ratings of all engines or turbines used in the same process will be accumulated to determine whether this exemption applies.

(ii) Any combustion equipment that has a maximum heat input of less than 1,000,000 Btu per hour (gross) and is equipped to be fired exclusively with purchased quality natural gas, liquefied petroleum gas or any combination thereof. The ratings of all combustion equipment used in the same process will be accumulated to determine whether this exemption applies.

(4) *Residential structures.* Equipment utilized exclusively in connection with any structure, when the structure is designed for and used exclusively as a dwelling for not more than four families.

(5) *Plastics and ceramics processing.* Ovens, kilns, or furnaces fired by electricity used exclusively for the heating, curing, softening, or annealing of plastics or ceramics, and not emitting more than 5 pounds of volatile organic compound (VOC) emissions in any one day. These exemptions shall not apply

to ovens used for heating or curing of fiberglass reinforced plastics.

(6) *Storage and transfer.* Tanks, reservoirs, vessels or other containers and their associated dispensing, pumping and compression systems used exclusively for the storage of:

(i) Liquefied or compressed gases.

(ii) Unheated organic materials with an initial boiling point of 150°C (302°F) or greater, as determined by the testing procedure specified in paragraph (f)(1)(ii) of this section, or with an organic vapor pressure of 5 mm Hg (0.1 psia) or less at 20°C, as determined by the testing procedure specified in paragraph (f)(1)(iii) of this section.

(iii) Organic liquids with a vapor pressure of 77.5 mm Hg (1.5 psia) or less at 20°C, as determined by the testing procedure specified in paragraph (f)(1)(iii) of this section, having a capacity of 23,000 liters (6,076 gallons or less). Equipment used exclusively for the transfer of organic liquids with a vapor pressure of 77.5 mm Hg (1.5 psia) at 20°C to or from storage.

(iv) Unheated solvent dispensing containers of 380 liters (100 gallons) capacity or less.

(7) *Surface coating and preparation.*

(i) Water solution for surface preparation, cleaning, stripping, etching (other than chemical milling) or the electrolytic plating with electrolytic polishing of, or the electrolytic stripping of brass, bronze, cadmium, copper, iron, lead, nickel, tin, zinc, and precious metals.

(ii) Surface coating operations using a combined total of 1 gallon per day or less of coating material and solvent.

(iii) Unheated non-conveyorized solvent-rinsing containers or unheated non-conveyorized coating dip tanks of 380 liters (100 gallons) capacity or less.

(8) *Food processing.* The following processing equipment for food or other human consumables and exhaust systems or collectors serving exclusively such equipment used in:

(i) Eating establishments for the purpose of preparing food for human consumption.

(ii) Smokehouses in which the maximum horizontal inside cross-sectional area does not exceed 2 square meters (21.5 square feet).

(iii) Mixers and blenders used in bakeries.

(iv) Confection cookers.

(v) Grinding, blending or packaging tea, cocoa, spices, or roasted coffee.

(9) *Laboratory equipment.* Laboratory equipment used exclusively for chemical or physical analysis and bench-scale tests, including associated vacuum-producing equipment.

(10) *Repairs and maintenance.* Routine repairs or maintenance not involving changes to any equipment for which a permit has been granted under paragraph (c)(1) of this section.

(11) *Other equipment.* Other equipment authorized for exemption by the EPA and which would emit less than 2 pounds in any 24-hour period of any pollutants without the benefit of air pollution control devices.

(e) *Administrative requirements.*

(1) *Posting.* A person who has been granted a permit to operate any article, machine, equipment, or other contrivance described in paragraph (c)(1) of this section shall maintain a legible copy of said permit on the premises of the subject equipment. Other information, analysis, plans or specifications which disclose the nature, extent, quantity, or degree of air contaminants which are or may be discharged from such source shall be readily available for inspection by the EPA.

(2) *Altering of permit.* A person shall not willfully deface, alter, forge, counterfeit, or falsify an Authority to Construct any article, machine, equipment, or other contrivance described in paragraph (c)(1) of this section. A permit amendment or revision requested by the owner or operator, other than an administrative permit amendment or an amendment pursuant to paragraph (c)(1) of this section, shall require the filing of an application. For an administrative permit amendment, a responsible official may implement the change addressed in the written request immediately upon submittal of the request.

(i) After designating the permit revisions as an administrative permit amendment, the EPA may revise the permit without providing notice to the public or any affected state.

(ii) The EPA shall provide a copy of the revised permit to the responsible official.

(iii) While the EPA need not make a completeness determination on a written request, the EPA shall notify the responsible official if it determines that the permit can not be revised as an administrative permit amendment.

(3) *Applications.* An application for an Authority to Construct, Permit to Operate, change of ownership, or an application for a permit amendment, permit reopening, or revision shall be filed in the manner and form prescribed by the EPA, and shall give all the information necessary to enable the EPA to make the determinations required by paragraph (c)(2) of this section and § 52.3001, New Source Review.

(i) A responsible official representing the owner or operator shall certify the truth, accuracy and completeness of application forms.

(ii) When the information submitted with the application is insufficient for the EPA to make the determination required by paragraph (c)(2) of this section, § 52.3001, and any other applicable rule, regulation, or order, a responsible official shall supplement any complete application with additional information upon the written request of the EPA within the time frame specified by the EPA.

(iii) A responsible official shall promptly provide additional information in writing to the EPA upon discovery of submittal of any inaccurate information as part of the application or as a supplement thereto, or of any additional relevant facts previously omitted which are needed for accurate analysis of the application.

(iv) Intentional or negligent submittal of inaccurate information shall be reason for denial of an application.

(v) An application for an Authority to Construct, permit amendment or revision shall be accompanied by payment of the application filing fee as determined by the EPA.

(vi) An application for an Authority to Construct shall be accompanied by evidence of a sufficient number of authorized emission reduction credits, to meet any offset obligation in accordance with § 52.3001, New Source Review.

(4) *Action on applications.* The EPA shall notify the applicant in writing of its approval, conditional approval, suspension, or denial of the application for an Authority to Construct.

(i) In the event said notification or notification of application completeness pursuant to § 52.3001, New Source Review, is not received by the applicant within 30 days of the filing of the application, or within 30 days of providing further information as required by paragraph (e)(3) of this section, the applicant may, at his or her option, deem the application to construct denied.

(ii) Service of said notification may be made in person or by mail, and such service may be proved by the written acknowledgement of the person(s) served or affidavit of the person making the service.

(5) *Conditional approval.* The EPA may issue an Authority to Construct subject to conditions which will bring the operation of any article, machine, equipment or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, within the standards of paragraph (c)(2) of this

section. The conditions shall be specified in writing. Commencing work under such an Authority to Construct shall be deemed acceptance of all the conditions so specified. The EPA shall issue an Authority to Construct with revised conditions upon receipt of a new application, if the applicant demonstrates that the article, machine, equipment or other contrivance, the use of which may cause the issuance of air contaminants, can operate under the revised conditions within the standards of paragraph (c)(2) of this section.

(6) *Denial of application.* In the event of a denial of an Authority to Construct, the EPA shall notify the applicant in writing of the reasons therefore. Service of this notification may be made in person or by mail, and such service may be proved by the written acknowledgement of the person(s) served or affidavit of the person making the service. The EPA shall not accept a further application unless the applicant has complied with the objections specified by the EPA as his or her reasons for denial of the Authority to Construct.

(7) *Disclosure.* The EPA, at any time, may require from an applicant, or holder of any permit provided for in these rules and regulations, such information, analyses, plans, or specifications which will disclose the nature, extent, quality, or degree of air contaminants which are, or may be, discharged by the source for which the permit was issued or applied. A responsible official representing the owner or operator shall certify the truth, accuracy and completeness of disclosures. Studies necessary to provide such information shall be completed at the expense of the owner or operator of the source for which a permit was issued or applied.

(8) *Suspension.* The EPA may suspend a permit if a holder of such permit willfully fails and refuses to furnish information, analyses, plans, and specifications, within a reasonable time, as requested by the EPA pursuant to any law, rule, regulation, agreement, or order enforceable by the EPA. The EPA shall serve notice, in writing, of such suspension and the reasons therefore. Service of said notification may be made in person or by mail, and such service may be proved by the written acknowledgement of the persons served or affidavit of the person making the service. The permit shall be reinstated when the EPA is furnished with all requested information, analyses, plans, and specifications.

(9) *Cancellation of application.* An Authority to Construct application may be cancelled by the EPA:

(i) At the request of the applicant; or

(ii) If additional information has been requested of the applicant in accordance with paragraph (e)(3) of this section without the subsequent submittal of information within a reasonable time.

(f) *Monitoring and records.*

(1) *Testing procedures.*

(i) *General requirements.* Except as otherwise specified in the district rules and regulations, the State Implementation Plan, any applicable Federal Implementation Plan, any Authority to Construct issued pursuant to this section, testing methods for determining compliance with emission limits shall be:

(A) The appropriate methods of 40 CFR part 50, appendix M, Recommended Test Methods for State Implementation Plans; or

(B) Any appropriate method of 40 CFR part 60, appendix A, Test Methods; or

(C) An alternative method following review and approval of that method by the California Air Resources Board and EPA.

(ii) *Initial boiling point.* ASTM D–1078–86, "Test Method for Distillation Range of Volatile Organic Liquids."

(iii) *Vapor pressure.* ASTM D–2879–86, "Vapor Pressure-Temperature Relation and Initial Decomposition Temperature of Liquids by Isoteniscope."

(2) *Monitoring.* As applicable, each emission source subject to the requirements of paragraph (c)(1) of this section shall comply with the following monitoring requirements:

(i) The requirements of 40 CFR part 51, appendix P, *Minimum Emission Monitoring Requirements.*

(ii) The applicable federal requirements for monitoring of Title V of the Clean Air Act as amended (42 U.S.C. 7401 *et seq.*)

(3) *Recordkeeping.*

(i) The following records shall be maintained and provided to the EPA upon request.

(A) Emissions monitoring and process data records necessary for the determination and reporting of emissions, in accordance with applicable provisions of the applicable rules and regulations, shall be maintained. Records shall be kept for at least five years.

(B) Other records of the nature and amounts of emissions or any other information as may be deemed necessary by the EPA to determine whether the stationary source or emissions unit is in compliance with applicable emission limitations, credited emission reductions, exemptions from rule provisions, or other requirements. The information must include emission measurements, continuous emission monitoring system performance testing measurements, performance evaluations, calibration checks and adjustments, maintenance performed on such monitoring systems, and other records and reports required by 40 CFR part 51, appendix P, Minimum Emission Monitoring Requirements.

(C) Operation and maintenance plans shall be submitted to the district for all add-on capture and control equipment for review and approval by the EPA. Such plans shall demonstrate, though the use of specific recordkeeping requirements, continuous operation of the add-on control equipment when emission-producing operations are occurring. The plan shall also specify records to be kept to document the performance of required periodic maintenance. Records shall be consistent with compliance time frames and employ the most recent EPA recordkeeping guidance.

(D) The EPA may require monitoring or recordkeeping and may authorize inspections pursuant to Section 114 of the Clean Air Act and the regulations thereunder.

(E) All monitoring, reporting, inspection and compliance requirements authorized under the Clean Air Act shall apply.

(ii) The EPA may require recordkeeping to verify or maintain any exemption.

§ 52.3001 New source review (Sacramento).

(a) *Purpose.* The purpose of this section is to provide for the review of new and modified stationary air pollution sources and to provide requirements, including emission offsets, for issuing Authority to Construct permits for such sources without interfering with the attainment or maintenance of ambient air quality standards.

(b) *Applicability and exemptions.* This section shall apply to all new stationary sources and emissions units and all modifications to existing stationary sources and emissions units which, after construction, emit or have the potential to emit nitrogen oxides (NO_X) or reactive organic compounds (ROC). This section shall not apply to prescribed burning of forest, agriculture or range land; road construction or any non-point source common to timber harvesting or agricultural practices; open burning in accordance with the following district regulations:

District	Rule/Regulation
Feather River	
Sutter County	Rule 2.0.
Yuba County	Rule 2.0.
Yolo/Solano	Rule 2.8.
El Dorado	Regulation 3.
Placer	Regulation 3.
Sacramento	Regulation 5.

Exemptions allowed in this section shall not be used to exempt from permit requirements any stationary source or modification which would be subject to review under U.S. Environmental Protection Agency (EPA) regulations or review pursuant to the operating permit requirements of Title V of the Clean Air Act as amended in 1990 (42 U.S.C. 7401 *et seq.*) The regulations in effect at the time any application for an Authority to Construct is deemed complete shall apply.

(1) *Exemptions for emergency electrical generating equipment.* Except as otherwise required for sources subject to the requirements of Title V of the Clean Air Act as amended in 1990 (42 U.S.C. 7401 *et seq.*) the EPA shall exempt an application from the requirements of paragraphs (c)(2) and (3) of this section if the emissions unit would provide emergency electrical power or emergency water pumping for flood control or emergency fire fighting and is not a major source or major modification, provided the requirements of paragraphs (b)(1)(i) and (ii) of this section are met. This exemption shall not apply to emissions units supplying power to a serving utility for distribution on the electric transmission grid nor the operation of standby power sources due to a voluntary reduction in power by the serving utility.

(i) Operation for maintenance purposes of internal combustion engines used solely as a source of emergency electrical power, not otherwise exempt, shall be limited to 100 hours per year, and such maintenance shall be scheduled in cooperation with the district so as to have no adverse air quality impact or shall be mitigated by emission offsets or on-site reductions so that there is no net increase in emissions; and

(ii) Operation for other than maintenance purposes shall be limited to actual interruptions of electrical power by the serving utility. Operation shall not exceed 24 hours without prior authorization by the EPA.

(2) *Exemptions to notification requirements.* Except as otherwise required for sources subject to the requirements of Title V of the Clean Air Act as amended in 1990 (42 U.S.C. 7401 *et seq.*) the requirements of paragraphs (d)(3) through (6) of this section relating to notification, publication, and public inspection of preliminary decisions; and notification, publication, and public inspection of final action shall not apply if the application is for a new or modified stationary source whose emissions, calculated pursuant to paragraph (d)(12) or (13) of this section, are less than 2500 pounds per quarter of nitrogen oxides or reactive organic compounds.

(3) *Exemptions for relocated equipment.* The requirements of paragraphs (c)(2) and (3) of this section shall only apply once to relocation of emission units solely within the district and within the air basin of which the district is part, and the relocation does not result in an increase in emissions. This exemption requires the performance of an air quality analysis pursuant to paragraph (c)(5) of this section.

(4) *Exemptions for replacement equipment.* The requirements of paragraphs (c) (2) and (3) of this section shall not apply to replacement equipment, as defined in paragraph (b) of § 52.3000 General Permit Requirements, providing the replacement does not result in any emissions increase.

(5) *Exemptions for temporary sources.* The requirements of paragraphs (c) (2) and (3) of this section shall not apply to temporary stationary emission sources, emission units, and portable equipment which will be operated on a temporary basis. This exemption requires the performance of an air quality analysis pursuant to paragraph (c)(5) of this section.

(c) *Standards.*

(1) *Best Available Control Technology.* An applicant shall apply Best Available Control Technology to a new emissions unit or modification of an existing emissions unit, except cargo carriers, for each emissions change of NO_X or ROC which would create an increase in emissions, according to procedures specified in paragraph (d)(10) of this section, and the potential to emit of the new or modified emissions unit would equal or exceed the levels specified in this paragraph. In addition, BACT shall be applied to each source that applies for a major modification as defined and calculated in § 52.3000(b). A condition which reflects BACT in a manner consistent with testing procedures, such as ppmv NO_X, g/liter VOC, or lbs/hr, shall be contained in the latest Authority to Construct and Permit to Operate.

Pollutant	lb/day
Reactive organic compounds	10
Nitrogen oxides	10

(2) *General offset requirements*

(i) Applicants for major modifications to major sources of NO_X or ROC shall provide offsets for the affected pollutant, obtained pursuant to § 52.3002 Emissions Reduction Credit Authorization, in the amount calculated pursuant to paragraphs (d) (12) and (13) of this section.

(ii) An applicant shall provide offsets for the affected pollutant, obtained pursuant to § 52.3002 Emissions Reduction Credit Authorization, for new and modified sources where the cumulative emission changes of ROCs or NO_X calculated pursuant to paragraph (d)(11) of this section exceed the level specified in paragraph (c)(2)(ii) of this section. Sufficient offsets shall be provided, from the same calendar quarter as the emissions, to offset positive emissions changes of ROCs or NO_X calculated according to procedures specified in paragraph (d)(13) of this section. Facilities shall be required to curtail operations if sufficient offsets are not obtained as required by permit conditions. Offsets used to mitigate emission increases must be of the same pollutant. The facility is ultimately responsible for ensuring offsets.

Pollutant	Pounds per quarter
ROC	7,500
NO_X	7,500

(iii) In no case shall halogenated hydrocarbons be used as offsets for ROCs, nor shall exempt compounds or other compounds excluded from the definition of ROCs be used as offsets for ROCs.

(iv) Portable equipment shall be evaluated for offsets at the initial location only. In the event such portable equipment is shutdown, emission reduction credits shall be granted based on the emissions calculated at the initially permitted location. If operated a cumulative total of less than 90 days within a continuous 12-month period, at all locations within the same non-attainment designated area and in any air basin of which the district is a part, the portable equipment is considered a temporary source.

(v) Offsets can only come from regions with air quality classifications that are the same as or worse than those in which the emissions unit or stationary source that requires the offsets is located.

(3) *Location of offsets and offset ratios.*

(i) Except as provided in paragraphs (c)(3) (ii), (iii), (iv) and (v) of this section, an applicant shall provide offsets for emissions from a proposed stationary source subject to the requirements of paragraph (c)(2) of this section according to the following ratios and requirements as a minimum:

Location of offset	Offset ratio ROC and NO_X pollutants
Same source (see paragraph (c)(3)(iv) of this section).	1.3 to 1.0.
Within 15-mile radius and within the district.	1.3 to 1.0.
Within 15-mile radius outside the district, but within the same air basin.	1.3 to 1.0.
Greater than 15 miles but within 50-mile radius and within district.	2.0 to 1.0.
Greater than 15 miles but within 50-mile radius and outside the district, but within the same air basin.	2.1 to 1.0.
More than 50-mile radius and within the same air basin.	Greater than 2.1 to 1.0.

(ii) Offsets obtained from locations not satisfying the location criteria of paragraph (c)(3)(i) of this section shall be subject to an offset ratio of at least 1.3 to 1.0. An air quality analysis pursuant to paragraph (c)(5) of this section shall be performed. The EPA may impose, based on the air quality analysis, a higher offset ratio such that the new or modified stationary source will not prevent or interfere with the attainment or maintenance of any ambient air quality standard.

(iii) Offsets which are obtained pursuant to paragraphs (c)(2) and (c)(3) of this section and pursuant to permitting actions in a district other than that in which the proposed source is located may be used only if the EPA has reviewed the permit conditions issued by the other district in which the proposed offsets are obtained and certifies that the impacts of using such offsets meet the requirements of all applicable rules and regulations. Emission reduction credits used to offset project emissions in another district shall be implemented through an interdistrict agreement to ensure their enforceability and permanence.

(iv) Applicants providing internal offsets for major modifications at major sources of NO_X or ROCs must provide them at a 1.3 to 1 offset ratio.

(v) Offsets which are achieved from mobile emission reduction credits shall be subject to an offset ratio of 2.0 to 1.0.

(4) *Emission reductions, shutdowns, and curtailments.* Actual emission reductions from a shutdown or curtailment of permitted emission units may be credited for the purposes of banking and offsets pursuant to § 52.3002, Emissions Reduction Credit Authorization, provided:

(i) Application is made for emission reduction credits; and

(ii) The crediting and disbursement of emission reductions from source shutdowns and curtailments are in accordance with the most current EPA emissions trading policy and applicable federal regulations; and

(iii) Emissions decreases are ensured and documented by enforceable emission limitations contained in the Authority to Construct; or

(iv) Emissions decreases are ensured by the permanent surrender or cancellation of the Authority to Construct.

(5) *Ambient air quality standards.* In no case shall emissions from the new or modified stationary source prevent or interfere with the attainment or maintenance of any applicable ambient air quality standard. The EPA may require the use of an air quality model to estimate the effects of a new or modified stationary source. The analysis shall estimate the effects of a new or modified stationary source, and verify that the new or modified stationary source will not prevent or interfere with the attainment or maintenance of any ambient air quality standard. In making this determination, the EPA shall take into account the mitigation of emissions through offsets pursuant to this section and the impacts of transported pollutants on downwind pollutant concentrations. The EPA may impose, based on an air quality analysis, offset ratios greater than the requirements of paragraph (c)(3) of this section.

(6) *Denial, failure to meet standards.* The EPA shall deny any Authority to Construct if the EPA finds that the subject of the application would not comply with the standards set forth in federal rules or regulations. Stationary sources and emission units are required to curtail operations corresponding to the extent that required offsets are not obtained, or are not permanently maintainable. The owner or operator of the stationary source or emissions unit requiring offsets has the ultimate responsibility for ensuring that offsets are real, surplus, permanent, and quantifiable.

(7) *Alternative siting analysis.* By means of an analysis of alternative sites, sizes, production processes, and environmental control techniques for a new or modified stationary source, the owner or operator of the proposed stationary source or modification shall demonstrate to the satisfaction of the EPA that the benefits of the proposed source significantly outweigh the environmental and social costs incurred as a result of its location, construction, or modification. Whenever any proposed source or modification is subject to action by a state or federal agency that might necessitate the preparation of an environmental impact statement, which includes an alternative siting analysis, the EPA may accept the alternative sitings analysis prepared pursuant to that action to meet this requirement to the extent appropriate.

(d) *Administrative requirements.* The following administrative requirements shall apply to any activities regulated by this section.

(1) *Complete application.* The EPA shall determine whether the application is complete no later than 30 days after receipt of the application, or after such longer time period that the applicant and the EPA have agreed to in writing. If the EPA determines that the application is not complete, the applicant shall be notified in writing of the decision specifying the information required. Upon receipt of any re-submittal of the application, a new 30-day period to determine completeness shall begin. Completeness of an application or a re-submitted application shall be evaluated on the basis of the information requirements set forth in 40 CFR 70.5(c), Federal Operating Permit Program and the information required by this section. The EPA may, at any time during the processing of the application, request an applicant to clarify, amplify, correct, or otherwise supplement the information submitted in the application.

(2) *Air quality models.* All air quality models used for the purposes of this section shall be consistent with the requirements provided in the most recent edition of the EPA's "Guidelines on Air Quality Models, OAQPS 1.2–080," unless the EPA finds that such model is inappropriate for use. After making such a finding, the EPA may designate an alternate model only after allowing for public comment. Credit shall not be given for stacks higher than dictated by good engineering practice. All modeling costs associated with the siting of a stationary source shall be borne by the applicant.

(3) *Preliminary decision.* Except as provided in paragraph (b)(2) of this section, following acceptance of an application as complete, the EPA shall perform the evaluations required to determine compliance with all applicable requirements of this section

and make a preliminary written decision as to whether an Authority to Construct should be approved, conditionally approved, or denied. The decision shall be supported by a succinct written analysis.

(4) *Publication, public comment, and requests for public hearings.* Except as provided in paragraph (b)(2) of this section, within 10 calendar days following a preliminary decision pursuant to paragraph (c) of this section, the EPA shall publish, in at least one newspaper of general circulation in the district, a notice stating the preliminary decision of the EPA noting how the pertinent information can be obtained, and inviting written public comment for a 30-day period following the date of publication. The notice shall also provide that any interested person may submit a written request for a public hearing, and that such request must include a statement of the issues proposed to be raised in the hearing. If a written request for a public hearing is received during the public comment period, the EPA shall use the procedures given at 40 CFR 124.12, Public Hearings, applicable to PSD permits, to grant or deny the request and to hold a public hearing.

(5) *Public inspection.* Except as provided in paragraph (b)(2) of this section, the EPA shall make available for public inspection, at the district's office and the Regional Office of the EPA, the information submitted by the applicant and the EPA's analysis no later than the date the notice of the preliminary decision is published pursuant to paragraph (d)(4) of this section. Information submitted that contains trade secrets shall be handled in accordance with the requirements of 40 CFR part 2.

(6) *Authority to Construct, final action.* Except as provided in paragraph (b)(2) of this section, the EPA shall provide written notice of the final action to the applicant, and shall make the notice and all supporting documents available for public inspection at the district's office and Regional Office of the EPA. Within 30 days after the final decision has been made on the authority to construct, the applicant or any person who filed comments of the preliminary determination, may petition the EPA to review any condition of the permit. Any person who failed to file comments on the preliminary decision, may petition for administrative review only on the changes from the preliminary to the final determination.

(7) *Requirements, authority to construct.*

(i) *General conditions.* As a condition for the issuance of an Authority to Construct, the EPA shall require that the emissions unit and stationary source, and any emissions units which provide offsets, be operated in the manner stated in the application in making the analysis required to determine compliance with this section, and as conditioned in the Authority to Construct.

(ii) *Emissions limitations.* All of the following emissions limitations shall be included in the Authority to Construct, if applicable:

(A) The Authority to Construct shall include emission limitations which reflect Best Available Control Technology. Such condition(s) shall be expressed in a manner consistent with testing procedures, such as ppmv NO_X, g/liter VOC, or lbs/hr.

(B) A quarterly emissions limitation for each affected pollutant for which offsets are being provided pursuant to paragraph (c)(2) of this section shall be contained in the Authority to Construct.

(C) A daily emission limitation shall be contained in the Authority to Construct when offsets are not being provided pursuant to paragraph (c)(2) of this section, or when required to be consistent with ambient air quality standards.

(iii) *Design, operational, or equipment standards.* If the EPA determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of a numerical emission standard infeasible, the EPA may instead prescribe a design, operational, or equipment standard. In such cases, the EPA shall make a best estimate as to the emission rate that will be achieved. Any permits issued without an enforceable numerical emission standard must contain enforceable conditions that assure that the design characteristics or equipment will be properly maintained, or that the operational conditions will be properly performed, so as to continuously achieve the assumed degree of control.

(iv) *Offsets.*

(A) Except as provided in paragraph (b) of this section, the operation of any emissions unit or stationary source which provides offsets shall be subject to enforceable permit conditions, containing specific emissions and operational limitations, to ensure that the emission reductions shall be provided in accordance with the provisions of this section and shall continue for the reasonably expected life of the proposed emissions unit or stationary source.

(B) Where the source of offsets is not required to obtain an Authority to Construct pursuant to § 52.3000, General Permit Requirements, and § 52.3002(c)(2), a legally binding contract shall be required between the applicant and the owner or operator of such source. Such contract, by its terms, shall be enforceable by the EPA. For such non-permitted sources, a source-specific SIP revision is required.

(C) An internal emission offset will be considered federally enforceable if it is made a SIP requirement by inclusion as a condition of the authority to construct.

(D) External offsets must be made enforceable either by revision of an offsetting source's Authority to Construct or by a SIP revision prior to the operation of the emissions unit.

(E) A violation of the emission limitation provisions of any contract pursuant to the above stipulations shall be a violation of this section by the applicant.

(F) The operation of any emissions unit or stationary source which uses offsets provided by another emissions unit or stationary source shall be subject to enforceable permit conditions, containing specific emissions and operational limits, to ensure that the emission reductions are used in accordance with the provisions of all applicable rules and shall continue for the reasonably expected life of the proposed emissions unit or stationary source.

(G) The permanence of emissions reductions may be demonstrated by federally enforceable changes in source permits to reflect a reduced level of allowable emissions.

(8) *Issuance, replacement unit.* Where a new or modified stationary source is, in whole or in part, a replacement for an existing stationary source on the same property, the EPA may allow a maximum of 90 days as a startup period for simultaneous operation of the existing stationary source and the new source or replacement.

(9) *Regulations in force.* An Authority to Construct shall be granted or denied based on Best Available Control Technology requirements and offset requirements of paragraphs (c)(1) and (c)(2) of this section in force on the date the application is deemed complete as defined in § 52.3000(b). In addition, the EPA shall deny an Authority to Construct for any new stationary source or modification, or any portion thereof, unless:

(i) The new source or modification, or applicable portion thereof, complies with the provisions of this section and all other applicable district rules and regulations; and

(ii) The owner or operator of the proposed new or modified source has certified that all existing major

stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in California which are subject to emission limitations are in compliance, or on an expeditious schedule for compliance, with all applicable emission limitations and standards.

(10) *Calculation of emissions—BACT.* The emissions change for a new or modified emissions unit shall be calculated by subtracting historic actual emissions from proposed emissions. Calculations shall be performed separately for each emissions unit for each calendar quarter.

(11) *Calculation of emissions—offsets trigger for ROC and NO_X.* The potential to emit for each calendar quarter for a stationary source shall be the sum of the potential to emit, including fugitive emissions, for all emissions units based on current Authority to Construct permits, information contained in current Permits to Operate, the pending application, and banked authorized emission reduction credits.

(12) *Calculation of emissions—offsets general.* The emissions change for a new or modified emissions unit shall be calculated by subtracting historic potential emissions from proposed emissions. Calculations shall be performed separately for each pollutant and each emissions unit for each calendar quarter. Negative emissions changes shall be processed under the procedures specified in § 52.3002, Emissions Reduction Credit Authorization.

(13) *Calculation of emissions—offsets required for ROC and NO_X.* The cumulative net emissions increase pursuant to paragraph (d)(12) of this section for a stationary source shall be the sum of emissions from each of the following for each calendar quarter expressed in terms of pounds per quarter.

(i) The potential to emit including associated fugitive emissions not previously offset, for all emissions units installed after September 21, 1993, based on current Authority to Construct permits, information contained in current Permits to Operate, and the pending application.

(ii) All emission increases, including associated fugitive emissions not previously offset, from the modification to emissions units installed before September 21, 1993, as determined by procedures specified in paragraph (d)(12) of this section. Any emissions increase represented by an Authority to Construct, which has been canceled by the EPA or has expired, shall not be included in the cumulative emissions increase calculation.

(e) *Fees.*

(1) The EPA will collect permit fees calculated in accordance with the fee requirements imposed in the district, not to exceed the costs to EPA to issue permits and administer the permit program.

(2) If this section is delegated, the delegated agency will collect fees calculated in accordance with the fee requirements imposed in the district. Upon delegation of any portion of this section, the EPA will cease to collect fees imposed in conjunction with that portion.

(f) *Monitoring and records.* The following records shall be maintained for five years and shall be provided to the EPA upon request.

(1) *Emergency electrical generating equipment.* Records of operation for maintenance purposes, for actual interruptions of power.

(2) *Portable and temporary equipment.* Records of operating location and corresponding dates of operation.

§ 52.3002 Emissions reduction credit authorization (Sacramento).

(a) *Purpose.* To provide an administrative mechanism for authorizing surplus emission reductions for transfer to other sources as offsets pursuant to § 52.3001, New Source Review. Actual emission reductions certified in a district bank shall be reevaluated and authorized under the requirements and procedures specified in this section.

(b) *Applicability.* This section shall apply to all emissions reduction credits which are to be used for offsets pursuant to § 52.3001, New Source Review.

(c) *Standards.*

(1) *Authorization.* Only actual emission reductions shall become authorized ERCs. Such actual emission reductions shall meet the following requirements to be authorized as ERCs:

(i) Be certified in accordance with a district banking rule except as provided in paragraph (c)(3) of this section.

(ii) Receive written approval of the EPA, as described in paragraph (e)(4) of this section.

(iii) If the emission reduction is created from an emission unit where the demand for the services or product could shift to other similar sources in the district, submittal of data to document that such reductions will result in district-wide emission reductions may be required by the EPA. Such documentation must be approved by the EPA.

(iv) Emissions reductions shall be prescribed by enforceable emission limitations contained in Authority to Construct permits.

(2) *Non-permitted sources.* If state or federal law prohibits the permitting authority from requiring an Authority to Construct or a Permit to Operate pursuant to § 52.3000, General Permit Requirements, the applicant for authorized emission reduction credits shall execute a legally binding contract with one or more owner(s) or operator(s) of the non-permittable emissions unit that ensures the sum of all emission reductions will be provided in accordance with the requirements of this section, and will continue for the life of the stationary source using the credits or life of the credits as provided in the application. Such a contract shall be filed with the EPA and, by its terms, be enforceable by the EPA. In the absence of federally enforceable conditions, the execution of a source-specific SIP revision is required.

(3) *Certification of ERCs in the absence of a district banking rule.* If the applicable district does not have a banking rule, the EPA will certify the ERC in accordance with EPA's most recent emission trading policy.

(d) *Exemptions.* Concurrent stationary source modification: Concurrent reductions need not be authorized prior to use as offsets, if those reductions satisfy all criteria established by this section; § 52.3000, General Permit Requirements; and § 52.3001, New Source Review. For the purposes of this exemption, "concurrent stationary source modification" means the simultaneous modification of emission units and/or the addition of new emissions units to a stationary source with all emission reductions occurring after the issuance of the Authority to Construct authorizing such reductions, but before the start of operation of the new or modified emissions unit(s) with emission increases.

(e) *Administrative requirements.*

(1) *Procedures for authorization of ERCs.*

(i) Any person or entity, or an authorized agent, applying to use an ERC in accordance with § 52.3001, New Source Review, must submit a complete application for authorization of ERCs 60 days prior to submitting an Authority to Construct Application under § 52.3001.

(ii) The person or entity requesting ERC authorization shall submit an application on forms approved by the EPA.

(iii) Except as provided in paragraph (c)(3) of this section, the application must include an engineering evaluation and verification of district certification of the ERC and any other information necessary to calculate the emission

reductions as described in paragraph (e)(2) of this section. Documents submitted and received according to a district banking rule may be sufficient for the application for authorization.

(iv) Applicants may claim confidentiality for submitted information to the extent allowed and provided for by Federal Regulation at 40 CFR part 2.

(v) To verify emission reductions claimed in conjunction with an application for ERC authorization, the EPA may require source tests by approved methods, continuous monitoring, production records, fuel use records, or any other appropriate means.

(2) *General calculation of emission reductions.* The following procedures apply to the calculation of ERCs for all sources:

(i) Actual emission reductions from modifications to, or shutdowns of, existing emissions units shall be calculated for each calendar quarter by subtracting the proposed emissions from historical actual emissions. Any positive value shall qualify for conversion to an emission reduction credit.

(ii) Credits shall be quantified in terms of pounds of pollutants per quarter for each calendar quarter.

(iii) In addition to the criteria explained in the definition of Actual Emission Reductions above, actual emission reductions shall be adjusted to at least reflect those emission rates achievable with reasonably available control technology (RACT), or best available retrofit control technology (BARCT), or any requirement of federal or state implementation plan rules, whichever results in the greatest adjustment.

(iv) The EPA may adjust the credits to maintain any discounting by the district prior to district certification of the ERCs. Such discounting includes adjustments made by the district for deposit into a district priority reserve bank and reductions claimed by the district to meet any federal planning requirements.

(v) The original ERC Certificate should be surrendered prior to authorization of an ERC.

(3) *Notification.* Following the authorization of emission reduction credits, the EPA shall issue a Authorization Certificate to the owner(s) by certified mail or in person. The authorization certificate shall contain the following information:

(i) Authorization Certificate number;

(ii) Date of authorization which expires pursuant to paragraph (e)(6) of this section;

(iii) Street address and Application Number of the site creating the surplus emissions reductions for which the ERC Certificate is issued;

(iv) Signature of the responsible EPA official;

(v) The name of the owner, typed on the certificate, and the owner's signature. If the owner is a public or private business entity, a person authorized to sign on behalf of the owner shall sign the certificate;

(vi) The life of the credit specifying the date and duration (and time of year, for seasonal emissions reductions) of the expected reduction;

(vii) Conditions of operation or use, including restrictions on the use of the reductions (e.g., on site only, replacement equipment only, seasonal equipment only, etc.), and current rules which affect the value of the ERCs; and

(viii) The mechanism by which the credit was created (e.g., shutdown, installation of Flue Gas Recirculation system, 1D/3D cyclone, etc.).

(4) *Registration.* When an Authority to Construct permit using authorized emission reduction credits has been issued, the following information shall be entered in the register:

(i) All information required in paragraph (e)(3) of this section except the information in paragraph (e)(3)(v) of this section, which can not be entered into the register;

(ii) Date that the Authorized ERC Certificate was surrendered to the EPA;

(iii) Permit numbers to which ERCs are being applied;

(iv) Name and address of ERC user;

(v) Name (if any), address, and application number of site where ERCs are being used as offsets; and

(vi) Number of ERCs being used for offsets.

(5) *Public inspection.* The information entered in the register pursuant to paragraph (e)(4) of this section shall be available for public inspection at the EPA Region IX office after the date of use of authorized ERCs as offsets. In addition, all such information shall be transmitted to the district, the California Air Resources Board, and (for trades proposed within 100 km of a Class I area, or for trades more than 100 km from a Class I area that might reasonably be anticipated to impact such area) the appropriate Federal Land Manager.

(6) *Expiration of authorization.* If an Authority to Construct permit is not granted within one year of the authorization of an ERC, the ERC will lose its authorized status and must reapply for authorization when a source again applies to use the ERC.

(7) *Moratorium.* If the EPA determines that additional emission reductions are necessary, a moratorium on authorizations of ERCs may be imposed. Prior to imposing a moratorium, the EPA shall provide notice to holders of ERCs and other interested parties and a 30-day opportunity for public comment on the proposed issuance of a moratorium. The moratorium shall be lifted upon determination by the EPA that additional emission reductions are not necessary.

Appendix A to Subpart GGG of Part 52—Counties, Partial Counties, and ZIP Codes for Partial Counties Included in the I/M Program

(I) Counties in which the entire county is in the program: Los Angeles, Orange, Sacramento, Solano, Sutter, Ventura, Yolo.

(II) Counties in which a portion of the county is in the program:

El Dorado, Placer, Riverside, San Bernardino.

(III) ZIP Codes for partial counties in the program:

El Dorado County

95613–95614	95651	95684
95619	95656	95709
95623	95664	95720–95721
95630	95667	95725–95727
95633–95636	95672	95735
95643	95682	

Placer County

95603–95604	95663	95713–95715
95631	95677–95678	95717
95648	95681	95722
95650	96701	95736
95658	95703–95704	95746
95661		

Riverside County

91718–91720	92282	92562
91752	92320	92563
91760	92340	92564
92201	92501–92523	92567
92202	92530	92570
92210	92532	92571
92220	92536	92572
92223	92539	92581
92230	92543	92582
92234	92544	92583
92236	92545	92585
92240	92546	92588
92253–92254	92548	92590
92257–92258	92549	92591
92260–92264	92553	92592
92270	92555	92595
92274	92557	92596
92276	92561	

San Bernardino County

91701	92304–92305	92368–92369
91708–91710	92307–92312	92371–92378
91729–91730	92314–92319	92382
91739	92321–92322	92385–92386
91743	92324–92327	92391–92392
91759	92329	92394
91761–91764	92333–92336	92397–92399
91785–91786	92338–92339	92401–92418
92252	92341–92342	92423
92256	92345–92347	92427
92268	92352	93516
92277–92278	92354	93558
92284–92286	92356–92359	93562
92301	92365	

Appendix B to Subpart GGG of Part 52—Start-up and Final IM240 Cutpoints for Light- and Heavy-Duty Vehicles for the California FIP

Start-up Standards. The following standards shall be used during calendar years 1997 and 1998:

LIGHT DUTY VEHICLES

Model Years	HC		CO		NO_x	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
All LEVs	0.80	0.50	15.0	12.0	2.0	(Reserved).
1994+ Tier 1	0.80	0.50	15.0	12.0	2.0	Do.
1991–95 Tier 0	1.20	0.75	20.0	16.0	2.5	Do.
1983–90	2.00	1.25	30.0	24.0	3.0	Do.
1981–82	2.00	1.25	60.0	48.0	3.0	Do.
1980	2.00	1.25	60.0	48.0	6.0	Do.
1977–79	7.50	5.00	90.0	72.0	6.0	Do.
1975–76	7.50	5.00	90.0	72.0	9.0	Do.
1973–74	10.00	6.00	150.0	120.0	9.0	Do.
1968–72	10.00	6.00	150.0	120.0	10.0	Do.

LIGHT DUTY TRUCKS 1 (LESS THAN 6000 POUNDS GVWR)

Model years	HC		CO		NO_x	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1994+ Tier 1 and all LEVs:						
(≤3750 LVW)	0.80	0.50	15.0	12.0	2.0	(Reserved).
(>3750 LVW)	1.00	0.63	20.0	16.0	2.5	Do.
1991–95 Tier 0	2.40	1.50	60.0	48.0	3.0	Do.
1988–90	3.20	2.00	80.0	64.0	3.5	Do.
1984–87	3.20	2.00	80.0	64.0	7.0	Do.
1979–83	7.50	5.00	100.0	80.0	7.0	Do.
1975–78	8.00	5.00	120.0	96.0	9.0	Do.
1973–74	10.00	6.00	150.0	120.0	9.0	Do.
1968–72	10.00	6.00	150.0	120.0	10.0	Do.

LIGHT DUTY TRUCKS 2 (GREATER THAN 6000 POUNDS GVWR)

Model years	HC		CO		NO_x	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1994+ Tier a and all LEVs:						
(≤5750 LVW)	1.00	0.63	20.0	16.0	2.5	(Reserved).
(>5750 LVW)	2.40	1.50	60.0	48.0	4.0	Do.
1991–95 Tier 0	2.40	1.50	60.0	48.0	4.5	Do.
1988–90	3.20	2.00	80.0	64.0	5.0	Do.
1984–87	3.20	2.00	80.0	64.0	7.0	Do.
1979–83	7.50	5.00	100.0	80.0	7.0	Do.
1975–78	8.00	5.00	120.0	96.0	9.0	Do.
1973–74	10.00	6.00	150.0	120.0	9.0	Do.
1968–72	10.00	6.00	150.0	120.0	10.0	Do.

HEAVY-DUTY TRUCK STANDARDS

Model years	HC		CO		NO_x	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1998+	2.00	1.30	30.0	24.0	4.0	(Reserved).
1991–1997	3.00	1.90	60.0	48.0	6.0	Do.
1987–1990	3.00	1.90	60.0	48.0	8.0	Do.
1985–1986	5.00	3.10	75.0	60.0	8.0	Do.
1979–1984	6.00	3.80	100.0	80.0	8.0	Do.
1974–1978	10.00	6.30	150.0	120.0	10.0	Do.

HEAVY-DUTY TRUCK STANDARDS—Continued

Model years	HC		CO		NO_x	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1970–1973	10.00	6.30	175.0	140.0	10.0	Do.
pre-1970	20.00	12.50	200.0	160.0	15.0	Do.

Second-Cycle Standards. The following exhaust emissions standards, in grams per mile, shall be used for vehicles tested in calendar years 1999 and 2000:

LIGHT DUTY VEHICLES

Model years	HC		CO		NO_x	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
All LEVs	0.60	0.40	10.0	8.0	1.5	(Reserved).
1994+ Tier 1	0.60	0.40	10.0	8.0	1.5	Do.
1983–95 Tier 0	0.80	0.50	15.0	12.0	2.0	Do.
1981–82	0.80	0.50	30.0	24.0	2.0	Do.
1980	0.80	0.50	30.0	24.0	4.0	Do.
1977–79	3.00	2.00	65.0	52.0	4.0	Do.
1975–76	3.00	2.00	65.0	52.0	6.0	Do.
1973–74	7.00	4.50	120.0	96.0	6.0	Do.
1968–72	7.00	4.50	120.0	96.0	7.0	Do.

LIGHT DUTY TRUCKS 1 (LESS THAN 6000 POUNDS GVWR)

Model years	HC		CO		NO_x	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1994+ Tier 1 and all LEVs:						
(≤3750 LVW)	0.60	0.40	10.0	8.0	1.5	(Reserved).
(>3750 LVW)	0.80	0.50	13.0	10.0	1.8	Do.
1988–95 Tier 0	1.60	1.00	40.0	32.0	2.5	Do.
1984–87	1.60	1.00	40.0	32.0	4.5	Do.
1979–83	3.40	2.00	70.0	56.0	4.5	Do.
1975–78	4.00	2.50	80.0	64.0	6.0	Do.
1973–74	7.00	4.50	120.0	96.0	6.0	Do.
1968–72	7.00	4.50	120.0	96.0	7.0	Do.

LIGHT DUTY TRUCKS 2 (GREATER THAN 6000 POUNDS GVWR)

Model years	HC		CO		NO_x	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1994+ Tier 1 and all LEVs:						
(≤5750 LVW)	0.80	0.50	13.0	10.0	1.8	(Reserved).
(>5750 LVW)	0.80	0.50	15.0	12.0	2.0	Do.
1988–95 Tier 0	1.60	1.00	40.0	32.0	3.5	Do.
1984–87	1.60	1.00	40.0	32.0	4.5	Do.
1979–83	3.40	2.00	70.0	56.0	4.5	Do.
1975–78	4.00	2.50	80.0	64.0	6.0	Do.
1973–74	7.00	4.50	120.0	96.0	6.0	Do.
1968–72	7.00	4.50	120.0	96.0	7.0	Do.

HEAVY-DUTY TRUCKS

Model years	HC		CO		NO_x	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1998+	2.00	1.30	30.0	24.0	4.0	(Reserved).
1991–97	2.00	1.30	40.0	32.0	5.0	Do.
1987–90	2.00	1.30	40.0	32.0	6.0	Do.
1985–86	3.00	1.90	50.0	40.0	6.0	Do.
1979–84	5.00	3.10	75.0	60.0	6.0	Do.
1974–78	10.00	6.30	150.0	120.0	10.0	Do.
1970–73	10.00	6.30	175.0	140.0	10.0	Do.
pre-1970	20.00	12.50	200.0	160.0	15.0	Do.

Final Standards. The following exhaust emissions standards, in grams per mile, shall be used for vehicles tested in calendar years 2001 and later:

LIGHT DUTY VEHICLES

Model years	HC		CO		NO_X	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
All LEVs	0.60	0.40	10.0	8.0	1.5	(Reserved).
1994+ Tier 1	0.60	0.40	10.0	8.0	1.5	Do.
1983–95 Tier 0	0.60	0.40	10.0	8.0	1.5	Do.
1981–82	0.60	0.40	10.0	8.0	1.5	Do.
1980	0.80	0.50	30.0	24.0	4.0	Do.
1977–79	3.00	2.00	65.0	52.0	4.0	Do.
1975–76	3.00	2.00	65.0	52.0	6.0	Do.
1973–74	7.00	4.50	120.0	96.0	6.0	Do.
1968–72	7.00	4.50	120.0	96.0	7.0	Do.

LIGHT DUTY TRUCKS 1 (LESS THAN 6000 POUNDS GVWR)[a]

Model years	HC		CO		NO_X	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1994+ Tier 1 and all LEVs:						
(≤3750 LVW)	0.60	0.40	10.0	8.0	1.5	(Reserved).
(>3750 LVW)	0.80	0.50	13.0	10.0	1.8	Do.
1988–95 Tier 0	1.60	1.00	40.0	32.0	2.5	Do.
1984–87	1.60	1.00	40.0	32.0	4.5	Do.
1979–83	3.40	2.00	70.0	56.0	4.5	Do.
1975–78	4.00	2.50	80.0	64.0	6.0	Do.
1973–74	7.00	4.50	120.0	96.0	6.0	Do.
1968–72	7.00	4.50	120.0	96.0	7.0	Do.

[a] The final cutpoints for LDT1, LDT2, and Heavy-duty trucks have not been modified from the second-cycle for those vehicles.

LIGHT DUTY TRUCKS 2 (GREATER THAN 6000 POUNDS GVWR)

Model years	HC		CO		NO_X	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1994+ Tier 1 and all LEVs:						
(<5750 LVW)	0.80	0.50	13.0	10.0	1.8	(Reserved).
(≤5750 LVW)	0.80	0.50	15.0	12.0	2.0	Do.
1988–95 Tier 0	1.60	1.00	40.0	32.0	3.5	Do.
1984–87	1.60	1.00	40.0	32.0	4.5	Do.
1979–83	3.40	2.00	70.0	56.0	4.5	Do.
1975–78	4.00	2.50	80.0	64.0	6.0	Do.
1973–74	7.00	4.50	120.0	96.0	6.0	Do.
1968–72	7.00	4.50	120.0	96.0	7.0	Do.

HEAVY-DUTY TRUCKS

Model years	HC		CO		NO_X	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1998+	2.00	1.30	30.0	24.0	4.0	(Reserved).
1991–97	2.00	1.30	40.0	32.0	5.0	Do.
1987–90	2.00	1.30	40.0	32.0	6.0	Do.
1985–86	3.00	1.90	50.0	40.0	6.0	Do.
1979–84	5.00	3.10	75.0	60.0	6.0	Do.
1974–78	10.00	6.30	150.0	120.0	10.0	Do.
1970–73	10.00	6.30	175.0	140.0	10.0	Do.
pre-1970	20.00	12.50	200.0	160.0	15.0	Do.

PART 81—[AMENDED]

27. The authority citation for part 81 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

28. Section 81.305 is proposed to be amended in the table for California—Ozone by revising the entry for "Sacramento Metro Area" to read as follows:

§ 81.305 California—

* * * * *

CALIFORNIA—OZONE

Designated area	Designation		Classification	
	Date[1]	Type	Date[1]	Type
*	*	*	*	*
Sacramento Metro Area	[Insert date 30 days from date of publication of final rule].	Non-attainment .	[Insert date 30 days from date of publication of final rule].	Severe.

[1] This date is November 15, 1990, unless otherwise noted.

[FR Doc. 94–9963 Filed 5–4–94; 8:45 am]
BILLING CODE 6560–50–P

federal register

Thursday
May 5, 1994

Part III

United States Sentencing Commission

Submission to Congress of Amendments to the Sentencing Guidelines; Notices

UNITED STATES SENTENCING COMMISSION

Amendments to the Sentencing Guidelines for United States Courts

AGENCY: United States Sentencing Commission.

ACTION: Notice of submission to Congress of amendments to the sentencing guidelines.

SUMMARY: Pursuant to its authority under section 994(p) of title 28, United States Code, the Commission on April 28, 1994, submitted to the Congress amendments to the sentencing guidelines, policy statements, and official commentary together with reasons for the amendments.

DATES: Pursuant to 28 U.S.C. 994(p), as amended by section 7109 of the Anti-Drug Abuse Act of 1988 (Pub. L. 100–690, Nov. 18, 1988), the Commission has specified an effective date of November 1, 1994, for these amendments. Comments regarding amendments that the Commission should specify for retroactive application to previously sentenced defendants should be received no later than June 30, 1994.

ADDRESSES: Comments should be sent to: United States Sentencing Commission, One Columbus Circle, N.E., Suite 2–500, South Lobby, Washington, DC 20002–8002, Attn: Public Information.

FOR FURTHER INFORMATION CONTACT: Mike Courlander, Public Information Specialist, telephone: (202) 273–4590.

SUPPLEMENTARY INFORMATION: The United States Sentencing Commission, an independent agency in the judicial branch of the U.S. Government, is empowered by 28 U.S.C. 994(a) to promulgate sentencing guidelines and policy statements for federal sentencing courts. The statute further directs the Commission to review periodically and revise guidelines previously promulgated and authorizes it to submit guideline amendments to the Congress no later than the first day of May each year. See 28 U.S.C. 994(o), (p). Absent action of Congress to the contrary, the amendments become effective on the date specified by the Commission (i.e., November 1, 1994) by operation of law.

Notice of the amendments submitted to the Congress on April 28, 1994, was published in the **Federal Register** of December 21, 1993 (58 FR 67521). A public hearing on the proposed amendments was held in Washington, DC, on March 24, 1994. After review of the hearing testimony and additional public comment, the Commission promulgated the amendments, each having been approved by at least four voting Commissioners.

In connection with its ongoing process of guideline review, the Commission welcomes comment on any aspect of the sentencing guidelines, policy statements, and official commentary. Specifically, the Commission solicits comment on which, if any, of the amendments submitted to the Congress that may result in a lower guideline range should be made retroactive to previously sentenced defendants under Policy Statement 1B1.10.

Authority: 28 U.S.C. 994(a), (o), (p); sec. 7109 of the Anti-Drug Abuse Act of 1988 (Pub. L. 100–690).

William W. Wilkins, Jr.,
Chairman.

Amendments to the Sentencing Guidelines

Pursuant to section 994(p) of title 28, United States Code, as amended by section 7109 of the Anti-Drug Abuse Act of 1988 [Pub. L. 100–690, Nov. 18, 1988, the United States Sentencing Commission reports to the Congress the following amendments to the sentencing guidelines, and the reasons therefor. As authorized by this section, the Commission specifies an effective date of November 1, 1994, for these amendments.

Policy Statements, and Official Commentary

1. Amendment: The Commentary to § 1B1.3 captioned "Application Notes" is amended in Note 2 by inserting the following additional paragraph as the eighth paragraph:

"A defendant's relevant conduct does not include the conduct of members of a conspiracy prior to the defendant's joining the conspiracy, even if the defendant knows of that conduct (e.g., in the case of a defendant who joins an ongoing drug distribution conspiracy knowing that it had been selling two kilograms of cocaine per week, the cocaine sold prior to the defendant's joining the conspiracy is not included as relevant conduct in determining the defendant's offense level). The Commission does not foreclose the possibility that there may be some unusual set of circumstances in which the exclusion of such conduct may not adequately reflect the defendant's culpability; in such a case, an upward departure may be warranted.".

The Commentary to § 1B1.3 captioned "Application Notes" is amended in Note 9(B) by deleting "and the time interval between offenses" and inserting in lieu thereof:

", the regularity (repetitions) of the offenses, and the time interval between the offenses. When one of the above factors is absent, a stronger presence of at least one of the other factors is required. For example, where the conduct alleged to be relevant is relatively remote to the offense of conviction, a stronger showing of similarity or regularity is necessary to compensate for the absence of temporal proximity.".

Reason for Amendment: This amendment clarifies the operation of § 1B1.3 (Relevant Conduct) with respect to the defendant's accountability for the actions of other conspirators prior to the defendant's joining the conspiracy. The amendment is in accord with the rule stated in recent caselaw. See, e.g., United States v. Carreon, 11 F.3d 1225 (5th Cir. 1994); United States v. Petty, 982 F.2d 1374, 1377 (9th Cir. 1993); United States v. O'Campo, 973 F.2d 1015, 1026 (1st Cir. 1992). Cf. United States v. Miranda-Ortiz, 926 F.2d 172, 178 (2d Cir. 1991); United States v. Edwards, 945 F.2d 1387, 1393 (7th Cir. 1991)) (applying earlier versions of § 1B1.3). By expressly addressing this issue, this amendment will ensure consistency in guideline interpretation. In addition, this amendment adds a well-phrased formulation developed by the Ninth Circuit in United States v. Hahn, 960 F.2d 903 (9th Cir. 1992), to the commentary addressing the circumstances in which multiple acts constitute the "same course of conduct.".

2. Amendment: Section 1B1.10(a) is amended by deleting "guidelines" and inserting in lieu thereof "Guidelines Manual", by deleting "may be considered" and inserting in lieu thereof "is authorized", by inserting "and thus is not authorized" immediately following "policy statement", and by deleting "subsection (d)" wherever it appears and inserting in lieu thereof in each instance "subsection (c)".

Section 1B1.10(b) is amended by inserting ", and to what extent," immediately before "a reduction", and by deleting "originally imposed had the guidelines, as amended, been in effect at that time" and inserting in lieu thereof "imposed had the amendment(s) to the guidelines listed in subsection (c) been in effect at the time the defendant was sentenced".

Section 1B1.10 is amended by deleting subsection (c), and by redesignating subsection (d) as subsection (c).

The Commentary to § 1B1.10 captioned "Application Note" is amended by deleting "Note" and

inserting in lieu thereof "Notes", and by deleting Note 1 and inserting in lieu thereof:

"1. Eligibility for consideration under 18 U.S.C. 3582(c)(2) is triggered only by an amendment listed in subsection (c) that lowers the applicable guideline range.

2. In determining the amended guideline range under subsection (b), the court shall substitute only the amendments listed in subsection (c) for the corresponding guideline provisions that were applied when the defendant was sentenced. All other guideline application decisions remain unaffected.".

The Commentary to § 1B1.10 captioned "Background" is amended in the last paragraph by deleting "subsection (d)" and inserting in lieu thereof "subsection (c)".

Reason for Amendment: This amendment revises § 1B1.10 to substantially simplify its operation. Under this amendment, the court will recalculate the guideline range using only those amendments expressly designated as retroactive. In addition, this amendment deletes current § 1B1.10(c), a rather complex subsection, as an unnecessary restriction on the court's consideration of a revised sentence in response to an amended guideline range. Finally, this amendment makes a number of minor clarifying revisions.

3. Amendment: Section 2D1.1(c) is amended by deleting subdivisions 1–3, by renumbering subdivisions 4–19 as 2–17, and by inserting the following as subdivision 1:

"(1) 30 KG or more of Heroin (or the equivalent Level 38 amount of other Schedule I or II Opiates);
150 KG or more of Cocaine (or the equivalent amount of other Schedule I or II Stimulants);
1.5 KG or more of Cocaine Base;
30 KG or more of PCP, or 3 KG or more of PCP (actual);
30 KG or more of Methamphetamine, or 3 KG or more of Methamphetamine (actual), or 3 KG or more of 'Ice';
300 G or more of LSD (or the equivalent amount of other Schedule I or II Hallucinogens);
12 KG or more of Fentanyl;
3 KG or more of a Fentanyl Analogue;
30,000 KG or more of Marihuana;
6,000 KG or more of Hashish;
600 KG or more of Hashish Oil.".

The Commentary to § 2D1.1 captioned "Application Notes" is amended in Note 16 by deleting "40" and inserting in lieu thereof "38", by deleting "35" wherever it appears and inserting in lieu thereof in each instance "33", and by deleting "4 levels" and inserting in lieu thereof "2 levels".

The Commentary to § 2D1.6 captioned "Application Note" is amended in Note 1 by deleting "(§ 2D1.1(c)(16))" and inserting in lieu thereof "(§ 2D1.1(c)(14))", and by deleting "(§ 2D1.1(c)(19))" and inserting in lieu thereof "(§ 2D1.1(c)(17))".

Reason for Amendment: This amendment sets the upper limit of the Drug Quantity Table in § 2D1.1 at level 38. The Commission has determined that the extension of the Drug Quantity Table above level 38 for quantity itself is not required to ensure adequate punishment given that organizers, leaders, managers, and supervisors of such offenses will receive a 4-, 3-, or 2-level enhancement for their role in the offense, and any participant will receive an additional 2-level enhancement if a dangerous weapon is possessed in the offense.

4. Amendment: The Commentary to § 4B1.1 captioned "Application Notes" is amended in Note 2 by deleting the first sentence and inserting in lieu thereof:

"'Offense Statutory Maximum,' for the purposes of this guideline, refers to the maximum term of imprisonment authorized for the offense of conviction that is a crime of violence or controlled substance offense, not including any increase in that maximum term under a sentencing enhancement provision that applies because of the defendant's prior criminal record (such sentencing enhancement provisions are contained, for example, in 21 U.S.C. 841(b)(1)(A), (b)(1)(B), (b)(1)(C), and (b)(1)(D)). For example, where the statutory maximum term of imprisonment under 21 U.S.C. § 841(b)(1)(C) is increased from twenty years to thirty years because the defendant has one or more qualifying prior drug convictions, the 'Offense Statutory Maximum' for the purposes of this guideline is twenty years and not thirty years.".

Reason for Amendment: This amendment defines the term "offense statutory maximum" in § 4B1.1 to mean the statutory maximum prior to any enhancement based on prior criminal record (i.e., an enhancement of the statutory maximum sentence that itself was based upon the defendant's prior criminal record would not be used in determining the offense level under this guideline). This rule avoids unwarranted double counting as well as unwarranted disparity associated with variations in the exercise of prosecutional discretion in seeking enhanced penalties based on prior convictions.

It is noted that when the instruction to the Commission that underlies § 4B1.1 (28 U.S.C. 994(h)) was enacted by the Congress in 1984, the enhanced maximum sentences provided for recidivist drug offenders (e.g., under 21 U.S.C. 841) did not exist.

5. Amendment: The Commentary to § 5G1.2 is amended in the fourth paragraph by deleting "3D1.2" and inserting in lieu thereof "3D1.1", and by inserting the following additional sentence at the end:

"Note, however, that even in the case of a consecutive term of imprisonment imposed under subsection (a), any term of supervised release imposed is to run concurrently with any other term of supervised release imposed. See 18 U.S.C. 3624(e).".

Reason for Amendment: This amendment revises the Commentary to § 5G1.2 to clarify that the Commission's interpretation is that 18 U.S.C. 3624(e) requires multiple terms of supervised release to run concurrently in all cases. This interpretation is in accord with the view stated in *United States* v. *Gullickson*, 982 F.2d 1231, 1236 (8th Cir. 1993). In contrast, two courts of appeals have cited the current commentary as supporting the view that, notwithstanding the language in 18 U.S.C. 3624(e) stating that terms of supervised release run concurrently, a court may order that supervised release terms run consecutively under certain circumstances. See *United States* v. *Shorthouse*, 7 F.3d 149 (9th Cir. 1993); *United States* v. *Maxwell*, 966 F.2d 545, 551 (10th Cir. 1992).

6. Amendment: The Introductory Commentary to Chapter Five, Part H, is amended in the second paragraph by inserting the following additional sentence at the end:

"Furthermore, although these factors are not ordinarily relevant to the determination of whether a sentence should be outside the applicable guideline range, they may be relevant to this determination in exceptional cases. See § 5K2.0 (Grounds for Departure).".

Section 5K2.0 is amended by inserting the following additional paragraph as the fourth paragraph:

"An offender characteristic or other circumstance that is not ordinarily relevant in determining whether a sentence should be outside the applicable guideline range may be relevant to this determination if such characteristic or circumstance is present to an unusual degree and distinguishes the case from the 'heartland' cases covered by the guidelines in a way that is important to the statutory purposes of sentencing.".

Section 5K2.0 is amended by inserting the following commentary at the end:

Commentary

The last paragraph of this policy statement sets forth the conditions under which an offender characteristic or other circumstance that is not ordinarily relevant to a departure from the applicable guideline range may be relevant to this determination. The Commission does not foreclose the possibility of an extraordinary case that, because of a combination of such characteristics or circumstances, differs significantly from the 'heartland' cases covered by the guidelines in a way that is important to the statutory purposes of sentencing, even though none of the characteristics or circumstances individually distinguishes the case. However, the Commission believes that such cases will be extremely rare.

In the absence of a characteristic or circumstance that distinguishes a case as sufficiently atypical to warrant a sentence different from that called for under the guidelines, a sentence outside the guideline range is not authorized. See 18 U.S.C. 3553(b). For example, dissatisfaction with the available sentencing range or a preference for a different sentence than that authorized by the guidelines is not an appropriate basis for a sentence outside the applicable guideline range.".

Reason for Amendment: This amendment provides guidance as to when an offender characteristic or other circumstance (or combination of such characteristics or circumstances) that is not ordinarily relevant to a determination of whether a sentence should be outside the applicable guideline range may be relevant to this determination. Such guidance should enhance consistency in decisions regarding guideline departures.

[FR Doc. 94–10782 Filed 5–4–94; 8:45 am]

BILLING CODE BAC2210–40–P

Reader Aids

Federal Register

Vol. 59, No. 86

Thursday, May 5, 1994

INFORMATION AND ASSISTANCE

Federal Register

Index, finding aids & general information	202–523–5227
Public inspection desk	523–5215
Corrections to published documents	523–5237
Document drafting information	523–3187
Machine readable documents	523–3447

Code of Federal Regulations

Index, finding aids & general information	523–5227
Printing schedules	523–3419

Laws

Public Laws Update Service (numbers, dates, etc.)	523–6641
Additional information	523–5230

Presidential Documents

Executive orders and proclamations	523–5230
Public Papers of the Presidents	523–5230
Weekly Compilation of Presidential Documents	523–5230

The United States Government Manual

General information	523–5230

Other Services

Data base and machine readable specifications	523–3447
Guide to Record Retention Requirements	523–3187
Legal staff	523–4534
Privacy Act Compilation	523–3187
Public Laws Update Service (PLUS)	523–6641
TDD for the hearing impaired	523–5229

ELECTRONIC BULLETIN BOARD

Free **Electronic Bulletin Board** service for Public Law numbers, and Federal Register finding aids.	202–275–1538, or 275–0920

FEDERAL REGISTER PAGES AND DATES, MAY

22491–22722.....2
22723–22950.....3
22951–23116.....4
23117–23610.....5

CFR PARTS AFFECTED DURING MAY

At the end of each month, the Office of the Federal Register publishes separately a List of CFR Sections Affected (LSA), which lists parts and sections affected by documents published since the revision date of each title.

3 CFR

Proclamations:
6679.....22955
6680.....22957
6681.....22959

Administrative Orders:
Memorandums:
April 29, 1994.....22951
April 29, 1994.....22953

Executive Orders:
12582 (Revoked by EO 12913).....23115
12878 (Amended by EO 12912).....22949
12912.....22949
12913.....23115

5 CFR

Proposed Rules:
Ch. XIV.....22537

7 CFR

271.....22723
272.....22723
273.....22723
301.....22491
723.....22723
1240.....22492
1413.....22494, 22495
1427.....22494, 22495
1464.....22723
1941.....22961
1943.....22961
1945.....22961

Proposed Rules:
Ch. VII.....22938
300.....22538
319.....22538
1468.....22546
1530.....23017
1823.....23018
1910.....23018
1941.....23018
1942.....23018
1943.....23018
1944.....22018
1945.....23018
1948.....23018
1951.....22548, 23018
1980.....23018, 23173

9 CFR

78.....22496

Proposed Rules:
381.....22554

10 CFR

12.....23119

Proposed Rules:
51.....23030

12 CFR

5.....22497
207.....23124
210.....22962
220.....23124
221.....23124
224.....23124
225.....22967
265.....22967

Proposed Rules:
205.....23031
563b.....22725
575.....22725
615.....22725

Proposed Rules:
335.....22555
563b.....22764
575.....22764

13 CFR

121.....23131

14 CFR

23.....23095
29.....22499
39.....23132, 23133, 23135, 23136, 23138, 23139, 23142, 23143, 23144, 23146, 23148, 23150
71.....22502, 22503, 22736, 22737, 22969, 22970
97.....22738

Proposed Rules:
Ch. I.....22565
25.....22218, 22766
39.....22565, 22769, 22771, 23031, 23174
71.....22567, 22568, 22569, 22570, 23033, 23034

15 CFR

7.....22742
285.....22742
290.....22504

17 CFR

30.....22505, 22971

Proposed Rules:
240.....22773

18 CFR

284.....22753

21 CFR

520.....22753

Proposed Rules:
73.....23035
74.....23055
168.....23055
172.....23055
173.....23055

182....23055
184....23055
878....23036

24 CFR

92....22506
880....22754, 22916
881....22754, 22916
883....22754, 22916
884....22916
888....22916

26 CFR

25....23152
602....23152
Proposed Rules:
1....22773

30 CFR

935....22507
Proposed Rules:
950....22571
914....23176
915....23177

31 CFR

601....22972

32 CFR

706....22755

33 CFR

117....23158
150....23095
165....23158
Proposed Rules:
100....22573
165....23179
402....23180

34 CFR

668....23095
Proposed Rules:
Ch. VI....22775, 22776

39 CFR

111....23038, 23158
265....22756

40 CFR

52....22757, 22973, 23164, 23167
60....22758, 22759
712....22519
716....22519
Proposed Rules:
52....22776, 23264
59....22776
65....22795
80....22800
81....23264
165....22574
721....23041
745....23041

41 CFR

302–11....22519

43 CFR

Proposed Rules:
11....23098

46 CFR

Proposed Rules:
540....23182

47 CFR

1....22980
73....22995, 22996
Proposed Rules:
1....23042, 23183
73....22814, 23042, 23043, 23183, 23184
76....23183

48 CFR

217....22759
225....23169
533....22520
1816....22521
1831....22521
1852....22521

49 CFR

571....22997
Proposed Rules:
571....23184
580....23186

50 CFR

217....23169
227....23169
301....22522
641....22760
651....22760
661....22999, 23013
675....22762, 23172
Proposed Rules:
36....23043
261....23095
262....23095
263....23095
267....23095
672....23044
675....23044

LIST OF PUBLIC LAWS

This is a continuing list of public bills from the current session of Congress which have become Federal laws. It may be used in conjunction with "P L U S" (Public Laws Update Service) on 202–523–6641. The text of laws is not published in the **Federal Register** but may be ordered in individual pamphlet form (referred to as "slip laws") from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 (phone, 202–512–2470).

H.R. 2333/P.L. 103–236

Foreign Relations Authorization Act, Fiscal Years 1994 and 1995 (Apr. 30, 1994; 108 Stat. 382; 148 pages)

H.R. 4066/P.L. 103–237

To suspend temporarily the duty on the personal effects of participants in, and certain other individuals associated with, the 1994 World Cup Soccer Games, the 1994 World Rowing Championships, the 1995 Special Olympics World Games, the 1996 Summer Olympics, and the 1996 Paralympics. (Apr. 30, 1994; 108 Stat. 530; 2 pages)

S. 1636/P.L. 103–238

Marine Mammal Protection Act Amendments of 1994 (Apr. 30, 1994; 108 Stat. 532; 36 pages)

Last List May 2, 1994

Public Laws

103d Congress, 2d Session, 1994

Pamphlet prints of public laws, often referred to as slip laws, are the initial publication of Federal laws upon enactment and are printed as soon as possible after approval by the President. Legislative history references appear on each law. Subscription service includes all public laws, issued irregularly upon enactment, for the 103d Congress, 2d Session, 1994.

(Individual laws also may be purchased from the Superintendent of Documents, Washington, DC 20402-9328. Prices vary. See Reader Aids Section of the Federal Register for announcements of newly enacted laws.)

Superintendent of Documents **Subscriptions** Order Form

Order Processing Code:
*** 6216**

S3

Charge your order. It's Easy! MasterCard VISA

To fax your orders (202) 512-2233

☐ **YES**, enter my subscription(s) as follows:

_____ subscriptions to **PUBLIC LAWS** for the 103d Congress, 2d Session, 1994 for $156 per subscription.

The total cost of my order is $_____. International customers please add 25%. Prices include regular domestic postage and handling and are subject to change.

(Company or Personal Name) (Please type or print)

(Additional address/attention line)

(Street address)

(City, State, ZIP Code)

(Daytime phone including area code)

(Purchase Order No.)

May we make your name/address available to other mailers? YES ☐ NO ☐

Please Choose Method of Payment:

☐ Check Payable to the Superintendent of Documents

☐ GPO Deposit Account ☐☐☐☐☐☐☐ – ☐

☐ VISA or MasterCard Account

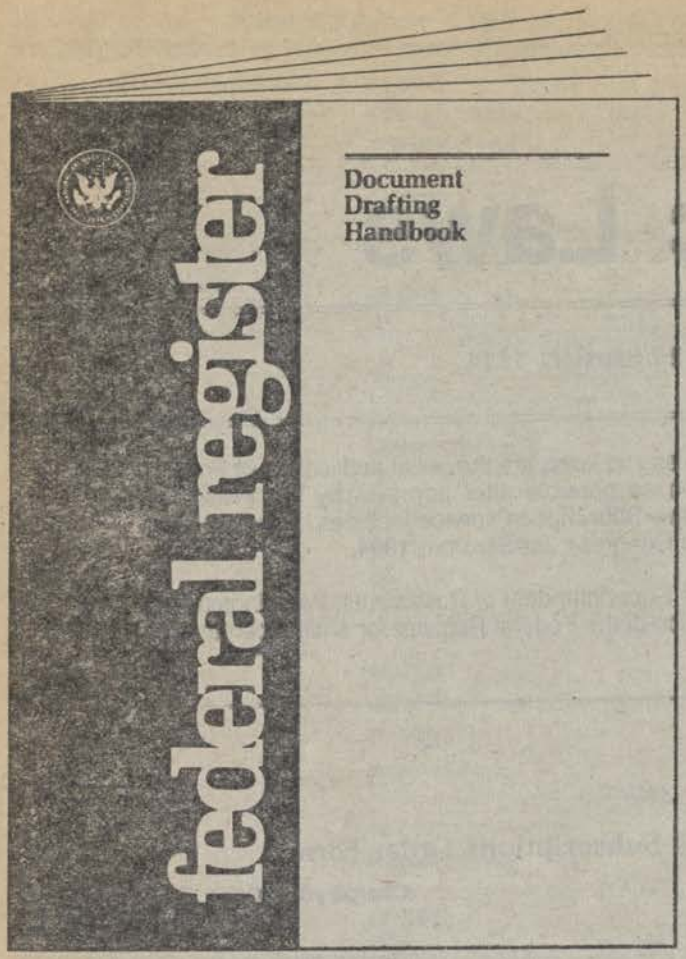
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

☐☐☐☐ (Credit card expiration date)

Thank you for your order!

(Authorizing Signature) (1/94)

Mail To: New Orders, Superintendent of Documents
P.O. Box 371954, Pittsburgh, PA 15250-7954



Federal Register Document Drafting Handbook

A Handbook for Regulation Drafters

This handbook is designed to help Federal agencies prepare documents for publication in the Federal Register. The updated requirements in the handbook reflect recent changes in regulatory development procedures, document format, and printing technology.

Price $5.50

Superintendent of Documents Publication Order Form

Order processing code: *6133

Charge your order. It's easy! VISA

To fax your orders and inquiries—(202) 512-2250

☐ **YES,** please send me the following indicated publications:

_____ copies of **DOCUMENT DRAFTING HANDBOOK at $5.50 each.** S/N 069-000-00037-1

1. The total cost of my order is $_____ Foreign orders please add an additional 25%.
All prices include regular domestic postage and handling and are subject to change.

Please Type or Print

2. _____
(Company or personal name)

_____
(Additional address/attention line)

_____
(Street address)

_____
(City, State, ZIP Code)

(_____) _____
(Daytime phone including area code)

3. Please choose method of payment:

☐ Check payable to the Superintendent of Documents

☐ GPO Deposit Account ☐☐☐☐☐☐☐–☐

☐ VISA or MasterCard Account

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

_____
(Credit card expiration date)

Thank you for your order!

_____
(Signature)

(Rev 12/91)

4. Mail To: New Orders, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250–7954

Printed on recycled paper