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federal register

Book 1 of 2 Books
Thursday May 22, 1980

Highlights

34483 **U.S.—Taiwan Cultural and Commercial Affairs** GSA/OFR publishes list of agreements between American Institute in Taiwan and Coordination Council for North American Affairs

34270 **Loan Programs** VA issues final rules decreasing maximum interest rates on homes, condominiums, and mobile homes, effective 5–15–80 (2 documents)

34782 **Grant Programs—Airports** DOT/FAA adopts revisions pertaining to Airport Aid Program for airport development and planning grant projects; effective 5–22–80 (Part VIII of this issue)

34272 **Grant Programs** HHS/Sec'y publishes comprehensive revision to Government–wide cost principles for educational institutions, State, local, and Indian tribal governments; effective 5–22–80

34846 **Gasohol** DOE/ERA proposes alternative amendments to petroleum allocation and price regulations concerning gasohol and unleaded gasoline used in gasohol production; comments by 7–21–80; hearings 6–23, 6–26, and 7–8–80 (Part X of this issue)

34719 **Motor Vehicle Pollution** EPA issues applications for waiver of 1981–1985 Model Year oxides of nitrogen emission standards for light-duty diesel vehicles and engines; (Part IV of this issue)

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Questions and requests for specific information may be directed to the telephone numbers listed under INFORMATION AND ASSISTANCE in the READER AIDS section of this issue.

Highlights

34718 **Motor Vehicle Pollution** EPA issues final rule establishing emission standards for 1981 and 1982 Model Year light-duty diesel vehicles; effective 6–23–80 (Part IV of this issue)

34264 **Fuel Oil Displacement Program** DOE/FERC extends program for one year; effective 5–15–80

34302 **Fuel Oil Displacement Program** DOE/ERA proposes to extend "fuel shortage emergency period" through 6–1–81

34762 **Air Pollution Control** EPA proposes regulation on visibility protection for Federal Class I areas; comments by 8–5–80; hearings 6–30 and 7–2–80 (Part VII of this issue)

34802 **Motor Vehicle Pollution** EPA establishes emission performance warranty tests and regulations, effective 6–23 and 7–21–80 (2 documents) (Part IX of this issue)

34560 **Hazardous Materials Transportation** DOT/RSPA publishes identification numbers for improving capabilities of emergency response personnel; effective 11–20–80

34752 **Pennsylvania Avenue Development Area** PADC sets forth interim rule for guidelines and standards for design of development within area; effective 4–1–80, comments by 6–15–80 (Part V of this issue)

34265 **Public Housing** HUD publishes a revised schedule of prototype cost limits; effective 5–22–80

34303 **Income Taxes** Treasury/IRS proposes rules for moving expense reduction for foreign moves and for retirees or decedents who were working abroad; comment by 7–21–80

34271, 34486 **Postal Service** PS issues permanent implementing regulations for merchandise return service; effective 5–21–80 (2 documents)

34337 **Privacy Act Documents—CPSC**

34496 **Sunshine Act Meetings**

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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 month.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 907

[Navel Orange Reg. 494]

Navel Oranges Grown in Arizona and Designated Part of California; Limitation of Handling

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: This regulation establishes the quantity of fresh California-Arizona navel oranges that may be shipped to market during the period May 23–29, 1980. Such action is needed to provide for orderly marketing of fresh navel oranges for this period due to the marketing situation confronting the orange industry.

EFFECTIVE DATE: May 23, 1980.

FOR FURTHER INFORMATION CONTACT: Malvin E. McGaha, 202–447–5975.

SUPPLEMENTARY INFORMATION: *Findings.* This regulation is issued under the marketing agreement, as amended, and Order No. 907, as amended (7 CFR Part 907), regulating the handling of navel oranges grown in Arizona and designated part of California. The agreement and order are effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601–674). This action is based upon the recommendations and information submitted by the Navel Orange Administrative Committee and upon other available information. It is hereby found that this action will tend to effectuate the declared policy of the act.

This action is consistent with the marketing policy for 1979–80 which was designated significant under the procedures of Executive Order 12044. The marketing policy was recommended by the committeee following discussion at a public meeting on October 30, 1979. A final impact analysis on the marketing policy is available from Malvin E. McGaha, Chief, Fruit Branch, F&V, AMS, USDA, Washington, D.C. 20250, telephone 202–447–5975.

The committee met again publicly on May 20, 1980, at Los Angeles, California, to consider the current and prospective conditions of supply and demand and recommended a quantity of navels deemed advisable to be handled during the specified week. The committee reports the demand for navel oranges continues to diminish.

It is further found that there is insufficient time between the date when information became available upon which this regulation is based and when the action must be taken to warrant a 60 day comment period as recommended in E.O. 12044, and that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rulemaking, and postpone the effective date until 30 days after publication in the **Federal Register** (5 U.S.C. 553). It is necessary to effectuate the declared purposes of the act to make these regulatory provisions effective as specified, and handlers have been apprised of such provisions and the effective time.

Section 907.794 is added as follows:

§ 907.794 Navel Orange Regulation 494.

Order. (a) The quantities of navel oranges grown in Arizona and California which may be handled during the period May 23, 1980, through May 29, 1980, are established as follows:

(1) District 1: 700,000 cartons;

(2) District 2: Unlimited cartons;

(3) District 3: Unlimited cartons;

(4) District 4: Unlimited cartons.

(b) As used in this section, "handled," "District 1," "District 2," "District 3," "District 4," and "carton" mean the same as defined in the marketing order.

(Secs. 1–19, 48 Stat. 31, as amended; 7 U.S.C. 601–674)

Dated: May 21, 1980.

D. S. Kuryloski,

Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

[FR Doc. 80-15943 Filed 5-21-80; 11:43 am]

BILLING CODE 3410-02-M

7 CFR Part 908

[Valencia Orange Reg. 647; Valencia Orange Reg. 646, Amdt. 1]

Valencia Oranges Grown in Arizona and Designated Part of California; Limitation of Handling

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: This action establishes the quantity of fresh California-Arizona Valencia oranges that may be shipped to market during the period May 23–May 29, 1980, and increases the quantity of such oranges that may be so shipped during the period May 16–May 22, 1980. Such action is needed to provide for orderly marketing of fresh Valencia oranges for the periods specified due to the marketing situation confronting the orange industry.

DATES: The regulation becomes effective May 23, 1980, and the amendment is effective for the period May 16–May 22, 1980.

FOR FURTHER INFORMATION CONTACT: Malvin E. McGaha, 202–447–5975.

SUPPLEMENTARY INFORMATION: *Findings.* This regulation and amendment are issued under the marketing agreement, as amended, and Order No. 908, as amended (7 CFR Part 908), regulating the handling of Valencia oranges grown in Arizona and designated part of California. The agreement and order are effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601–674). The action is based upon the recommendations and information submitted by the Valencia Orange Administrative Committee and upon other available information. It is hereby found that the action will tend to effectuate the declared policy of the act.

This action is consistent with the marketing policy for 1979–80 which was designated significant under the procedures of Executive Order 12044. The marketing policy was recommended by the committee following discussion at a public meeting on January 22, 1980. A final impact analysis on the marketing policy is available from Malvin E. McGaha, Chief, Fruit Branch, F&V, AMS, USDA, Washington, D.C. 20250, telephone 202–447–5975.

The committee met again publicly on May 20, 1980 at Los Angeles, California, to consider the current and prospective

conditions of supply and demand and recommended a quantity of Valencia oranges deemed advisable to be handled during the specified weeks. The committee reports the demand for Valencia oranges continues to improve.

It is further found that there is insufficient time between the date when information became available upon which this regulation and amendment are based and when the actions must be taken to warrant a 60-day comment period as recommended in E.O. 12044, and that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rulemaking, and postpone the effective date until 30 days after publication in the **Federal Register** (5 U.S.C. 553), and the amendment relieves restrictions on the handling of Valencia oranges. It is necessary to effectuate the declared purposes of the act to make these regulatory provisions effective as specified, and handlers have been apprised of such provisions and the effective times.

1. Section 908.947 is added as follows:

§ 908.947 Valencia Orange Regulation 647.

Order. (a) The quantities of Valencia oranges grown in Arizona and California which may be handled during the period May 23, 1980, through May 29, 1980, are established as follows:

(1) District 1: 320,000 cartons;

(2) District 2: 360,000 cartons;

(3) District 3: 120,000 cartons.

(b) As used in this section, "handled," "District 1," "District 2," "District 3," and "carton" mean the same as defined in the marketing order.

2. Paragraph (a) in § 908.946 Valencia Orange Regulation 646 (45 FR 31953), is hereby amended to read:

§ 908.946 Valencia Orange Regulation 646.

(a) * * *

(1) District 1: 333,000 cartons;

(2) District 2: 378,000 cartons;

(3) District 3: 189,000 cartons.

(Secs. 1–19, 48 Stat. 31, as amended; 7 U.S.C. 601–674)

Dated: May 21, 1980.

D. S. Kuryloski,

Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

[FR Doc. 80–15944 Filed 5–21–80; 11:43 am]

BILLING CODE 3410–02–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 20357; Amdt. 39–3781]

Airworthiness Directives; Government Aircraft Factories Nomad Models N22B and N24A Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) which requires inspections, replacements and modifications, as necessary, of hot air check valves, pilots' and copilots' control wheel assemblies, wing to fuselage attachments, rudder pedal guards, the rudder tab mass balance, the horizontal stabilizer, the vertical fin, the rudder and elevator trim tabs, the vertical stabilizer stub fin, and the horizontal stabilizer control system on Government Aircraft Factories of Australia (GAF) Models N22B and N24A airplanes. The AD is necessary to detect and prevent certain unsafe conditions which have been reported to the FAA by the Australian Department of Transport. These service difficulties, found earlier on non-U.S. registered Nomad aircraft, could likely exist on U.S. registered Nomad aircraft.

DATES: Effective June 5, 1980.

Compliance schedule—as prescribed in body of AD.

ADDRESESS: The manufacturer's applicable alert service bulletins may be obtained from Government Aircraft Factories, 226 Lorimer Street, Port Melborne 3207 Vic., Australia. These documents may also be examined at the Federal Aviation Administration, Pacific-Asia Region, Engineering and Manufacturing District Office, 300 Ala Moana Blvd., Room 7321, Honolulu, Hawaii 96850, and the Rules Docket, Room 916, FAA, 800 Independence Ave. S.W., Washington, D.C. 20591.

FOR FURTHER INFORMATION CONTACT: Gary K. Nakagawa, Chief, Engineering and Manufacturing District Office, APC–210, Federal Aviation Administration, Pacific-Asia Region, P.O. Box 50109, Honolulu, Hawaii 96850, telephone (808) 546–8650/546–8658, or C. Christie, Chief, Technical Standards Branch, AWS–110, FAA, 800 Independence Ave. S.W., Washington, D.C. 20591, telephone (202) 426–8374.

SUPPLEMENTARY INFORMATION: Government Aircraft Factories (GAF) Nomad Models N22B and N24A airplanes are manufactured in Australia. Recently, the Australian Department of Transport imposed a number of mandatory corrective actions applicable to these airplanes. Although none of the service difficulties have been encountered on U.S. registered aircraft to date, the same unsafe conditions are likely to exist or develop on U.S. registered aircraft. Accordingly, an airworthiness directive is being issued which requires inspection, replacement and modification, as necesary, of hot air check valves, pilots' and copilots' control wheel assemblies, wing to fuselage attachments, rudder pedal guards, the rudder tab mass balance, the horizontal stabilizer, the vertical fin, rudder and elevator trim tabs, the vertical stabilizer stub fin, and the horizontal stabilizer control system on GAF Models N22B and N24A airplanes.

Since a situation exists that requires immediate adoption of this amendment, it is found that notice and public procedure thereon are impracticable and good cause exists for making this amendment effective in less than 30 days.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, § 39.13 of Part 39 of the Federal Aviation Regulations (14 CFR 39.13) is amended by adding the following new airworthiness directive:

Government Aircraft Factories (GAF). Applies to Models N22B and N24A airplanes, certificated in all categories.

Unless already accomplished, compliance is required within 25 hours time in service after the effective date of this AD. However, airplanes may be flown in accordance with FAR 21.197 and 21.199 to a base where the work can be performed.

(1) Applies to all Model N22B airplanes S/N 5 and up and all Model N24A airplanes S/N 42 and up, delivered or in operation prior to, or on, June 22, 1978. To prevent leakage of hot air check valve, P/N I/N–74–334, which could damage surrounding components, inspect, and repair as necessary, hot air check valve P/N I/N–74–334, in accordance with Accomplishment Instructions of GAF Alert Service Bulletin AN 22–74–1, Revision 1, dated June 30, 1978, or an FAA-approved equivalent.

(2) Applies to all Model N22B airplanes S/N 5 and up, and all Model N24A airplanes, S/N 42 and up, which have not incorporated Nomad modification N301. To prevent possible disconnection or jamming of pilots' or copilots' control wheel assembly, which could result in loss of control of the airplane, remove control wheel retaining pin and replace with a new bolt in accordance with the Accomplishment Instructions of GAF Alert Service Bulletin AN 22–27–8, Revision 1, dated June 30, 1978, or an FAA-approved equivalent.

(3) Applies to all Model N22B airplanes S/N 5 and up, and Model N24A airplanes S/N

42 and up, delivered from the factory prior to July 4, 1978. To prevent possible dislodging of structural bolts securing the wing center section spar support brackets to the fuselage, which could result in loss of structural integrity of the airplane, inspect wing center section spar support bracket for loose attachments, and replace loose nuts, in accordance with the Accomplishment Instructions of GAF Alert Service Bulletin ANMD–53–2, Revision 1, dated July 5, 1978, or an FAA-approved equivalent.

(4) Applies to all Model N22B airplanes S/N 5 and up, and all Model N24A airplanes S/N 42 and up, which have not incorporated Nomad modification N290. To prevent possible interference and jamming of the rudder pedals with the pedal guards, which could impair control of the airplane, remove and repair rudder pedal guards in accordance with the Accomplishment Instructions of GAF Alert Service Bulletin ANMD–53–3, dated July 10, 1978, or an FAA-approved equivalent.

(5) Applies to Model N22B airplanes S/N 6, 7, 11, 12, 13, 15, and 16. To prevent reduction of the flutter speed reserves as a result of excessive wear and backlash in the rudder tab operating system, which could result in loss of control of the airplane, remove rudder assembly, install steel mass balance arm and rework rudder and trim tab in accordance with the Accomplishment Instructions of GAF Alert Service Bulletin NMD–27–3, Revision 1, dated June 8, 1979, or an FAA-approved equivalent.

(6) Applies to all Model N22B airplanes S/N 5 and up, and all Model N24A airplanes S/N 42 and up. To prevent excessive vibration of the horizontal stabilizer trim tab and prevent subsequent structural damage to the empennage, which could result in loss of control of the airplane, inspect the horizontal stabilizer trim tab, and empennage, and modify stub fin in accordance with the Accomplishment Instructions of GAF Alert Service Bulletin ANMD–55–5, Revision 2, dated September 3, 1979, or an FAA-approved equivalent.

(7) Applies to all Model N22B airplanes S/N 5 and up, and all Model N24A airplanes, S/N 42 and up. To detect possible damage to the horizontal stabilizer control rod, visually inspect components in the horizontal stabilizer control system for wind gust damage, and replace as necessary, in accordance with the Accomplishment Instructions of GAF Alert Service Bulletin ANMD–27–12, Revision 1, dated October 30, 1979, or an FAA-approved equivalent.

For the purposes of this amendment, the FAA-approved equivalent specified in paragraphs (1) through (7) of this AD must be approved by the Chief, Engineering and Manufacturing District Office, FAA, Pacific-Asia Region, Honolulu, Hawaii.

All persons affected by this directive who have not already received these documents from the manufacturer, may obtain copies upon request to the Government Aircraft Factories, 226 Lorimer Street, Port Melborne 3207 Vic., Australia. These documents may also be examined at the FAA, Pacific-Asia Region, 300 Ala Moana Blvd., Room 7321, Honolulu, Hawaii 96850, and at FAA Headquarters, 800 Independence Ave., S.W., Washington, D.C. 20591. A historical file on this AD which includes the incorporated material in full is maintained by the FAA at its Headquarters in Washington, D.C., and at the Pacific-Asia Region in Honolulu, Hawaii.

This amendment becomes effective June 5, 1980.

(Sec. 313(a), 601, 603, Federal Aviation Act of 1958, as amended (49 U.S.C. 1353(a), 1421, 1423); Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)); and 14 CFR 11.89).

Note.—The FAA has determined that this document involves a regulation which is not considered to be significant under the provisions of Executive Order 12044, as implemented by the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979).

Issued in Washington, D.C., on May 14, 1980.

M. C. Beard,

Director of Airworthiness.

[FR Doc. 80–15673 Filed 5–21–80; 8:45 am]

BILLING CODE 4910–13–M

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14 CFR Part 39

[Docket No. 79–NE–18; Amdt. 39–3773]

Airworthiness Directives; Pratt & Whitney Aircraft JT8D–1, –1A, –1B, –7, –7A, and –7B Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) which requires a visual and ultrasonic inspection of second stage fan blades of Pratt & Whitney JT8D–1, –1A, –1B, –7, –7A, and –7B turbofan engines. The AD is needed to detect material defects, surface damage, or cracks in the blade attachment straps which could result in strap fracture and possible uncontained blade liberation and fire.

DATES:

Effective—July 18, 1980.

Compliance required not later than December 31, 1981, unless already accomplished.

ADDRESSES: The applicable service bulletin may be obtained from Pratt & Whitney Aircraft Group, Division of United Technologies Corporation, 400 Main Street, East Hartford, Connecticut 06108.

A copy of the service bulletin is contained in the Rules Docket, Federal Aviation Administration, 12 New England Executive Park, Burlington, Massachusetts 01803.

FOR FURTHER INFORMATION CONTACT: Donald F. Perrault, Propulsion Section (ANE–214), Engineering and Manufacturing Branch, Flight Standards Division, Federal Aviation Administration, New England Region, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone: (617) 273–7347.

SUPPLEMENTARY INFORMATION: A proposal to amend Part 39 of the Federal Aviation Regulations to include an AD requiring a visual and ultrasonic inspection of second stage fan blades to detect cracks and surface damage on JT8D–1, –1A, –1B, –7, –7A, and –7B turbofan engines was published in the **Federal Register** at 44 FR 72181, December 13, 1979. The proposal was prompted by several instances of fracture of second stage fan blade attachment straps due to cracks caused by material defects and surface damage resulting in uncontained blade liberation.

Interested persons have been afforded the opportunity to participate in the making of the amendment. At the request of the Air Transport Association of America (ATA), a public meeting was held at the FAA New England Region office on February 6, 1980, for the purpose of receiving comments and data pertaining to the notice of proposed rule making (NPRM). During this meeting, ATA on behalf of its member airlines submitted preliminary comments and requested a 30-day extension of the NPRM comment period to allow the airlines additional time to prepare and submit final comments. FAA concurred with the ATA request and on February 11, 1980, formally issued an extension of the closing date from February 12, 1980, to March 12, 1980. Final comments were received during the extension period from ATA on behalf of its member airlines and other airlines recommending that the AD be made applicable to only P/N 433802, and its derivative, second stage fan blades and that the compliance date be extended to December 31, 1982. FAA concurs with ATA that only P/N 433802, and its derivative, second stage fan blades require inspection since only these blades have experienced the root fracture problem. Other subsequent part number second stage fan blades have been ultrasonic inspected at manufacturing, beginning in 1970, and therefore are in compliance with the intent of this AD. FAA does not concur with ATA that extension of the compliance date to December 31, 1982, is reasonable since such an extension would increase the potential number of occurrences of blade fractures and

engine cowl penetrations. However, the additional economic impact information provided by ATA combined with confirmation of existing blade fracture probability data indicates that an extension of the compliance date from July 1, 1981, to December 31, 1981, will maintain an acceptable level of airworthiness and will provide a significant reduction of the overall financial burden of compliance.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, Section 39.13 of Part 39 of the Federal Aviation Regulations (14 CFR 39.13) is amended by adding the following new AD:

Pratt & Whitney Aircraft: Applies to Pratt & Whitney Aircraft JT8D-1, -1A, -1B, -7, -7A, -7B turbofan engine models.

Compliance required as indicated, unless already accomplished.

To detect material defects, surface damage, or cracks at the base of the second stage fan blade attachment strap and inner diameter of the strap pinholes which could result in noncontained strap fracture and possible fire, accomplish the following: "At next blade exposure but not later than December 31, 1981, perform a visual and ultrasonic inspection of second stage fan blade, P/N 433802, and derivative blade P/Ns 645732, 645902, 759922, and 759902, attachment straps in accordance with the procedures contained in Pratt & Whitney Aircraft Alert Service Bulletin No. 5022, Revision 1, dated December 21, 1979, or equivalent means approved by the Chief, Engineering and Manufacturing Branch, New England Region. Second stage fan blades with crack, material defect, or surface damage indications in attachment straps must be repaired in accordance with the JT8D engine manual or replaced prior to further flight."

Note.—Pratt & Whitney Aircraft JT8D Engine Manual P/N 481672, Section 72-33-1, requires reinspection at each blade overhaul.

The manufacturer's service bulletin and engine manual identified and described in this directive are incorporated herein and made a part hereof pursuant to 5 U.S.C 552(a)(1). All persons affected by this directive who have not already received these documents from the manufacturer may obtain copies upon request to Pratt & Whitney Aircraft Group, United Technologies Corporation, 400 Main Street, East Hartford, Connecticut 06108. These documents may also be examined at Federal Aviation Administration, New England Region, 12 New England Executive Park, Burlington, Massachusetts 01803, and at FAA Headquarters, 800 Independence Avenue, S.W., Washington, D.C. 20591. A historical file on this AD which includes the incorporated material in full is maintained by the FAA at its headquarters in Washington, D.C. and at New England Region.

This amendement becomes effective July 18, 1980.

(Secs. 313(a), 601, and 603, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1421, and 1423); Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)); 14 CFR 11.89)

Note.—The Federal Aviation Administration has determined that this document involves a regulation which is not significant under Executive Order 12044, as implemented by Department of Transportation Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). A copy of the final evaluation prepared for this document is contained in the docket.

Issued in Burlington, Massachusetts, on May 12, 1980.

Robert E. Whittington,

Director, New England Region.

Note.—The incorporation by reference provisions of this document was approved by the Director of the Federal Register on June 19, 1967.

[FR Doc. 80-15675 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 39

[Docket No. 80-NW-25-AD; Amdt. 39-3774]

Airworthiness Directives; Rockwell NA-265-60 and NA-265-80 Airplanes Modified in Accordance With the Raisbeck Group STC SA687NW and STC SA847NW

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This Amendment amends an existing AD applicable to Rockwell NA-265-60 and NA-265-80 airplanes modified in accordance with the Raisbeck Group STC SA687NW and STC SA847NW. The existing AD requires eddy current inspections of critical fastener holes in the inboard flap track support structure, the modification of the inboard and outboard flap track support, the imposition of certain operating limitations and a reduced service life. A modification has now been developed and approved to remove these operating limitations and extend the service life, and the AD is amended to incorporate this modification.

DATES: Effective date June 3, 1980.

ADDRESSES: Raisbeck service bulletins specified in this directive may be obtained upon request to The Raisbeck Group, 7777 Perimeter Road, Seattle, Washington 98108. These documents may also be examined at FAA Northwest Region, 9010 East Marginal Way South, Seattle, Washington, 98108.

FOR FURTHER INFORMATION CONTACT: Mr. William M. Perrella, Airframe Section, ANW-212, Engineering and Manufacturing Branch, FAA Northwest Region, 9010 East Marginal Way South, Seattle, Washington 98108, telephone (206) 767-2516.

SUPPLEMENTAL INFORMATION: The incorporation of structural modifications designed to improve the fatigue life of the inboard and outboard flap track support structure has been approved to extend the life of newly installed flap track support structure to 2,000 hours time in service. The flap track support structure of airplanes which had been in service prior to these structural modifications may have sustained undetectable fatigue damage which could result in premature failure; therefore, the inspections and service life requirements of AD 80-01-07 were still applicable to these airplanes.

Subsequently identified workmanship problems resulted in AD's 80-03-03 and 80-04-11, which required that all affected parts either be reworked or replaced. As a result, the increased fatigue life will now directly apply to airplanes previously in service as well as those delivered with the modifications. Amendment 39-3658, 45 FR 2009, AD 80-01-07 is therefore amended to incorporate a terminating action which includes modification of the flap track support structure.

Since this amendment relieves a restriction, and imposes no additional burden on any person, it is found that notice and public procedure hereon are unnecessary and the amendment may be made effective in less than 30 days.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, § 39.13 of the Federal Aviation Regulations (14 CFR 39.13) as amended by 39-3658, 45 FR 2009, AD 80-01-07 is further amended by adding a new paragraph H to read as follows:

H. Modification of the flap support structure per FAA approved Raisbeck Service Bulletins 17, dated October 5, 1979; 19, Rev. B, dated April 28, 1980; and 23, dated November 30, 1979, constitutes terminating action under the provisions of this AD. Equivalent modifications are acceptable if approved by the Chief, Engineering and Manufacturing Branch, FAA Northwest Region. If the optional bolts listed in Paragraph III of Raisbeck Service Bulletin 23 are used, they must be replaced at intervals not exceeding 900 landings.

This amendment becomes effective June 3, 1980.

(Secs. 313(a), 601, and 603, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1421, and 1423); Sec. 6(c), Department of

Transportation Act (49 U.S.C. 1655(c); and 14 CFR 11.89))

Note.—The FAA has determined that this document involves a regulation which is not considered to be significant under the provision of Executive Order 12044, as implemented by Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979).

Issued in Seattle, Washington, on May 14, 1980.

C. B. Walk, Jr.,

Director, Northwest Region.

Incorporation by reference provisions in the document were approved by the Director of the Federal Register on June 19, 1967.

[FR Doc. 80-15671 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 39

[Docket No. 80-WE-2-AD, Amdt. 39-3772]

Airworthiness Directives; Rockwell International NA-265 Airplanes

AGENCY: Federal Aviation Administration (FAA) DOT.

ACTION: Final rule.

SUMMARY: This amendment amends as existing Airwortiness Directive (AD) applicable to Rockwell International NA-265 airplanes by revising the applicability to delete certain NA-265-70 airplanes. This amendment is needed to relieve an undue burden which has no safety contribution.

DATE: Effective May 29, 1980.

Compliance schedule—As prescribed in the body of the AD.

FOR FURTHER INFORMATION CONTACT: Jerry Presba, Executive Secretary, Airworthiness Directive Review Board, Federal Aviation Administration, Western Region, P.O. Box 92007, World Way Postal Center, Los Angeles, California 90009. Telephone: (213) 536-6351.

SUPPLEMENTARY INFORMATION: This amendment amends Amendment 39-3685 (45 FR 7539), AD 80-03-05, which currently requires inspection of elevator trailing edges for delamination and installation of drain holes on Rockwell International NA-265-70 and NA-265-80 airplanes. After issuing Amendment 39-3685 the FAA has determined that the corrective action specified is applicable to only two aircraft in the NA-265-70 series. Therefore, the FAA is amending Amendment 39-3685 to limit the applicability to NA-265-80 (all) and NA-265-70, serial numbers 1 and 7 only.

Since this amendment relieves a restriction and imposes no additional burden on any person, notice and public procedure hereon are unnecessary and good cause exists for making the amendment effective less than 30 days.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, § 39.13 of Part 39 of the Federal Aviation Regulations (14 CFR 39.13) is amended, by amending Amendment 39-3685 (45 FR 7539), AD 80-03-05 as follows:

* * * * *

Rockwell International: Applies to Model NA-265-70 serial numbers 1 and 7 only, and NA-265-80 (all) series airplanes certificated in all categories.

* * * * *

This amendment becomes effective May 29, 1980.

(Secs. 313(a), 601, and 603, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1421, and 1423); sec. 6(c) Department of Transportation Act (49 U.S.C. 1655(c)); and 14 CFR 11.89)

Note.—The FAA has determined that this document involves a final regulation which is not considered to be significant under Executive Order 12044 as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). In addition, the expected impact is so minimal that this action does not warrant preparation of a regulatory evaluation.

Issued in Los Angeles, Calif., on May 8, 1980.

W. R. Frehse,

Acting Director, FAA Western Region.

[FR Doc. 15351 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 71

[Airspace Docket No. 80-ASW-4]

Designation of Transition Area: Medford, Okla.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The nature of the action being taken is to designate a transition area at Medford, Okla. The intended effect of the action is to provide controlled airspace for aircraft executing a new instrument approach procedure to the Medford Municipal Airport. The circumstance which created the need for the action is the establishment of a nondirectional radio beacon (NDB) located on the airport. Coincident with this action, the airport is changed from Visual Flight Rules (VFR) to Instrument Flight Rules (IFR).

EFFECTIVE DATE: July 10, 1980.

FOR FURTHER INFORMATION CONTACT: Manuel R. Hugonnett, Airspace and Procedures Branch (ASW-536), Air Traffic Division, Southwest Region, Federal Aviation Administration, P.O. Box 1689, Fort Worth, Texas 76101; telephone 817-624-4911, extension 302.

SUPPLEMENTARY INFORMATION:

History

On March 13, 1980, a notice of proposed rulemaking was published in the **Federal Register** (45 FR 16197) stating that the Federal Aviation Administration proposed to designate a transition area at Medford, Okla. Interested persons were invited to participate in this rulemaking proceeding by submitting written comments on the proposal to the Federal Aviation Administration. Comments were received without objections. Except for editorial changes this amendment is that proposed in the notice.

The Rule

This amendment to Subpart G of Part 71 of the Federal Aviation Regulations (14 CFR Part 71) designates the Medford, Okla., transition area. This action provides controlled airspace from 700 feet above the ground for the protection of aircraft executing instrument approach procedures to the Medford Municipal Airport.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, Subpart G of Part 71 of the Federal Aviation Regulations (14 CFR Part 71) as republished (45 FR 445) is amended, effective 0901 G.m.t., July 10, 1980, by adding the Medford, Okla., transition area as follows.

Medford, Okla.

That airspace extending upward from 700 feet above the surface within a 5-mile radius of the Medford Municipal Airport (latitude 36°47'26"N., longitude 97°44'56"W.) and within 4 miles each side of the 349° bearing from the NDB (latitude 36°47'35"N., longitude 97°44'46"W.) extending from the 5-mile radius area to 8.5 miles north of the NDB.

(Sec. 307(a), Federal Aviation Act of 1958 (49 U.S.C. 1348(a); and sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)))

Note.—The FAA has determined that this document involves a regulation which is not significant under Executive Order 12044, as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Since this regulatory action involves an established body of technical requirements for which frequent and routine amendments are necessary to keep them operationally current and promote safe flight operations, the anticipated impact is so minimal that this action does not warrant preparation of a regulatory evaluation.

Issued in Fort Worth, Tex., on May 12, 1980.

F. E. Whitfield,

Acting Director, Southwest Region.

[FR Doc. 80-15349 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 71

[Airspace Docket No. 80-ASW-6]

Alteration of Transition Area: Ponca City, Okla.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The nature of the action being taken is to alter the transition area at Ponca City, Oklahoma. The intended effect of the action is to provide additional controlled airspace for aircraft departing the Ponca City Municipal Airport. The circumstance which created a need for the action is that a review of the current transition area revealed the controlled airspace is not properly described and inadequate for the protection of aircraft departing the airport. Airspace for the protection of aircraft executing two new proposed instrument approaches is currently adequate.

EFFECTIVE DATE: July 10, 1980.

FOR FURTHER INFORMATION CONTACT: Manuel R. Hugonnett, Airspace and Procedures Branch (ASW-536), Air Traffic Division, Southwest Region, Federal Aviation Administration, P.O. Box 1689, Fort Worth, Texas 76101; telephone 817-624-4911, extension 302.

SUPPLEMENTARY INFORMATION:

History

On March 20, 1980, a notice of proposed rulemaking was published in the **Federal Register** (45 FR 18029) stating that the Federal Aviation Administration proposed to alter the Ponca City, Okla., transition area. Interested persons were invited to participate in this rulemaking proceeding by submitting written comments on the proposal to the Federal Aviation Administration. Comments were received without objections. Except for editorial changes this amendment is that proposed in the notice.

The Rule

This amendment to Subpart G of Part 71 of the Federal Aviation Regulations (14 CFR 71) alters the Ponca City, Okla., transition area. This action provides controlled airspace from 700 feet above the ground for the protection of aircraft executing instrument approach procedures to and departing from the Ponca City Municipal Airport.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, Subpart G of Part 71, § 71.181, of the Federal Aviation Regulations (14 CFR Part 71) as republished (45 FR 445) is amended, effective July 10, 1980, by altering the Ponca City, Okla., transition area by deleting:

* * * within a 6-mile radius of the Ponca City Municipal Airport (Latitude 36°43'41"N., Longitude 97°05'57"W.), and 2 miles each side of the Pioneer, Oklahoma, VORTAC 297° radial, extending from the 6-mile radius area to 8 miles NW of the VORTAC, and within 1.5 miles each side of the 180° bearing from the Ponca City LOM, extending from the 6-mile radius area to the LOM * * *.

and substituting therefor:

* * * within a 6.5-mile radius of the Ponca City Municipal Airport (Latitude 36°43'50"N., Longitude 97°05'50"W.), and within 2 miles each side of the Pioneer, Oklahoma, VORTAC 297° radial, extending from the 6.5-mile radius area to 8 miles NW of the VORTAC, and within 1.5 miles each side of the 180° bearing from the Ponca City LOM, extending from the 6.5-mile radius area to the LOM * * *.

(Sec. 307(a), Federal Aviation Act of 1958 (49 U.S.C. 1348(a); and sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)))

Note.—The FAA has determined that this document involves a regulation which is not significant under Executive Order 12044, as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Since this regulatory action involves an established body of technical requirements for which frequent and routine amendments are necessary to keep them operationally current and promote safe flight operations, the anticipated impact is so minimal that this action does not warrant preparation of a regulatory evaluation.

Issued in Fort Worth, Tex., on May 12, 1980.

F. E. Whitfield,

Acting Director, Southwest Region.

[FR Doc. 80-15350 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 71

[Airspace Docket No. 80-NE-15]

Amendment of South Weymouth, Mass., Control Zone

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action amends a rule appearing in the **Federal Register** Vol. 45, Page 433, Wednesday, January 2, 1980. In that issue, part of the description of the South Weymouth, Massachusetts control zone was omitted. This amendment restores it to the description of the control zone.

EFFECTIVE DATE: May 22, 1980.

FOR FURTHER INFORMATION CONTACT: Richard G. Carlson, Operations Procedures and Airspace Branch, ANE-536, Federal Aviation Administration, Air Traffic Division, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (617) 273-7285.

SUPPLEMENTARY INFORMATION: The purpose of this amendment to Subpart F of Part 71 of the Federal Aviation Regulations [14 CFR Part 71] is to add to the description of the South Weymouth, Massachusetts, control zone.

As the amendment is editorial in nature having no significant impact on airspace users, notice or public procedure hereon would be impractical and contrary to the public interest, and good cause exists for making the amendment effective in less than thirty (30) days.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, Subpart F of Part 71 of the Federal Aviation Regulations [14 CFR Part 71] is amended, effective upon publication in the **Federal Register**, as follows:

1. Amend § 71.171 of Part 71 of the Federal Aviation Regulations by adding to the description of the South Weymouth, Massachusetts control zone the following:

"or during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Airport/Facility Directory."

(Sec. 307(a) of the Federal Aviation Act of 1958 (72 Stat. 749; 49 U.S.C. 1348(a)) and sec. 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c) and 14 CFR 11.69))

Note.—The FAA has determined that this document involves a regulation which is not considered to be significant under the procedures and criteria prescribed by Executive Order 12044 and as implemented by Interim Department of Transportation guidelines (43 FR 9582; March 8, 1978). The anticipated impact is so minimal that this action does not warrant preparation of a regulatory evaluation.

Issued in Burlington, Mass., on May 12, 1980.

Robert E. Whittington,

Director, New England Region.

[FR Doc. 80-15352 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

14 CFR Part 71

[Airspace Docket Number 80-CE-2]

Designation of Transition Area—Independence, Iowa

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The nature of this federal action is to designate a 700-foot transition area at Independence, Iowa, to provide controlled airspace for aircraft executing a new instrument approach procedure to Independence Municipal Airport, Independence, Iowa, based on the Non-Directional Radio Beacon (NDB), a navigational aid being installed on the airport. The intended effect of this action is to ensure segregation of aircraft using the new approach procedure under Instrument Flight Rules (IFR) and other aircraft operating under Visual Flight Rules (VFR).

EFFECTIVE DATE: July 10, 1980.

FOR FURTHER INFORMATION CONTACT: Dwaine E. Hiland, Airspace Specialist, Operations, Procedures and Airspace Branch, Air Traffic Division, ACE-537, FAA, Central Region, 601 East 12th Street, Kansas City, Missouri 64106, Telephone (816) 374-3408.

SUPPLEMENTARY INFORMATION: An instrument approach procedure to Independence Municipal Airport, Independence, Iowa, is being established based on a Non-Directional Radio Beacon (NDB), a navigational aid being installed on the airport by the City of Independence. This radio facility will provide new navigational guidance for aircraft utilizing the airport. The establishment of an instrument approach procedure based on this approach aid entails the designation of a transition area at Independence, Iowa, at and above 700 feet above the ground (AGL) within which aircraft are provided air traffic control service. The intended effect of this action is to ensure segregation of aircraft using the new approach procedure under Instrument Flight Rules (IFR) and other aircraft operating under Visual Flight Rules (VFR).

Discussion of Comments

On pages 20901 and 20902 of the **Federal Register** dated March 31, 1980, the Federal Aviation Administration published a Notice of Proposed Rule Making which would amend § 71.181 of Part 71 of the Federal Aviation Regulations so as to designate a transition area at Independence, Iowa. Interested persons were invited to participate in this rule making proceeding by submitting written comments on the proposal to the FAA. No objections were received as a result of the Notice of Proposed Rule Making.

Accordingly, Subpart G, Section 71.181 of the Federal Aviation Regulations (14 CFR 71.181) as republished on January 2, 1980, (45 FR 445), is amended effective 0901 GMT July 10, 1980, by adding the following new transition area:

Independence, Iowa

That airspace extending upward from 700 feet above the surface within a nine mile radius of the Independence Municipal Airport (latitude 42° 27' 04" N, longitude 91° 56' 57" W), excluding that airspace overlying the Waterloo, Iowa transition area, and the Oelwein, Iowa transition area.

(Sec. 307(a), Federal Aviation Act of 1958 as amended (49 U.S.C. 1348); Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)); Sec. 11.69 of the Federal Aviation Regulations (14 CFR 11.69)).

Note.—The FAA has determined that this document involves a regulation which is not significant under Executive Order 12044, as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Since this regulatory action involves an established body of technical requirements for which frequent and routine amendments are necessary to keep them operationally current and promote safe flight operations, the anticipated impact is so minimal that this action does not warrant preparation of a regulatory evaluation.

Issued in Kansas City, Missouri, on May 12, 1980.

Paul J. Baker,

Director, Central Region.

[FR Doc. 80-15676 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

14 CFR Part 71

[Airspace Docket No. 80-NE-06]

Proposed Designation of Lawrence Municipal Airport Lawrence, Mass., Control Zone

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Change of control zone effective date.

SUMMARY: This action changes the effective date appearing in the Federal Register, Volume 45, No. 81, Thursday, April 24, 1980, page 27746 "Designation of Lawrence Airport, Lawrence, Massachusetts, control zone." In that issue the final rule effective date was shown as June 15, 1980. This action changes the final rule effective date to July 10, 1980.

EFFECTIVE DATE: July 10, 1980.

FOR FURTHER INFORMATION CONTACT: Richard G. Carlson, Operations Procedures and Airspace Branch, ANE-536, Air Traffic Division, Federal Aviation Administration, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (617) 273-7385.

SUPPLEMENTARY INFORMATION: This changes the effective date of the designation of the Lawrence Airport, Lawrence, Massachusetts, control zone which was published in the **Federal Register**, Volume 45, Page 27746, from June 15, 1980, to July 10, 1980. The June 15, 1980, date was established to coincide with the commissioning of a new air traffic control tower at the Lawrence Airport, Lawrence, Massachusetts. As the tower will not be commissioned until approximately July 10, 1980, the effective date of the control zone can be deferred until that time.

Change of Control Zone Effective Date

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration hereby changes the effective date of the designation of the Lawrence Airport, Lawrence, Massachusetts, control zone in Section 71.171 of Part 71 of the Federal Aviation Regulations from June 15, 1980, to July 10, 1980.

(Section 307(a) of the Federal Aviation Act of 1958 (72 Stat. 749; 49 USC 1348(a)) and Section 6(c) of the Department of Transportation Act (49 USC 1655(c) and 14 CFR 11.69))

Note.—The FAA has determined that this document involves a regulation which is not considered to be significant under the procedures and criteria prescribed by Executive Order 12044 and as implemented by Interim Department of Transportation guidelines (43 FR 9582; March 8, 1978). The anticipated impact is so minimal that this action does not warrant preparation of a regulatory evaluation.

Issued in Burlington, Massachusetts, on May 2, 1980.

Robert E. Whittington,

Director, New England Region.

[FR Doc. 80-15677 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

14 CFR Part 71

[Airspace Docket No. 80-AL-3]

Designation of Alternate Airway

Correction

In FR Doc. 80-14945 appearing at page 31975 in the issue for Thursday, May 15, 1980, third column, fifth line of the

second paragraph, "098°" should read "087°".

BILLING CODE 1505-01-M

CIVIL AERONAUTICS BOARD

14 CFR Part 302

[Procedural Regulations Amendment No. 62 to Part 302; PR-224]

Rules of Practice in Board. Proceedings

AGENCY: Civil Aeronautics Board

ACTION: Amendment to rule.

SUMMARY: The CAB is amending its rules of practice to eliminate the requirement that a motion for leave to file an otherwise unauthorized document be filed as a separate document. The change is at the Board's own initiative.

DATES: Adopted: May 16, 1980; effective: May 16, 1980.

FOR FURTHER INFORMATION CONTACT: Mark Schwimmer, Office of the General Counsel, Civil Aeronautics Board, 1825 Connecticut Avenue, NW., Washington, D.C. 20428; (202) 673-5442.

SUPPLEMENTARY INFORMATION:

The rules of practice applicable to Board proceedings (14 CFR Part 302) currently require that all written motions be filed as separate documents, unless the Board specifically authorizes a motion to be incorporated into a document for which admission is sought (§ 302.18(b)). The separate filing requirement applies to § 302.4(f), under which the Board can grant leave to file an otherwise unauthorized document upon written motion and for good cause shown.

We believe that requiring two separate documents, each subject to its own formal filing requirements, imposes a needless procedural step. The motion can conveniently be incorporated as the first two or three paragraphs of the underlying document. Allowing a joint document will reduce the paperwork and benefit the public by simplifying filing procedures.

14 CFR 302.4(f) is therefore amended to include a specific authorization to incorporate a motion for acceptance into an otherwise unauthorized document by adding at the end of the section: "The written motion may be incorporated into the otherwise unauthorized document for which admission is sought." The amendment is not intended to remove the $50 fee required to file an otherwise unauthorized document, or the § 302.18(b) requirement that a joint document contain a caption describing both the motion and the underlying document.

Since this is a rule of agency procedure that relieves a restriction, we find that notice and comment are unnecessary, and that the change may take effect immediately.

Accordingly, in 14 CFR Part 302, *Rules of Practice in Board Proceedings*, paragraph (f)(1) of § 302.4 is amended to read as follows:

§ 302.4 General requirements as to documents.

* * * * *

(f) *Motions for leave to file otherwise unauthorized documents.*

(1) The Board will accept otherwise unauthorized documents for filing only if leave has previously been obtained, from the administrative law judge or the Board, on written motion and for good cause shown. The written motion may be incorporated into the otherwise unauthorized document for which admission is sought. In such event, the document filed shall be titled to describe both the motion and the underlying documents.

* * * * *

(Secs. 204 and 1001 of the Federal Aviation Act of 1958, as amended, 72 Stat. 743, 788, 49 U.S.C. 1324, 1481)

By the Civil Aeronautics Board.

Phyllis T. Kaylor,

Secretary.

[FR Doc. 80-15760 Filed 5-21-80; 8:45 am]

BILLING CODE 6320-01-M

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

18 CFR Part 284

[Docket No. RM79-34, Order No. 30-B]

Transportation Certificate for Natural Gas for the Displacement of Fuel Oil

Issued: May 15, 1980

AGENCY: Federal Energy Regulatory Commission.

ACTION: Interim Rule and request for comments on extension.

SUMMARY: On May 12, 1980, the Economic Regulatory Administration (ERA) of the Department of Energy issued a proposal (published elsewhere in this issue) pursuant to section 403(a) of the Department of Energy Organization Act to extend the Commission's fuel oil displacement program for one year (Order No. 30). This program authorizes the transportation of natural gas to end users that would otherwise burn fuel oil. The Commission hereby establishes a public hearing and comment procedure on ERA's proposed rule. Furthermore, pending completion of the rulemaking proceeding in this docket, the Commission extends, on an interim basis, the Order No. 30 program for three months, *i.e.*, through August 31, 1980.

DATES: Effective date: May 15, 1980. Public Hearing on June 16, 1980. Notice of intent to participate in public hearing by June 9, 1980. Submission of statement for presentation of public hearing by June 13, 1980. Written comments filed by June 16, 1980.

ADDRESS: All filing should reference Docket No. RM79-34 and should be addressed to: Office of the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street N.E., Washington, D.C. 20426.

Public hearing location: Address above beginning at 9:30 a.m.

FOR FURTHER INFORMATION CONTACT: Robert C. Platt, Office of the General Counsel, 825 North Capitol Street N.E., Washington, D.C. 20426 202-357-8454.

SUPPLEMENTARY INFORMATION:

I. Introduction

On May 17, 1979, the Federal Energy Regulatory Commission (Commission) issued Order No. 30 which established a short term program authorizing the transportation of natural gas for the displacement of fuel oil (44 FR 30323, May 25, 1979). That order was adopted in response to a proposal of the Economic Regulatory Administration (ERA) of the Department of Energy which was referred to the Commission pursuant to section 403(a) of the Department of Energy Organization Act, 42 U.S.C. § 7173(a) (DOE Act). (44 FR 17644, March 22, 1979) [1]

In Order No. 30, the Commission recognized that rapidly changing factors surround the fuel oil displacement program and was unable to conclude that the program would be necessary beyond June 1, 1980. The regulations in Order No. 30 reflect this determination by providing that the program remain in effect during a "fuel shortage emergency period" which expires on June 1, 1980.

On May 12, 1980, the ERA proposed a further rule under section 403(a) of the DOE Act which would extend the "fuel shortage emergency period" for an additional year.[2] the ERA proposal finds

[1] In a related rule, the ERA established a procedure to certify the eligibility of end-users for this program. 10 CFR Part 595, 44 FR 20398 (April 5, 1979).

[2] The ERA proposal is being published in the **Federal Register** concurrently with the interim rule in this docket.

"that the urgent need to reduce oil imports still exists." For this reason, and because of the importance of fashioning a Commission regulation consistent with the overall ERA fuel oil displacement effort, the Commission seeks comment upon the ERA proposed extension as submitted.[3] In particular, the Commission invites comments on whether the program, if extended, should be limited to the displacement of premium grades of fuel oil such as low sulphur residual fuel oil and middle distillates.

Section 403(a) of the DOE Act authorizes the Secretary of Energy to propose rules with respect to any function within the jurisdiction of the Commission. Section 403(b) of that Act provides that the Commission shall have exclusive jurisdiction over such proposals. Accordingly, although the appended proposal is that of the ERA, the rulemaking proceeding commenced by this order shall result in a final rule of the Commission, and shall be governed by the Commission's procedures.

II. *Interim Extension*

As noted above, the fuel shortage emergency period defined in Order No. 30 ends on June 1, 1980. Since the public procedures on the ERA proposal will not be completed by that date, the Commission would be unable to take final action on the ERA proposal prior to the expiration of the Order No. 30 program. For this reason, the Commission extends the fuel oil displacement program for an additional three months. Thus, this interim rule amends the definition of "fuel shortage emergency period" in § 284.201(e) of the Commission's regulations to extend the period through August 31, 1980.

Section 284.208(c)(2) is also amended to clarify that our delegation to the Director of the Office of Pipeline and Producer Regulation remains in effect during the extension.

III. *Written Comment Procedures*

Interested persons are invited to submit written comments, data, views, or arguments with respect to the ERA proposed rule and the interim extension of the Order No. 30 program. An original and 14 copies should be filed with the Secretary, June 16, 1980, will be considered by the Commission prior to promulgation of final regulations. All written submissions Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, D.C. 20426, and should reference Docket No. RM79–34. All comments received prior to 4:30 p.m. e.d.t., June 16, 1980, will be considered by the Commission prior to promulgation of final regulations. All written submissions will be placed in the public file which has been established in this docket and which is available for public inspection through the Commission's Division of Public Information, Room 1000, 825 North Capitol Street NE., Washington, D.C. during regular business hours.

IV. *Public Hearing Procedures*

A public hearing concerning the interim extension and ERA's proposal will be held at the Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, D.C. on June 16, 1980, beginning at 9:30 a.m. and will continue if necessary on the following day. Any person interested in this proceeding or representing a group or class of persons interested in this proceeding may make a presentation at the hearing provided a written request to participate is received by the Secretary of the Commission prior to 4:30 p.m. e.d.t., on June 9, 1980.

Requests should reference Docket No. RM79–34, and should indicate the amount of time, not to exceed fifteen minutes, that is required for the oral presentation, and the telephone number at which the person making the presentation can be reached. At least 14 copies of the statement shall be submitted to the Secretary of the Commission prior to 4:00 p.m. on June 13, 1980.

Persons participating in the public hearing should, if possible, bring 50 copies of their testimony to the hearing for distribution to other participants. A list of participants in the hearing will be available in the Commission's Division of Public Information, Office of Congressional and Public Affairs, three days before the hearing and will be available at the site of the hearing on the morning it is convened.

The hearing will not be a judicial or evidentiary-type hearing. Members of the hearing panel will be designated by the Chairman of the Commission. There will be no cross-examination of persons presenting statements. However, the panel may question such persons and any interested person may submit questions to the presiding officer to be asked of persons making statements. The presiding officer will determine whether the question is relevant and whether the time limitations permit it to be presented. Any further procedural rules will be announced by the presiding officer at the hearing. A transcript of the hearing will be available through the Commission's Division of Public Information.

V. *Effective Date*

The Commission finds that the public interest is best served by the continuation of the fuel oil displacement program pending the Commission's consideration of ERA's proposed rule. In order to accomplish this, the Commission must act before June 1, 1980. For this reason, the Commission finds good cause to waive the 30-day requirement set forth in 5 U.S.C. § 553(d) and to make this interim rule effective immediately.

(Natural Gas Act, 15 U.S.C. § 717 *et seq.*; Natural Gas Policy Act of 1978, P.L. 95–621; Department of Energy Organization Act, P.L. 95–91; E.O. 12009, 42 FR 46267)

In consideration of the foregoing, Part 284 of Chapter I, Title 18, Code of Federal Regulations, is amended, on an interim basis, as set forth below, effective immediately.

By the Commission.

Kenneth F. Plumb,

Secretary.

1. Section 284.201 is amended by revising paragraph (e) to read as follows:

§ 284.201 Definitions.

* * * * *

(e) "Fuel shortage emergency period" means the period beginning May 17, 1979, and ending at 11:59 p.m. on August 31, 1980.

* * * * *

§ 284.208 [Amended]

2. Section 284.208 is amended in paragraph (c)(2) by deleting "1979,".

[FR Doc. 80–15776 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–85–M

[3] Consolidated Edison Company of New York, Public Service Electric and Gas, and National Fuel Gas Supply Corporation have filed motions in this docket seeking an extension of the program. Comments have also been filed, some in favor of and others in opposition to an extension. Furthermore, the Commission convened an informal conference on April 2, 1980, to study the nation's natural gas supply outlook. Notice of Informal Conference, Docket No. GP80–76, 45 FR 15944 (March 12, 1980).

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Assistant Secretary for Housing—Federal Housing Commissioner

24 CFR Part 841

[Docket No. N–80–1000]

Public Housing Program; Development Phase; Prototype Cost Limits for Low-Income Public Housing

AGENCY: Office of the Assistant Secretary for Housing—Federal Housing

Commissioner, Department of Housing and Urban Development (HUD).

ACTION: Notice of prototype cost determination under 24 CFR Part 841, Appendix A.

SUMMARY: On June 6, 1979 (44 FR 32516), the Department published a revised schedule of "Prototype Cost Limits for Low-Income Public Housing." After consideration of additional factual data, revisions are necessary to delete thirteen prototype areas and increase the per unit prototype cost limits for eight areas in the State of Florida.

DATE: Effective May 22, 1980.

FOR FURTHER INFORMATION CONTACT: Mr. Jack R. VanNess, Director, Technical Support Division, Office of Public Housing, Room 6248, 451 7th Street, S.W., Washington, D.C. 20410, (202) 755–4956 (this is not a toll-free number).

SUPPLEMENTARY INFORMATION: These schedules establish per unit limits on the dwelling construction and equipment costs (prototype costs) for the development of new Low-Income Public Housing under the United States Housing Act of 1937 (Section 6(b)) as set forth in 24 CFR Part 841, Appendix A. Prototype cost schedules established for special Indian prototype cost areas, in accordance with 24 CFR Part 805 are identified by an asterisk (*) and only apply to the development of Indian housing.

Timely written comments will be considered and additional amendments will be published if the Department determines that acceptance of the comments is appropriate. Comments with respect to cost limits for a given location should be sent to the address indicated above.

A Finding of Inapplicability respecting the National Environmental Policy Act of 1969 has been made in accordance with HUD procedures. A copy of this Finding of Inapplicability will be available for public inspection during regular business hours in the Office of the Rules Docket Clerk, Office of General Counsel, Room 5218, 451 7th Street, S.W., Washington, D.C. 20410.

Accordingly, the per unit cost schedules setting Prototype Cost Limits for Low-Income Housing are amended as follows:

1. At 44 FR 32533–32535, delete the per unit prototype cost schedules for detached and semi-detached, row, walk-up and elevator dwellings, Region IV, Fort Walton Beach and Panama City. Consolidate these areas with the prototype area designated Pensacola.

2. At 44 FR 32533–32535, delete the per unit prototype cost schedules for detached and semi-detached, row, walk-up and elevator dwellings, Region IV, Gainesville and Tallahassee. Consolidate these areas with the prototype area designated Jacksonville.

3. At 44 FR 32533–32535, delete the per unit prototype cost schedules for detached and semi-detached, row, walk-up and elevator dwellings, Region IV, Fort Lauderdale and West Palm Beach. Consolidate these areas with the prototype area designated Miami.

4. At 44 FR 32533–32535, delete the per unit prototype cost schedules for detached and semi-detached, row, walk-up and elevator dwellings, Region IV, Fort Myers, Lakeland, Sarasota and St. Petersburg. Consolidate these areas with the prototype area designated Tampa.

5. At 44 FR 32533–32535, revise the per unit prototype cost schedules for detached and semi-detached, row, walk-up and elevator dwellings, Region IV, Jacksonville, Pensacola, Miami, Big Cypress, Brighton, Key West, Tampa and Orlando, Florida.

6. At 44 FR 32533–32535, delete the per unit prototype cost schedules for detached and semi-detached, row, walk-up and elevator dwellings, Region IV, Cocoa Beach, Daytona Beach and Fort Pierce. Consolidate these areas with the prototype area designated Orlando.

(Sec. 7(d), Department of HUD Act, 42 U.S.C. 3535(d); Sec. 6(b) U.S. Housing Act of 1937, 42 U.S.C. 1437(d))

Issued at Washington, D.C. on May 14, 1980.

Lawrence B. Simons,

Assistant Secretary for Housing—Federal Housing Commissioner.

Region IV.—*Prototype per Unit Cost Schedule*

	Number of bedrooms						
	0	1	2	3	4	5	6
Florida:							
Jacksonville:							
Detached and semidetached	13,250	16,450	21,050	24,650	28,750	31,250	32,800
Row dwellings	13,200	16,350	20,900	24,550	28,500	31,200	32,700
Walkup	13,050	16,200	20,750	24,400	28,350	31,150	32,600
Elevator-structure	20,650	23,900	30,450				
Pensacola:							
Detached and semidetached	13,250	16,350	20,800	24,350	28,450	31,100	32,600
Row dwellings	13,150	16,250	20,650	24,200	28,300	30,900	32,500
Walkup	13,050	16,150	20,550	24,050	28,150	30,800	32,350
Elevator-structure	19,700	23,900	29,000				
Tampa:							
Detached and semidetached	14,100	16,950	21,100	25,150	30,150	33,650	35,150
Row dwellings	13,950	16,800	20,850	24,800	29,950	33,350	34,900
Walkup	11,300	14,750	18,650	22,200	25,800	28,300	29,700
Elevator-structure	22,200	25,800	32,650				
Orlando:							
Detached and semidetached	13,750	16,400	20,300	24,300	29,100	32,500	33,950
Row dwellings	13,600	16,350	20,250	24,150	28,950	32,300	33,750
Walkup	12,600	15,750	19,900	23,650	27,400	30,250	31,600
Elevator-structure	23,050	26,700	33,600				
Miami:							
Detached and semidetached	14,550	17,450	21,450	25,750	31,000	34,450	36,050
Row dwellings	14,200	17,150	21,250	25,300	30,350	33,750	35,450
Walkup	11,650	14,750	18,650	22,150	25,600	28,250	29,700
Elevator-structure	25,800	30,000	37,950				
Key West:							
Detached and semidetached	14,550	17,450	21,450	25,750	31,000	34,450	36,050
Row dwellings	14,200	17,150	21,250	25,300	30,350	33,750	35,450
Walkup	11,650	14,750	18,650	22,150	25,600	28,250	29,700
Elevator-structure	25,800	30,000	37,950				
*Big Cypress:							
Detached and semidetached	15,100	18,000	22,000	26,900	32,050	35,250	37,100
Row dwellings							
Walkup							
Elevator-structure							
*Brighton:							
Detached and semidetached	15,100	18,000	22,000	26,900	32,050	35,250	37,100
Row dwellings							
Walkup							
Elevator-structure							
Alabama:							
Mobile:							
Detached and semidetached	14,800	17,900	22,150	26,400	31,800	35,350	36,950
Row dwellings	14,150	17,250	21,200	25,200	30,350	33,700	35,350
Walkup	12,200	15,250	19,300	22,800	26,550	29,300	30,800
Elevator-structure	23,700	27,550	34,700				
Montgomery:							
Detached and semidetached	13,450	16,300	20,100	24,250	29,050	32,200	33,800
Row dwellings	13,000	15,650	19,300	22,900	27,700	30,800	32,300
Walkup	11,150	13,950	17,650	20,900	26,200	26,550	28,050
Elevator-structure	22,200	26,000	32,600				
Tuscaloosa:							
Detached and semidetached	13,300	16,200	20,000	23,750	28,750	31,950	33,450
Row dwellings	12,950	15,450	19,200	22,800	27,500	30,660	32,050
Walkup	11,100	13,900	17,500	20,650	23,950	26,400	27,700
Elevator-structure	21,950	25,650	32,400				

Region IV.—*Prototype per Unit Cost Schedule—Continued*

	Number of bedrooms						
	0	1	2	3	4	5	6
Florida:							
Jacksonville:							
Detached and semidetached	12,050	14,400	17,850	21,350	25,600	28,400	29,800
Row dwellings	11,500	13,900	17,100	20,300	24,400	27,250	28,500
Walkup	13,050	16,200	20,750	24,400	28,350	31,150	32,600
Elevator-structure	19,850	23,000	29,200				
Fort Walton Beach:							
Detached and semidetached	11,800	14,350	17,650	21,100	25,400	28,100	29,500
Row dwellings	11,450	13,850	17,000	20,200	24,100	27,000	28,200
Walkup	13,000	16,150	20,550	24,050	28,150	30,800	32,350
Elevator-structure	19,700	22,850	29,000				
Gainesville:							
Detached and semidetached	12,400	15,100	18,550	22,200	26,700	29,500	30,950
Row dwellings	11,850	14,450	17,750	21,050	25,350	28,350	29,600
Walkup	13,050	16,150	20,750	24,400	28,200	31,150	32,600
Elevator-structure	20,650	23,900	30,450				
Panama City:							
Detached and semidetached	11,800	14,350	17,650	21,100	25,400	28,100	29,500
Row dwellings	11,450	13,850	17,000	20,200	24,100	27,000	28,200
Walkup	13,000	16,150	20,550	24,050	28,150	30,800	32,350
Elevator-structure	19,700	22,850	29,000				
Pensacola:							
Detached and semidetached	11,800	14,350	17,650	21,100	25,400	28,100	29,500
Row dwellings	11,450	13,850	17,000	20,200	24,100	27,000	28,200
Walkup	12,650	15,850	20,050	23,650	27,600	30,200	31,600
Elevator-structure	19,700	22,850	29,000				
Tallahassee:							
Detached and semidetached	12,300	14,800	18,250	21,900	26,300	29,150	30,500
Row dwellings	11,700	14,150	17,450	20,850	24,950	27,900	29,150
Walkup	12,750	15,950	20,450	23,800	27,850	30,550	32,000
Elevator-structure	20,250	23,350	29,900				
Florida:							
Miami:							
Detached and semidetached	14,050	16,850	20,650	24,850	29,900	33,200	34,750
Row dwellings	13,650	16,400	20,450	24,200	29,200	32,500	34,050
Walkup	11,250	14,200	18,000	21,350	24,700	27,250	28,650
Elevator-structure	25,800	30,000	37,950				
Big Cypress:							
Detached and semidetached	15,100	18,000	22,000	26,500	32,050	35,250	37,100
Row dwellings							
Walkup							
Elevator-structure							
Brighton:							
Detached and semidetached	15,100	18,000	22,000	26,500	32,050	35,250	37,100
Row dwellings							
Walkup							
Elevator-structure							
Fort Lauderdale:							
Detached and semidetached	14,050	16,800	20,700	24,800	29,850	33,100	34,800
Row dwellings	14,200	17,150	21,250	25,300	30,350	33,750	35,450
Walkup	9,450	12,000	15,300	17,900	20,800	22,900	24,100
Elevator-structure	24,400	28,550	35,850				
Fort Myers:							
Detached and semidetached	12,400	14,850	18,200	21,850	26,300	29,200	31,600
Row dwellings	12,500	15,100	18,700	22,250	26,700	29,750	31,200
Walkup	9,050	11,350	14,350	17,050	19,750	21,700	22,800
Elevator-structure	23,900	27,850	35,200				
Key West:							
Detached and semidetached	13,850	16,600	20,400	24,450	29,450	32,700	34,250
Row dwellings	14,000	16,850	21,000	24,850	30,000	33,400	34,950
Walkup	10,350	13,050	16,550	19,600	22,700	25,000	26,300
Elevator-structure	25,550	29,750	37,600				
West Palm Beach:							
Detached and semidetached	12,950	15,550	19,100	22,900	27,600	30,600	32,050
Row dwellings	13,150	15,800	19,600	23,300	28,050	31,100	32,700
Walkup	9,950	12,500	15,900	18,800	21,850	24,050	25,200
Elevator-structure	24,950	29,050	36,650				
Tampa:							
Detached and semidetached	11,200	13,400	16,500	19,800	23,700	26,450	27,650
Row dwellings	11,000	13,350	16,550	19,600	23,550	26,300	27,450
Walkup	10,850	13,450	17,150	20,300	23,550	25,800	27,100
Elevator-structure	21,650	25,200	31,850				
Cocoa Beach:							
Detached and semidetached	11,100	13,250	16,400	19,600	23,500	26,250	27,400
Row dwellings	10,950	13,200	16,400	19,350	23,400	26,050	27,250
Walkup	10,700	13,400	16,950	20,050	23,350	25,550	26,850
Elevator-structure	21,550	25,100	31,500				
Florida:							
Daytona Beach:							
Detached and semidetached	13,050	15,600	19,400	23,200	27,700	30,900	32,350
Row dwellings	12,850	15,550	19,300	22,900	27,500	30,750	32,100
Walkup	12,600	15,750	19,900	23,650	27,400	30,250	31,600
Elevator-structure	21,250	24,750	31,300				
Fort Pierce:							
Detached and semidetached	11,850	14,100	17,500	20,900	25,150	28,050	29,350
Row dwellings	11,650	14,000	17,400	20,700	24,850	27,800	28,950
Walkup	11,550	14,300	18,150	21,500	25,150	27,350	28,800
Elevator-structure	23,050	26,700	33,600				

Region IV.—*Prototype per Unit Cost Schedule—Continued*

	Number of bedrooms						
	0	1	2	3	4	5	6
Lakeland:							
Detached and semidetached	11,250	13,450	16,650	20,000	23,850	26,700	27,800
Row dwellings	11,050	13,400	16,650	19,800	23,650	26,450	27,700
Walkup	11,050	13,600	17,250	20,400	23,650	26,050	27,350
Elevator-structure	21,650	25,150	31,800				
Orlando:							
Detached and semidetached	11,000	13,100	16,250	19,400	23,250	25,900	27,000
Row dwellings	10,800	12,950	16,150	19,100	22,950	25,600	26,800
Walkup	10,300	12,900	16,300	19,300	22,300	24,600	25,800
Elevator-structure	21,100	24,400	30,900				
Sarasota:							
Detached and semidetached	11,400	13,700	17,050	20,300	24,350	27,200	28,400
Row dwellings	11,300	13,750	17,050	20,050	24,200	26,950	28,200
Walkup	11,250	14,050	17,750	21,150	24,550	26,950	28,300
Elevator-structure	22,200	25,800	32,650				
St. Petersburg:							
Detached and semidetached	11,000	13,100	16,250	19,400	23,250	25,900	27,000
Row dwellings	10,800	12,950	16,150	19,100	22,950	25,600	26,800
Walkup	10,600	13,300	16,800	19,850	23,000	25,400	26,550
Elevator-structure	21,350	24,750	31,150				
Georgia:							
Atlanta:							
Detached and semidetached	12,400	15,000	18,350	21,950	26,400	29,300	30,650
Row dwellings	11,750	14,150	17,550	20,850	25,100	27,900	29,150
Walkup	13,300	16,450	20,950	24,650	28,650	31,400	33,100
Elevator-structure	19,250	22,300	28,300				
Albany:							
Detached and semidetached	12,350	14,900	18,250	21,750	26,100	29,050	30,400
Row dwellings	11,700	14,100	17,400	20,650	24,800	27,700	29,000
Walkup	13,150	16,350	20,750	24,350	28,500	31,200	32,900
Elevator-structure	19,050	22,200	28,000				
Augusta:							
Detached and semidetached	12,700	15,200	18,900	22,550	27,100	30,000	31,400
Row dwellings	12,150	14,550	17,900	21,550	25,850	28,650	30,000
Walkup	13,350	16,450	20,950	24,750	28,650	31,750	33,150
Elevator-structure	17,900	20,750	26,300				

[FR Doc. 80-15619 Filed 5-21-80; 8:45 am]

BILLING CODE 4210-01-M

DEPARTMENT OF JUSTICE

Attorney General

28 CFR Part 0

[Order No. 893-80]

Authorizations With Respect to Personnel and Certain Administrative Matters; Amendment to the Personnel Authority of the U.S. Marshals Service

AGENCY: Department of Justice.

ACTION: Final rule.

SUMMARY: This order extends the authority of the Director of the United States Marshals Service to take final action in matters pertaining to personnel in General Schedule grades GS-1 through GS-15, consistent with the other Bureaus of the Department of Justice and the Executive Office for United States Attorneys.

EFFECTIVE DATE: May 14, 1980.

FOR FURTHER INFORMATION CONTACT: Harry H. Flickinger, Deputy Assistant Attorney General, Justice Management Division, Department of Justice, Washington, D.C. 20530, (202-633-5501).

PART 0—ORGANIZATION OF THE JUSTICE DEPARTMENT

By virtue of the authority vested in me by 28 U.S.C. 509 and 510 and 5 U.S.C. 301, Title 28, Code of Federal Regulations is amended as follows:

§ 0.138a [Deleted]

1. Section 0.138a is deleted.

2. Section 0.138 is revised to read as follows:

§ 0.138 Bureau of Prisons, Federal Prison Industries, Immigration and Naturalization Service, Drug Enforcement Administration, United States Marshals Service, Executive Office for U.S. Attorneys and Law Enforcement Assistance Administration.

The Director of the Bureau of Prisons, the Commissioner of Federal Prison Industries, the Commissioner of Immigration and Naturalization, the Administrator of the Drug Enforcement Administration, the Director of the U.S. Marshals Service, and the Director of the Executive Office for U.S. Attorneys are, as to their respective jurisdictions, authorized to exercise the power and authority vested in the Attorney General by law to take final action in matters pertaining to the employment, direction, and general administration (including appointment, assignment, training, promotion, demotion, compensation, leave, classification, and separation) of

personnel in General Schedule grades GS–1 through GS–15 and in Wage Grade positions, but excluding therefrom all attorney and U.S. Marshal positions. Such officials, and the Administrator of the Law Enforcement Assistance Administration, are, as to their respective jurisdictions, authorized to exercise the power and authority vested in the Attorney General by law to employ on a temporary basis experts or consultants or organizations thereof, including stenographic reporting services (5 U.S.C. 3109(b)). All personnel actions taken under this section shall be subject to postaudit and correction by the Assistant Attorney General for Administration.

Dated: May 14, 1980.

Benjamin R. Civiletti,

Attorney General.

[FR Doc. 80-15659 Filed 5-21-80; 8:45 am]

BILLING CODE 4410-01-M

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28 CFR Part 0

[Order No. 894-80]

Delegation of Authority to the Assistant Attorney General of the Criminal Division To Redelegate Certain Functions Pertaining to Juvenile Criminal Prosecutions to the Chiefs of the Sections within the Criminal Division.

AGENCY: Department of Justice.

ACTION: Final rule.

SUMMARY: By this order the Attorney General gives authority to the Assistant Attorney General of the Criminal Division to redelegate certain functions (previously delegated to him) pertaining to juvenile criminal prosecutions to the Chiefs of the Sections within that Division.

EFFECTIVE DATE: May 14, 1980.

FOR FURTHER INFORMATION CONTACT: Joseph F. Ciolino (202–724–7144) or Earl Kaplan (202–724–6898), Attorneys, General Litigation and Legal Advice Section, Criminal Division, Department of Justice, Washington, D.C. 20530.

SUPPLEMENTARY INFORMATION: Section 0.57 of Title 28, Code of Federal Regulations currently provides that certain functions delegated to the Assistant Attorney General, Criminal Division, by the Attorney General, which pertain to the criminal prosecution of juvenile delinquents pursuant to Sections 5032 and 5036 of Title 18, United States Code, may be redelegated to the United States Attorneys. By this action the Assistant Attorney General will be given the power to redelegate those functions to the Chief of the Section within the Criminal Division which supervises the implementation of the Juvenile Justice and Delinquency Prevention Act (18 U.S.C. 5031 *et seq.*).

The power to decide whether to grant a United States Attorney's request to petition a United States District Court for a motion to transfer a juvenile to adult prosecution is presently being exercised by one of the Deputy Assistant Attorneys General of the Criminal Division in accordance with 28 CFR 0.57. That decision is preceded by a review of the request and a recommendation made by the Section which supervises the implementation of the Juvenile Justice and Delinquency Prevention Act (18 U.S.C. 5031 *et seq.*). This procedure can be made more efficient by granting the power to make the final decision on the request to the Chief of the Section which is responsible for the initial review and recommendation.

Accordingly, by virtue of the authority vested in me by 28 U.S.C. 509 and 510, Section 0.57 of Title 28, Code of Federal Regulations, is amended by deleting the period at the end thereof and adding the following:

"and to the Chief of the Section within the Criminal Division which supervises the implementation of the Juvenile Justice and Delinquency Prevention Act (18 U.S.C. 5031 *et seq.*)."

Dated: May 14, 1980.

Benjamin R. Civiletti,

Attorney General.

[FR Doc. 80-15660 Filed 5-21-80; 8:45 am]

BILLING CODE 4410-01-M

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 110

[CGD 79-176]

Amendment to San Francisco Bay Anchorage Grounds, Anchorage Number 5

AGENCY: Coast Guard, DOT.

ACTION: Final Rule.

SUMMARY: This rule expands San Francisco Bay Anchorage No. 5, as a result of the relocation of a buoy used to mark the northwest corner of this anchorage. In conjunction with the expansion the description of the eastern boundary is revised to reflect the replacement of Southampton Shoal Channel Lighted Buoy 5SS by Southampton Shoal Light 5.

EFFECTIVE DATE: This amendment is effective on June 23, 1980.

FOR FURTHER INFORMATION CONTACT: Lieutenant Gerald Jenkins, Commander (m), Twelfth Coast Guard District, Room 356, 630 Sansome Street, San Francisco, CA 94126, (415) 556–1380.

SUPPLEMENTARY INFORMATION: On February 19, 1980, the Coast Guard published a proposed rule (45 FR 10811) concerning this amendment. Interested persons were given until April 1, 1980 to submit comments. No comments were received.

The Coast Guard has determined that in accordance with the Department of Transportation's "Regulatory Policies and Procedures" (44 FR 11034), this amendment is nonsignificant.

DRAFTING INFORMATION: The principal persons involved in drafting this rule are Ensign Rhae A. Giacoma, Project Manager, Office of Marine Environment and Systems, and Lieutenant J. W. Salter, Project Attorney, Office of the Chief Counsel.

PART 110—ANCHORAGE REGULATIONS

In consideration of the foregoing, Part 110 of Title 33, Code of Federal Regulations is amended by revising § 110.224(a)(3) to read as follows:

§ 110.224 San Francisco Bay, San Pablo Bay, Carquinez Straits, Suisun Bay, San Joaquin River, and connecting waters, California.

(a) * * *

(3) Anchorage No. 5, General Anchorage. (i) In San Francisco Bay beginning on the northwest shore of Red Rock at latitude 37°55'48" N., longitude 122°25'52" W.; thence west to San Francisco Bay North Channel Lighted Buoy 12 at latitude 37°55'50" N., longitude 122°26'32.4" W.; thence south to San Francisco Bay North Channel Lighted Buoy 10 at latitude 37°54'49" N., longitude 122°26'39" W.; thence southeast to latitude 37°53'23" N., longitude 122°25'09" W.; thence north to Southampton Shoal Light 5 at latitude 37°55'19" N., longitude 122°25'33" W.; thence to the southeast shore of Red Rock at latitude 37°55'42" N., longitude 122°25'45" W.; thence along the shoreline to the point of beginning.

(ii) Special regulation: No vessel anchored in this anchorage may project into the San Francisco Bay North Channel or the Southampton Shoal Channel.

* * * * *

(Sec. 7, 30 Stat. 1053 as amended, (33 U.S.C. 471); 6(g)(1)(A) 80 Stat. 937; (49 U.S.C. 1655 (g)(1)(A)), 49 CFR 1.46(c)(1))

Dated: May 14, 1980.

K. G. Wiman,

Captain, U.S. Coast Guard, Acting Chief, Office of Marine Environment and Systems.

[FR Doc. 80-15736 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-14-M

VETERANS ADMINISTRATION

38 CFR Part 36

Decrease in Maximum Permissible Interest Rates on Guaranteed Mobile Home Loans

AGENCY: Veterans Administration.

ACTION: Final regulations.

SUMMARY: The VA (Veterans Administration) is decreasing the maximum interest rates on guaranteed mobile home loans. These decreases in interest rates apply to mobile home unit loans and combination mobile home unit and lot loans. No change is being made at this time to the interest rate for mobile home lot only loans. These decreases in interest rates are possible because of recent improvements in the availability of funds in various credit markets. The decrease in the interest rates will allow eligible veterans to purchase a mobile home unit or a combination mobile home unit and lot at a lower monthly cost.

EFFECTIVE DATE: May 15, 1980.

FOR FURTHER INFORMATION CONTACT: Mr. George D. Moerman, Loan Guaranty Service (264), Department of Veterans Benefits, Veterans Administration, 810 Vermont Ave., N.W., Washington, DC 20420 (202-389-3042).

SUPPLEMENTARY INFORMATION: The Administrator is required by section 1819(f), title 38, United States Code, to establish maximum interest rates for mobile home loans guaranteed by the VA as he finds the mobile home loan capital markets demand. Recent market indicators—including the prime rate, the general decrease in interest rates charged on conventional mobile home loans, and the decrease of other short-term and long-term interest rates—have shown that the mobile home capital markets have improved. It is now possible to decrease the interest rates on mobile home unit loans and combination mobile home unit and lot loans while still assuring an adequate supply of funds from lenders and investors to make these types of VA loans. The lower interest rates for mobile home loans and combination mobile home and lot loans should assist more veterans in the purchase of mobile home housing because of the decrease in the monthly loan payments for principal and interest.

No change is being made at this time to the interest rate for loans to purchase a lot only on which a veteran can place a previously acquired mobile home unit. The credit markets for the purchase of unimproved real estate have not sufficiently eased to allow a decrease in the mobile home lot interest rate.

The decrease in the maximum rates for mobile home unit loans and combination mobile home unit and lot loans is accomplished by amending § 36.4212(a)(1) and (3), title 38, Code of Federal Regulations. Compliance with the procedure for publication of proposed regulations prior to final adoption is waived because compliance would deny veteran mobile home purchasers the advantage of a lower interest rate pending the ultimate effective date which would necessarily be more than 30 days after publication in proposed form.

These amendments are adopted under authority of sections 210(c), 1819(f) and (g) of title 38, United States Code.

Approved: May 13, 1980.

By direction of the Administrator.

Rufus H. Wilson,

Deputy Administrator.

PART 36—LOAN GUARANTY

In § 36.4212, paragraph (a) (1) and (3) is revised to read as follows:

§ 36.4212 Interest rates and late charges.

(a) The interest rate charged the borrower on a loan guaranteed or insured pursuant to 38 U.S.C. 1819 may not exceed the following maxima except on loans guaranteed or insured pursuant to guaranty or insurance commitments issued by the Veterans Administration prior to the respective effective date: (38 U.S.C. 1819(f))

(1) Effective May 15, 1980, 16 percent simple interest per annum for a loan which finances the purchase of a mobile home unit only.

* * * * *

(3) Effective May 15, 1980, 15½ percent simple interest per annum for a loan which will finance the simultaneous acquisition of a mobile home and a lot and/or the site preparation necessary to make a lot acceptable as the site for the mobile home.

* * * * *

(38 U.S.C. 210(c), 1819(g))

[FR Doc. 80-15723 Filed 5-21-80; 8:45 am]

BILLING CODE 8320-01-M ge

38 CFR Part 36

Decrease in Maximum Interest Rate, Home and Condominium Loans

AGENCY: Veterans Administration.

ACTION: Final regulations.

SUMMARY: The VA (Veterans Administration) is decreasing the maximum interest rate on guaranteed, insured and direct loans for homes and condominiums. The maximum interest rate is decreased because the mortgage money market has eased in recent weeks. The decrease in the interest rate will allow eligible veterans to obtain a loan at a lower monthly cost.

EFFECTIVE DATE: May 15, 1980.

FOR FURTHER INFORMATION CONTACT: Mr. George D. Moerman, Loan Guaranty Service (264), Department of Veterans Benefits, Veterans Administration, 810 Vermont Ave., NW, Washington, D.C. 20420 (202-389-3042).

SUPPLEMENTARY INFORMATION: The Administrator is required to establish a maximum interest rate for home and condominium loans guaranteed, insured or made by the Veterans Administration as he finds the loan market demands. Recent market indicators—including the rate of discount charged by lenders on VA and Federal Housing Administration loans, the general availability of mortgage funds, and the results of the bi-weekly Federal National Mortgage Association auctions—have shown that the mortgage market has eased. The Administrator, after consultation with the Secretary of Housing and Urban Development as required by law, has determined that a decrease in the VA home and condominium interest rate is warranted at this time.

The decrease in the VA maximum home and condominium interest rate should not have an adverse impact on the availability of funds necessary to make VA loans. The decrease in the VA interest rate, however, should allow more veterans to purchase a home because of the lower monthly payment for principal and interest required at the lower interest rate.

The decrease in the maximum interest rate for home and condominium loans is accomplished by amending §§ 36.4311(a), and 36.4503(a) of title 38, Code of Federal Regulations. Compliance with the procedure for publication of proposed regulations prior to final adoption is waived because compliance would deny veteran home-buyers the advantage of a lower interest rate pending the ultimate effective date which would necessarily be more than 30 days after publication in proposed form.

By direction of the Administrator.
Approved: May 13, 1980.

Rufus H. Wilson,

Deputy Administrator.

PART 36—LOAN GUARANTY

1. In § 36.4311, paragraph (a) is revised to read as follows:

§ 36.4311 Interest rates.

(a) Excepting loans guaranteed or insured pursuant to guaranty or insurance commitments issued by the Veterans Administration which specify an interest rate in excess of 11½ per centum per annum, effective May 15, 1980, the interest rate on any home or condominium loan guaranteed or insured wholly or in part on or after such date may not exceed 11½ per annum on the unpaid principal balance. (38 U.S.C. 1803(c)(1))

* * * * *

2. In § 36.4503, paragraph (a) is revised to read as follows:

§ 36.4503 Amount and amortization.

(a) The original principal amount of any loan made on or after October 1, 1978, shall not exceed an amount which bears the same ratio to $33,000 as the amount of the guaranty to which the veteran is entitled under 38 U.S.C. 1810 at the time the loan is made bears to $25,000. This limitation shall not preclude the making of advances, otherwise proper, subsequent to the making of the loan pursuant to the provisions of § 36.4511. Except as to home improvement loans, loans made by the Veterans Administration shall bear interest at the rate of 11½ percent per annum. Loans solely for the purpose of energy conservation improvements or other alterations, improvements, or repairs shall bear interest at the rate of 15 percent per annum. (38 U.S.C. 1811(d)(1) and (2)(A))

* * * * *

(38 U.S.C. 210(c), 1803(c))

[FR Doc. 80-15722 Filed 5-21-80; 8:45 am]

BILLING CODE 8320-01-M

POSTAL SERVICE

39 CFR Part 111

Merchandise Return Service; Permanent Implementing Regulations

AGENCY: Postal Service.

ACTION: Permanent implementing regulations.

SUMMARY: By separate notice published elsewhere in this issue, the Postal Service announced the establishment of a permanent mail classification for merchandise return service under the authority of 39 U.S.C. 3625. The change becomes effective at 12:01 a.m. on May 21, 1980.

In order to fully implement that mail classification change, the Postal Service also adopts on a permanent basis a new Part 919 of the Domestic Mail Manual, also effective May 21, 1980.

EFFECTIVE DATE: May 21, 1980.

FOR FURTHER INFORMATION CONTACT: Grayson Poats, (202) 245-4602.

SUPPLEMENTAL INFORMATION: By notice published on April 17, 1980 (45 FR 26194), the Postal Service announced the establishment of a temporary mail classification for merchandise return service under the authority of 39 U.S.C. 3641(e). Temporary implementing regulations were published on April 29, 1980 (45 FR 28331). Those changes became effective on April 27, 1980.

On April 21, 1980, the Postal Rate Commission issued a Recommended Decision pursuant to 39 U.S.C. 3624, which recommended that the Postal Service adopt the merchandise return service classification on a permanent basis. On May 6, 1980, the Governors of the Postal Service, pursuant to 39 U.S.C. 3625, approved the Commission's Recommended Decision and ordered the recommended changes in the mail classification schedule into effect on a permanent basis. Those changes are identical to the changes previously implemented on a temporary basis and become effective at 12:01 a.m. on May 21, 1980.

Since the changes in the mail classification schedule have been adopted on a permanent basis, the implementing regulations adopted April 27, 1980 on a temporary basis as new Part 919 of the Domestic Mail Manual must also be made permanent. No changes in the implementing regulations are being made. They are being adopted exactly as published in the **Federal Register** on April 29, 1980. It may be noted that these same regulations were also published in the Postal Bulletin on April 24, 1980 (PB21242) and will be included in an upcoming issue of changes to the Domestic Mail Manual, which is incorporated by reference in the **Federal Register** (39 CFR 111.1).

Accordingly, the Postal Service hereby permanently adopts, effective 12:01 a.m., May 21, 1980, new Part 919 of the Domestic Mail Manual in the exact form it was published in the **Federal Register** on April 29, 1980 (45 FR 28331).

The temporary implementing regulations will remain in effect as temporary regulations until they become permanent on May 21, 1980.

(39 U.S.C. 401, 403, 404, 3621, 3623, 3641)

W. Allen Sanders,

Associate General Counsel for General Law and Administration.

[FR Doc. 80-15668 Filed 5-21-80; 8:45 am]

BILLING CODE 7710-12-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[FRL 1498-3]

Approval and Promulgation of Implementation Plans; Prevention of Significant Deterioration of Air Quality: Partial Delegation of Authority to the State of Mississippi

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The amendment below institutes address changes for the implementation of the technical and administrative portions of the Prevention of Significant Deterioration of Air Quality (PSD) program. The notice announcing the partial delegation of authority is published elsewhere in this issue of the **Federal Register**. Under the partial delegation of PSD authority, EPA will continue to issue and enforce PSD permits for sources in Mississippi, but the State will process and evaluate the applications for permits.

EFFECTIVE DATE: June 14, 1979.

ADDRESSES: This amendment provides that all reports, requests, applications, submittals, and communications required for the delegated review will now be sent to the following address instead of to EPA's Region IV office: Bureau of Pollution Control, Mississippi Department of Natural Resources, P.O. Box 10385, Jackson, Mississippi 39209.

FOR FURTHER INFORMATION CONTACT: Winston Smith, Chief, Air Programs Branch, Environmental Protection Agency, Region IV, 345 Courtland Street NE., Atlanta, Georgia 30308, 404/881-3043 (FTS 257-3043).

SUPPLEMENTARY INFORMATION: The Regional Administrator finds good cause for foregoing prior public notice and for making this rulemaking effective immediately in that it is an administrative change and not one of substantive content. No additional substantive burdens are imposed on the parties affected. The delegation which is reflected by this administrative amendment was effective June 14, 1979, and it serves no purpose to delay the technical change of this addition of the State address to the Code of Federal

Regulations. This rulemaking is effective immediately and is issued under authority of sections 101, 110, and 301 of the Clean Air Act (42 U.S.C. 7401, 7410, and 7601).

Under Executive Order 12044, EPA is required to judge whether a regulation is "significant" and therefore subject to the procedural requirements of the Order or whether it may follow other specialized development procedures. EPA labels these other regulations "specialized." I have reviewed this regulation and determined that it is a specialized regulation not subject to the procedural requirements of Executive Order 12044.

(Sections 101, 110, and 301 of the Clean Air Act (42 U.S.C. 7401, 7410, and 7601))

Dated: May 10, 1980.

Rebecca W. Hanmer,

Regional Administrator.

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Part 52 of Chapter I, Title 40, Code of Federal Regulations, is amended as follows:

Subpart Z-Mississippi

Section 52.1280 is amended by adding a new paragraph (c) as follows:

§ 52.1280 Significant deterioration of air quality.

* * * * *

(c) All applications and other information required pursuant to § 52.21 of this part from sources located or to be located in the State of Mississippi shall be submitted to the Bureau of Pollution Control, Department of Natural Resources, P.O. Box 10385, Jackson, Mississippi 39209.

[FR Doc. 80-15715 5-21-80; 8:45 am]

BILLING CODE 6560-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

45 CFR Part 74

Department-Wide Administration of Grants; Implementation of Revised Cost Principles

AGENCY: Department of Health and Human Services (HHS).

ACTION: Final rule.

SUMMARY: This amendment to HHS' Department-wide grants administration regulation implements: (1) a comprehensive revision to the Government-wide cost principles for educational institutions, and (2) changes to the Government-wide cost principles for State, local, and Indian tribal governments. This amendment also changes the way HHS implements Government-wide cost principles.

EFFECTIVE DATE: May 22, 1980

FOR FURTHER INFORMATION CONTACT: Henry G. Kirschenmann, Department of Health and Human Services, Room 544–G, Hubert H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201 (202) 755–7562.

SUPPLEMENTARY INFORMATION:

Cost Principles for Educational Institutions

On March 10, 1978, the Office of Management and Budget (OMB) published a notice in the **Federal Register** inviting comments on a proposed revision to the Government-wide cost principles for educational institutions in OMB Circular No. A–21 (formerly Federal Management Circular 73–8). Numerous comments on the proposal were received and a number of changes were made in response to the comments. OMB published the final changes to the principles in the **Federal Register** on March 6, 1979 (44 FR 12368). The significant changes to the principles are:

1. The coverage of the principles has been expanded to cover virtually all types of Federal awards (grants, contracts, subgrants, subcontracts, etc.). Previously, the principles covered only research, training and educational service awards.

2. The principles place greater emphasis on the use of special cost analysis studies to allocate each component of indirect costs (e. g., depreciation or use allowances on buildings, equipment, and capital improvements; operation and maintenance expenses; etc.). If an acceptable cost analysis study is not performed, a standard method must be used to allocate each component of indirect costs unless an exception can be justified under conditions specified in the principles.

3. Significant changes were made in the requirements for supporting charges for salaries and wages, including:

a. Introduction of a new optional method for supporting salaries of faculty members and other professional employees in lieu of after-the-fact activity reporting. This optional method, called a "monitored workload system", allows the charges to be based on the assigned workload of each employee, adjusted to reflect significant changes in workload.

b. Elimination of the "stipulated salary" option previously included in the principles.

c. A reduction in the frequency of after-the-fact activity reporting for faculty members and other professional employees from monthly to once each academic term.

d. A requirement that each activity report account for 100% of each employee's total compensated work at the institution. A similar requirement also applies to workload distributions under the monitored workload system.

4. Charges for depreciation or use allowances must be supported by property records and physical inventories must be taken at least once every two years.

5. The definition of "organized research" has been clarified and now includes an explicit statement that the costs of organized research and development activities must include all costs incurred by the institution in performing the activities. This clarification was needed to ensure that indirect cost rates for organized research activities are properly determined.

6. The final distribution base for computing indirect cost rates has been changed from salaries and wages to modified total direct costs (except for institutions that use the "simplified method" for computing indirect cost rates).

7. Institutions may now use the "simplified method" for computing indirect cost rates if their direct costs under Federal awards do not exceed $3,000,000. The previous ceiling was $1,000,000. The computation of indirect cost rates under this method has also been liberalized to allow depreciation or use allowances. However, the allowable indirect costs must be reduced by depreciation, use allowances, and operation and maintenance expenses attributable to "other institutional activities" (e.g., dormitories, student dining halls, etc.).

8. The provision dealing with the costs of specialized service facilities (e.g., computers, wind tunnels, etc.) has been clarified and now includes a specific statement that these facilities must normally be allocated their share of indirect costs.

9. Improvements have been made in the coverage of depreciation and use allowances, equipment costs, pension costs, rental costs, and compensation paid to student-employees.

Cost Principles for State, Local and Indian Tribal Governments

On November 1, 1978 and April 22, 1980, OMB published notices in the

Federal Register (at 43 FR 50977 and 45 FR 27363 respectively) amending the Government-wide cost principles for State and local governments in Federal Management Circular 74–4. These amendments resulted in the following changes to the principles:

1. The coverage of the principles has been expanded to include federally recognized Indian Tribal governments.

2. The provision concerning general expenses (Attachment B, paragraph D.6.) has been modified to clarify the allowability of costs incurred by the office of the chief executive of an Indian Tribal government.

3. The provision concerning travel costs (Attachment B, paragraph B.28.) has been liberalized to allow travel costs incurred by the offices of chief executives and legislative bodies which are specifically related to grant programs.

4. The provisions concerning rental costs and interest costs (Attachment B, paragraphs C.2.a. and D.7.) have been liberalized to allow interest costs associated with the acquisition of publicly owned buildings which are newly occupied on or after October 1, 1980, provided that a "rental rate" system or equivalent system reflecting actual costs is used.

The affected grantee organizations and Federal grant making agencies were given an opportunity to comment on these changes prior to their adoption.

HHS Implementation

The expansion in the coverage of the cost principles for State and local governments to include Indian Tribal governments was anticipated by HHS before it was adopted by OMB and was incorporated into the Department's grants administration regulation on August 2, 1978 (43 FR 34076). The amendment to the regulation being made today implements the other changes to the principles for State, local, and Indian Tribal governments as well as the revised principles for educational institutions.

This amendment to the regulation also changes the way HHS implements OMB circulars on cost principles. Until now, HHS implemented these circulars by reproducing them, with minor editorial modifications, in appendices to the regulation. The Department will now incorporate the circulars into the regulation by reference, with no modifications. The Department will also automatically apply any future changes to the circulars as of the start of an organization's first fiscal year beginning after OMB's publication of the change in the **Federal Register** (unless a different date is prescribed by OMB). This approach will benefit organizations that receive awards from other Federal agencies as well as HHS, and will eliminate duplicative **Federal Register** publications of the same provisions. It will also reduce the physical volume of HHS regulations and eliminate the necessity of amending the regulation each time an OMB circular on cost principles is changed. Copies of the circulars will be provided to grantees, upon request, by the Department's Regional Offices.

Waiver of Proposed Rulemaking Procedures

Since this amendment to HHS' regulations merely incorporates changes to Government-wide policy made by OMB after obtaining public participation, and HHS has no discretion to modify the policy, proposed rulemaking procedures are considered unnecessary.

Other Information

Timing. The revised cost principles for educational institutions shall be implemented by institutions on the date prescribed in OMB Circular No. A–21. Early implementation, or a delay in implementation, of individual provisions is permitted by mutual agreement between an institution and the cognizant Federal agency designated under OMB Circular No. A–88.

The changes to the cost principles for State, local, and Indian Tribal governments are effective on May 22, 1980. Early implementation of the change concerning general expenses of Indian Tribal Governments is permitted by mutual agreement between an Indian Tribal Government and the cognizant Federal agency designated under FMC 74–4. The change allowing interest costs on publicly owned buildings applies to publicly owned buildings which are newly occupied on or after October 1, 1980.

Note.—The Department of Health and Human Services has determined that this document does not contain a major proposal requiring preparation of a Regulatory Analysis under Executive Order 12044.

Dated: May 13, 1980.

Patricia Roberts Harris,

Secretary, Department of Health and Human Services.

Part 74 of Title 45, Code of Federal Regulations, is amended as follows:

1. The listing of appendices following the table of sections for Part 74 is revised to read as follows:

Appendix A—(Reserved).
Appendix B—(Reserved).
Appendix C—(Reserved).
Appendix D—(Reserved).
Appendix E—Principles for determining costs applicable to research and development under grants and contracts with hospitals.
Appendix F—Principals for determining costs applicable to grants and contracts with non-profit institutions.

2. Section 74.170 is revised to read as follows:

§ 74.170 Basic policy; scope of subpart.

Grant funds may be used only for allowable costs of the activities for which the grant was awarded. This subpart identifies the principles to be used in determining allowable costs. The principles apply to grant-support activities conducted by grantees as well as by subgrantees and cost-type contractors (and subcontractors) under grants.

3. Section 74.171 is revised to read as follows:

§ 74.171 Governments.

(a) The principles to be used in determining the allowable costs of activities conducted by governments are contained in Federal Management Circular 74–4, including any amendments to the Circular published in the **Federal Register** by OMB. A copy of this Circular may be obtained from the Division of Cost Allocation in any HHS Regional Office.

(b) Unless otherwise prescribed by OMB, future amendments to the Circular shall apply as of the start of a government's first fiscal year beginning after the amendment is published in the **Federal Register.**

4. Section 74.172 is revised to read as follows:

§ 74.172 Institutions of higher education.

(a) The principles to be used in determining the allowable costs of activities conducted by institutions of higher education (other than for profit institutions) are contained in OMB Circular No. A–21, including any amendments to the Circular published in the **Federal Register** by OMB. A copy of this Circular may be obtained from the Division of Cost Allocation in any HHS Regional Office.

(b) Unless otherwise prescribed by OMB, future amendments to the Circular shall apply as of the start of an institution's first fiscal year beginning after the amendment is published in the **Federal Register.**

§ 74.175 (Amended).

5. Paragraph 74.175(a) is revised to read as follows:

(a) The cost principles applicable to a subgrantee or cost-type contractor under an HHS grant will not necessarily be the same as those applicable to the grantee.

For example, where a State government awards a subgrant or cost-type contract to an institution of higher education, OMB Circular No. A–21 would apply to the costs incurred by the institution of higher education, even though Federal Management Circular 74–4 would apply to the costs incurred by the State.

* * * * *

Appendices C and D [Deleted and Reserved].

6. Appendix C and D to Part 74 are deleted and reserved.

[FR Doc. 80–15657 Filed 5–21–80; 8:45 am]

BILLING CODE 4110–12–M

INTERSTATE COMMERCE COMMISSION

49 CFR Part 1033

[Directed Service Order Nos. 1453, 1456; Supplemental Order No. 2]

St. Louis Southwestern Railway Co.—Directed Service—Chicago, Rock Island & Pacific Railroad Co., Debtor (William M. Gibbons, Trustee) Between Santa Rosa, N. Mex., and St. Louis, Mo; Petition to Fix Compensation for Use of Tracks—Tucumcari and Memphis-Fordyce Lines

Decided: April 25, 1980.

AGENCY: Interstate Commerce Commission.

ACTION: Supplemental Order No. 2 to Directed Service Orders Nos. 1453 and 1456.

SUMMARY: Pursuant to 49 U.S.C. 11125, the Commission authorized the St. Louis Southwestern Railway Company (SSW) in Directed Service Orders Nos. 1453 and 1456 to provide service as a "directed rail carrier" (DRC)—without federal subsidization under 49 U.S.C. 11125(b)(5)—over the "Tucumcari Line" and the "Memphis-Fordyce Line" of the Chicago, Rock Island & Pacific Railroad Company, Debtor (Williams M. Gibbons, Turstee) ("Rock Island" or "RI").

Both directed service orders provide that the SSW and the Trustee negotiate terms of compensation for use of RI lines and facilities. In the event the parties should be unable to reach agreement, we reserved the right to set reasonable terms of compensation.

SSW has filed a petition asserting that it has not been able to reach agreement with the trustee regarding terms of compensation and requesting that the Commission determine and fix, or deny, compensation.

We conclude that reasonable compensation for use of the Memphis-Fordyce Line and related facilities under DSO No. 1456 should be calculated in accordance with the formula established in Finance Docket No. 29305, *St. Louis-San Francisco Railway Company—Compensation for Use of Terminal Tracks—Chicago, Rock Island & Pacific Railroad Company, Debtor (William M. Gibbons, Trustee)*, —— I.C.C. — (decided April 7, 1980), 45 FR 25401 (April 15, 1980). (*Frisco Compensation* case). For the Tucumcari Line, reasonable compensation is rent based on the agreed sale price of the property and, producing a rate of return 2 percent below the yield on 90-day U.S. Treasury bills less expenditures which preserve value of the property (up to 50 percent of the total rental payment).

DATES: *Effective Date:* This decision shall be effective on April 28, 1980.

Expiration Date: Unless otherwise modified by the Commission, this decision will expire at 11:59 p.m. (Central time) on May 31, 1980.

FOR FURTHER INFORMATION CONTACT: Richard J. Schiefelbein, (202) 275–0826, or Joel E. Burns, (202) 275–7849.

SUPPLEMENTAL INFORMATION:

Decision of the Commission

Background

The Rock Island has been in bankruptcy proceedings since 1975. In September 1979 its cash flow position became so severe as to prevent the continuation of normal rail operations. Accordingly, we issued Directed Service Order No. 1398 (and supplements thereto) authorizing the Kansas City Terminal Railway Company (KCT) to provide service under 49 U.S.C. § 11125 as a subsidized "directed rail carrier" (DRC) over the Rock Island rail system. *Kansas City Term. Ry. Co.—Operate—Chicago, R.I. & P.*, 360 I.C.C. 289, 478, 718 (1979–80); 44 FR 56343, 70733, and 45 FR 14578 (1979–80). That order expired on March 23, 1980.

In order to permit the continuation of essential rail services without federal subsidy, we subsequently issued several service orders, under 49 U.S.C. 11123, authorizing various railroads to operate over described RI lines. We authorized the SSW to operate over RI's Tucumcari Line, from Santa Rosa, NM, to St. Louis, MO, in Service Order No. 1411, and to operate over RI's Memphis-Fordyce Line, from Memphis, TN, to Fordyce, AR, in Service Order No. 1415.

The U.S. Court of Appeals for the Seventh Circuit reversed and remanded Service Order No. 1411, finding that order's jurisdictional basis under 49 U.S.C. 11123(a)(2) and (4) to be defective. *See* Nos. 79–2461 and 79–2478, *Atchison, Topeka, & Santa Fe Railway Company* v. *United States of America.* In response to that decision we issued Directed Service Orders Nos. 1453 and 1456, under 49 U.S.C. 11125. These orders authorized SSW to operate over the lines described in Service Orders Nos. 1411 and 1415, conditioned upon waiver of federal subsidization under 49 U.S.C. 11125(b)(5).

The terms of the directed service orders require SSW and the RI Trustee to negotiate terms of compensation for use of RI lines and facilities. We reserved the right to fix compensation in the event the parties should be unable to reach agreement.

The parties have not been able to reach agreement regarding terms of compensation and SSW has requested an order determining and fixing, or denying, compensation. SSW contends that it should not be required to pay compensation to the Trustee for use of RI properities unless its operations over the involved lines are profitable.

The Trustee has replied to SSW's petition. In his reply, the Trustee asserts that the RI estate should be compensated for use of Rock Island properties whether or not temporary operations by SSW are profitable. The Trustee proposes that reasonable compensation should be the greater of either (1) 1.2 percent per month of gross salvage value of improvements and fair market value of the real estate, or (2) 1.2 percent per month of the going concern value of the property, measured by 1978 RI gross station revenues, adjusted for rate increases since 1978. SSW and the RI Trustee have entered into an agreement for the sale of the Tucumcari Line, subject to Commission approval, for a price of $57 million. *See* Finance Docket No. 28799 (And sub-numbers thereunder), *St. Louis Southwestern Railway Company—Purchase (Portion)—William M. Gibbons, Trustee of the property of Chicago, Rock Island & Pacific Railway Company, Debtor.* The Trustee maintains that the fair value of the Memphis-Fordyce Line is $19.5 million. Trustee asserts that these figures reflect the fair value of the lines and that under his proposed formula the monthly rental for the Tucumcari Line should be $684,000 and for the Memphis-Fordyce Line $234,000.

Discussion and Conclusions

DSO Nos. 1453 and 1456 were issued pursuant to 49 U.S.C. 11125. These orders were not intended, however, to be substantively different from the prior SSW service orders issued pursuant to 49 U.S.C. 11123. Unlike DSO No. 1398, the provisions of DSO Nos. 1453 and 1456 are permissive rather than mandatory. Further, operation under the authority of these orders by SSW is

conditioned upon waiver of federal subsidization under 49 U.S.C. 11125(b)(5). Therefore, Commission precedents defining reimbursable costs for DRCs operating under mandatory directed service orders, under 49 U.S.C. 11125, are not controlling here.

In DSOs Nos. 1453 and 1456 we directed SSW and the RI Trustee to negotiate regarding terms of compensation for use of Rock Island properties and reserved the right to settle disputes if the parties could not reach agreement. In exercising authority under this reserved right, we act as an arbitrator settling a dispute, not as a regulator fixing compensation to be paid under federally subsidized operations. Our duty in settling a compensation dispute is essentially the same under our reservation of authority in DSO Nos. 1453 and 1456 as it would be under 49 U.S.C. 11123(b)(2).

In the *Frisco Compensation* case, we fixed terms of compensation for use of Rock Island tracks and related facilities operated by Frisco under Service Order No. 1451, issued under 49 U.S.C. 11123. The *Frisco Compensation* case adopted a two-part formula for determining compensation to be paid for use of Rock Island lines. The first part of the formula is a base rental assessed on route miles. The second part of the formula is a percentage share of net revenues, if any, derived from operations over the line.

The *Frisco Compensation* case formula is designed to make a reasonable accommodation of the competing interests of the Trustee and the DRCs. The base rental payment provision assures the trustee of some payment for the use of Rock Island properties, even if temporary directed operations are not profitable. The percentage of profits provision provides the trustee with a return on the going concern value of the properties, if the involved lines generate net revenues from temporary interim operations.

The Rock Island properties operated by the various interim operators include a wide range of types of lines and line segments, from relatively short terminal tracks with high profit potential to long lines with doubtful profit potential during temporary interim operation. Interim operators operating only terminal tracks would pay relatively little compensation to the Trustee under the base rental provision. Operations of terminal tracks, however, should be highly profitable and the percentage of profits payments to the trustee should be significant. Long lines, on the other hand, will have a substantial base rental, although they may produce little or no net revenues for the interim operator under temporary operations.

The base rental of $1,250 per route mile per year established in the *Frisco Compensation* case is a mid-range figure between extreme high and low track rentals set in past agreements. In the *Frisco Compensation* case we chose this intermediate approach because that proceeding involved the use of facilities for which a sale agreement had not been reached. Therefore, the parties had not agreed to the value of the line. These circumstances also exist with respect to the Memphis-Fordyce Line. Further, we believe that the percentage of profits provision in the *Frisco Compensation* case is reasonable for use of the Memphis-Fordyce Line, based on the considerations discussed in that decision.

We conclude that the formula set forth in the *Frisco Compensation* case would make a reasonable accommodation of the opposing interests of the SSW and the RI Trustee regarding use of RI properties not subject to a sale agreement. Accordingly, the SSW should pay the RI Trustee, for the use of the Memphis-Fordyce Line and related facilities operated under DSO No. 1456, compensation calculated under the following formula:

(1) The sum of $1,250 per route mile per year, payable on a monthly basis, in advance; and

(2) 14.4 percent of net revenues derived from operations over the involved lines. Net revenues shall be calculated in accordance with the Commission's regulations applicable in abandonment proceedings (49 CFR 1121.41–1121.43), subject only to the following exceptions: (a) The casualty reserve account is eliminated; (b) rehabilitation expenses are reported under maintenance of way and structures costs; and (c) bridge traffic revenues and costs are eliminated.

In determining the share of traffic attributable to RI at former RI–SSW reciprocal switching points, RI's share shall be considered to be the same as the share handled by KCT in its operations under Directed Service Order No. 1398.

The formula specified in the *Frisco Compensation* case is designed to accommodate the interests of the Trustee and the DRC with respect to temporary operations over a line for which a sale agreement has not been reached. We do not believe that the same rationale and formula is appropriate for determining the reasonable compensation for the use of lines, like the Tucumcari Line, as to which the parties have entered into a purchase and sale agreement setting a value on the line. In such circumstances, we believe that an appropriate rental for the Tucumcari Line should provide the Trustee with a reasonable return on the agreed value of the property ($57 million) pending approval and consummation of the sale.

The Trustee asserts that a rate of return of 14.4 percent per year on the value of the line would be reasonable. That rate of return is reasonable in today's financial markets for conservatively invested liquid assets. The Tucumcari Line, however, is not a liquid asset. It is commercial rail property subject to sale agreement. Therefore, it is not readily disposable for cash. We believe, that the rate of return on the value of the line should be lower than that for liquid assets. We also recognize that rates of return on investments have fluctuated greatly in recent months. Considering these factors, we conclude that a reasonable return on the value of the Tucumcari Line should be set at a rate of 2 percentage points below the average yield (adjusted to a monthly basis on the first business day of each month) of marketable securities of The United States Government having a duration of 90 days.[1]

The sums expended by SSW during temporary operations for maintenance and security, to the extent necessary to preserve the value of the property, should be credited toward the rental payments. This allowance for maintenance and security expenditures shall not exceed 50 percent of the total rent.

One-half of the monthly rental for the Tucumcari Line shall be payable in advance. The balance of the monthly rental shall be paid within 30 days of the end of the month and payment shall be accompanied by an itemized statement of maintenance and security expenses claimed as credits against the rental.

We find: 1. SSW and the RI Trustee have been unable to agree upon terms for compensation of the RI estate for the use of RI property by SSW under Directed Service Order Nos. 1453 and 1456.

2. The terms of compensation set forth in this decision will be reasonable and will accommodate the interests of SSW and the RI Trustee.

3. This action will not significantly affect either the quality of the human environment or the conservation of energy resources. *See* 49 CFR Parts 1106 and 1108 (1978).

[1] This monthly rental may be expressed by the formula (Y–.02) P÷12; where Y equals the average yield of 90-day U.S. Government securities on the first business day of the month and P equals the agreed purchase price for the line.

It is ordered: 1. SSW shall compensate the Rock Island estate for the use of RI tracks and related facilities, operated under Directed Service Order Nos. 1453 and 1456, in accordance with the terms of this decision.

2. This decision shall be effective on the date it is served (April 28, 1980).

By the Commission. Chairman Gaskins, Vice Chairman Gresham, Commissioners Stafford, Clapp, Trantum, Alexis and Gilliam. Vice Chairman Gresham not participating. Commissioner Stafford absent and not participating. Commissioner Trantum concurring with a separate expression. Commissioner Gilliam not participating.

Agatha L. Mergenovich,

Secretary.

Commissioner Trantum, Concurring:

I reluctantly concur in this decision because the Commission is in the unfortunate position of having to set compensation. If either the RI trustee or the SSW disagrees with the formulas adopted today, I would welcome hearing about a more reasonable solution.

[FR Doc. 80-15733 Filed 5-21-80; 8:45 am]

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49 CFR Part 1033

[Service Order No. 1471]

The Atchison, Topeka & Santa Fe Railway Co. Authorized To Operate Over Tracks of Chicago, Rock Island & Pacific Railroad Co., Debtor (William M. Gibbons, Trustee) at Alva, Okla.

AGENCY: Interstate Commerce Commission.

ACTION: Service Order No. 1471.

SUMMARY: This order authorizes the Atchison, Topeka and Santa Fe Railway Company (ATSF) to operate over tracks of Chicago, Rock Island and Pacific Railroad Company (RI) located at Alva, Oklahoma, for the purpose of serving industries located adjacent to such tracks, and provides for continuation of service to shippers which would otherwise be deprived of essential railroad service.

EFFECTIVE: 12:01 a.m., May 17, 1980, and continuing in effect until 11:59 p.m., May 31, 1980.

FOR FURTHER INFORMATION CONTACT: M. F. Clemens, Jr., (202) 275-7840.

Decided: May 16, 1980.

The embargo of the lines of Chicago, Rock Island and Pacific Railroad Company (RI) is depriving shippers located adjacent to those tracks of essential railroad service. The Atchison, Topeka and Santa Fe Railway Company (ATSF) connects with the RI and has consented to operate over these tracks in order to serve the industries.

It is the opinion of the Commission that an emergency exists requiring the operation by ATSF over tracks formerly operated by RI in the interest of the public; that notice and public procedure are impracticable and contrary to the public interest; and that good cause exists for making this order effective upon less than thirty days' notice.

It is ordered,

§ 1033.1471 The Atchison, Topeka & Santa Fe Railway Co. authorized to operate over tracks of Chicago, Rock Island & Pacific Railroad Co., debtor (William M. Gibbons, trustee) at Alva, Okla.

(a) The Atchison, Topeka and Santa Fe Railway Company (ATSF) is authorized to operate over tracks of the Chicago, Rock Island and Pacific Railroad Company (RI) at Alva, Oklahoma for the purpose of serving industries located adjacent to such tracks.

(b) *Application.* The provisions of this order shall apply to intrastate, interstate and foreign traffic.

(c) Compensation will be on terms established between the Trustee and the affected carrier(s); or upon failure of the parties to agree as hereafter fixed by the Commission in accordance with pertinent authority conferred upon it by Section 11123 (b)(2) of the Interstate Commerce Act.

(d) *Rate applicable.* Inasmuch as this operation by the ATSF over tracks previously operated by the RI is deemed to be due to carrier's disability, the rates applicable to traffic moved over these lines shall be the rates applicable to traffic routed to, from, or via these lines which were formerly in effect on such traffic when routed via RI, until tariffs naming rates and routes specifically applicable via ATSF become effective.

The operator under this temporary authority will not be required to protect transit rate obligations incurred by the RI or the directed carrier, Kansas City Terminal Railway Company, on transit balances currently held in storage.

(e) In transporting traffic over these lines, ATSF and all other common carriers involved shall proceed even though no contracts, agreements, or arrangements now exist between them with reference to the divisions of the rates of transportation applicable to that traffic. Divisions shall be, during the time this order remains in force, those voluntarily agreed upon by and between the carriers; or upon failure of the carriers to so agree, the divisions shall be those hereafter fixed by the Commission in accordance with pertinent authority conferred upon it by the Interstate Commerce Act.

(f) *Employees.* On March 4, 1980, a number of rail carriers and labor unions reached an agreement regarding the proper level of employee protection entitled *"Labor Protective Agreement Between Railroads Parties Hereto Involved in Midwest Rail Restructuring and Employees of Such Railroads Represented by the Rail Labor Organizations operating through the Railway Labor Executives' Association"* (Negotiated Labor Protection Agreement). We have reviewed the negotiated labor protection agreement and find that it adequately safeguards the interests of affected employees.

Accordingly, if ATSF chooses to exercise the authority granted by this decision, it shall afford affected employees the protection contemplated by the negotiated labor protection agreement and any subsequent amendments to it.

(g) *Effective date.* This order shall become effective at 12:01 a.m., May 17, 1980.

(h) *Expiration date.* the provisions of this order shall expire at 11:59 p.m., May 31, 1980, unless otherwise modified, amended, or vacated by order of this Commission.

This action is taken under the authority of 49 U.S.C. 10304-10305 and 11123 (a)(3).

This order shall be served upon the Association of American Railroads, Car Service Division, as agent of the railroads subscribing to the car service and car hire agreement under the terms of that agreement and upon the American Short Line Railroad Association. Notice of this order shall be given to the general public by depositing a copy in the Office of the Secretary of the Commission at Washington, D.C., and by filing a copy with the Director, Office of the Federal Register.

By the Commission, Railroad Service Board, members Joel E. Burns, Robert S. Turkington and John R. Michael.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 80-15678 Filed 5-21-80; 8:45 am]

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49 CFR Parts 1243 and 1249

[No. 37117]

Elimination of Requirement To File Quarterly Report Form QL&D

AGENCY: Interstate Commerce Commission.

ACTION: Final rule.

SUMMARY: The Commission is eliminating the requirement that all Class I railroads, and all motor common and contract carriers of property with average annual operating revenues of $1 million or more, file Form QL&D–R&M, the quarterly report of freight loss and damage claims. The Commission does not use the data contained in the report, and we do not believe that the use others make of the data justifies continuing to require carriers to bear the considerable burden of filling out the form. To give other users time to adjust to our action, form QL&D will still have to be filed for each quarter of 1980, but schedule B, which contains data no one uses, will not have to be filed with the form.

DATES: The requirement that carriers file form QL&D will be eliminated for the reporting year beginning January 1, 1981. The requirement that carriers file Schedule B of Form QL&D–M is eliminated, effective May 22, 1980.

FOR FURTHER INFORMATION CONTACT: Bryan Brown, Jr. (202) 275–7448.

SUPPLEMENTARY INFORMATION: On September 25, 1979, the Commission published a notice (44 FR 55218) which proposed to eliminate the requirement that all Class I railroads, and all motor carriers of property with average annual operating revenues of $1 million or more, file Form QL&D–R&M, the quarterly report of loss and damage claims. The action was proposed to implement a recommendation of a Commission data task force which had concluded that the Commission did not make sufficient use of the data contained in the report to justify continuing to require carriers to supply it. We asked for public comment on the proposal, and we made the Department of Transportation (DOT), which does use the data in the report, a party to the proceeding. We asked them to demonstrate a "justifiable need for the data" and to discuss alternative methods for obtaining it.

In response to our NPR, we received nineteen comments, all but three of which favored our proposal. Of the carriers responding, there was near unanimous agreement that the elimination of the reporting requirement would relieve them from an unjustifiable expense. They believe that little benefit is reaped from the considerable amount of time that is required to complete the report form.

Two carrier associations, the Association of American Railroads (AAR) and the American Trucking Associations, Inc. (ATA), filed comments supporting our proposal. AAR surveyed claims departments of railroads and found that they did not use the loss and damage data. The National Freight Claim Council (NFCC), a division of ATA, is considering establishing a voluntary reporting requirement, using the present Commission form for the first year and a revised form in subsequent years. The revised form would be in line with methods used by most carriers to collect data for internal use. NFCC would make the collected data available to DOT. ATA believes that the NFCC data would be more timely and more meaningful than the data DOT presently obtains from our form.

The three comments in opposition to our proposal came from the Inland Marine Underwriters Association (IMUA), the Shippers National Freight Claim Council, Inc. (SNFCC), and DOT. IMUA contends that the present form gives insurance companies information that is essential to handle loss and damage claims. These companies are required by law to assume full responsibility for all losses, both insured and uninsured, which are unpaid by their motor carrier policy holders. IMUA asserts that the requirement to file form QL&D–R&M serves as an impetus for carriers to file claims promptly, rather than letting a large amount of claims build up at once.

SNFCC claims that the Commission is the only organization capable of collecting statistics which are meaningful. SNFCC uses the data in the report to detect trends in causes of losses, to detect changes in carriers' protection of freight, to detect unlawful claim practices, to determine rates and charges based on ratios, and to reveal reasons for non-payment of freight claims. They do not believe that the responsibility for collecting the data should be left to the discretion of carriers and "self-serving organizations."

DOT reports that it uses the data from Form QL&D–R&M in its National Cargo Security Program, which was established by Executive Order No. 11836. DOT uses the data to determine loss trends, on which it reports in an annual report to the President on the cargo security program. According to DOT, the program has reduced the cost to the public of losses from cargo thefts. DOT does not have the authority to require that the data it needs be filed with it, and it asserts that loss of the data would significantly damage its program. DOT further asserts that the data is useful to the transportation industry and that continuing to require carriers to file the form does not represent a continuing burden on the industry since carriers will still be required to keep the data, whether or not the report is eliminated. Thus, DOT claims that reporting the data constitutes an "insignificant" paperwork burden for carriers. As to alternative sources for the data, DOT believes that voluntary reporting through carrier associations would not be reliable since associations cannot require timely or accurate reporting. As result, DOT does not believe that the data base would be as reliable or useful as that obtained from the present report.

We do not believe that the arguments of DOT, SNFCC, and IMUA justify our continuing to require carriers to file Form QL&D–R&M. Although we agree that the data is useful, we do not agree that adequate data cannot be obtained elsewhere. For example, insurance companies which insure the losses of Class II railroads and motor carriers with less than $1 million in revenue have not had Commission quarterly report data, and they have developed alternative means of satisfying their data needs at a minimal expense to the carriers.

The question of the expense to the carriers seems to us to be the key determinant in this proceeding. Although DOT contends that reporting the data is an insignificant burden, the carriers associations participating in this proceeding say that it is a considerable burden. The Commission has looked into this matter itself and has determined that it requires 339,000 man hours for carriers to fill out and file Form QL&D–R&M. We cannot in good conscience continue to require carriers to expend this kind of effort to supply data which our agency does not use.

Consequently, we have determined that Form QL&D–R&M should be eliminated. We urge DOT and other interested parties to work with the carriers and their associations to try to find a method for providing reliable data in a way which will be easier and less costly for carriers than the present procedure. To assist the DOT, IMUA, and SNFCC in adjusting to our action, we are deferring the elimination of the reporting requirement until next year. Carriers will still be required to file Form QL&D–R&M for each quarter of 1980. This will give the parties time to explore alternatives.

In the course of this proceeding, we have determined that no one uses the data contained in Schedule B of Form QL&D–R&M. Consequently, we are eliminating the requirement that Schedule B be filed with the form. We are making this change effective immediately so that carriers will not have to file the schedule with their

reports for the first quarter of 1980. We find that there is good cause for this action, since it will reduce carriers costs and since there is no need for the information contained in the schedule.

Accordingly, 49 CFR 1243.4 and 1249.15, which contain the requirement that Form QL&D–R&M be filed, are rescinded, effective January 1, 1981 and Schedule B—"Analysis of theft—all carriers" is deleted from Form QL&D–R&M, effective immediately.

This action will not affect significantly either the quality of the human environment or conservation of energy resources.

This action is taken under the authority of 5 U.S.C. 553 and 49 U.S.C. 10321.

Decided: May 8, 1980.

By the Commission, Chairman Gaskins, Vice Chairman Gresham, Commissioners Stafford, Clapp, Trantum, Alexis and Gilliam.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 80–15570 Filed 5–21–80; 8:45 am]

BILLING CODE 7035–01–M

Proposed Rules

Federal Register
Vol. 45, No. 101
Thursday, May 22, 1980

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.

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 2, 50

Possible Amendments to "Immediate Effectiveness" Rule

AGENCY: U.S. Nuclear Regulatory Commission.

ACTION: Proposed rulemaking.

SUMMARY: The Commission is considering amendments to its "immediate effectiveness" rule. That rule provides that construction on a nuclear power plant can begin on the basis of an initial decision by an Atomic Safety and Licensing Board even though that decision is subject to further review within the Commission. The Commission is concerned that the present rules often prevent it from reviewing a case until construction is well underway. The Commission is considering three alternative amendments to that rule, and is also considering retaining the present rule unchanged.

DATES: Comments must be received on or before July 7, 1980.

ADDRESSES: All persons who desire to submit written comments or suggestions for consideration in connection with the proposed amendments should send them to the Secretary, United States Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch. copies of all comments received may be examined in the Commission's Public Document Room at 1717 H Street, NW., Washington, DC. Persons who have commented previously on this subject in connection with the work of the Federal Advisory Committee, mentioned below, may wish to make reference to their previous comments, and to direct their further remarks to the specific features of the three options for change which are now presented.

FOR FURTHER INFORMATION CONTACT: Peter Crane, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, (202) 634–1465.

SUPPLEMENTARY INFORMATION: In its *Seabrook* opinion of January 6, 1978, the Commission announced that it intended to monitor more effectively the proceedings of its lower boards. *Public Service Company of New Hampshire*, 7 NRC 1, 7. It stated that in practice its current rules often prevent it from reviewing a case until construction is well underway and that this might adversely affect either the quality of its decisionmaking process or the public's perception of that process, or both. It directed that a study be made of the following questions:

1. "The effect which would be achieved by relaxation of our stay standards so that site-related issues in potentially troublesome cases may be taken up before large sums of money are committed and sites irrevocably altered; and

2. Ways in which our appellate administrative procedures may assure earlier resolution of all the issues arising out of a licensing and cut relitigation and piecemeal review to a minimum."

In January of 1979 the Commission established a Federal Advisory Committee to conduct the study; on December 12, 1979 the Advisory Committee submitted its final report (NUREG–06436) to the Commission. Single copies of NUREG–0646 may be obtained without charge by writing to the Director, Division of Technical Information and Document Control, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. The report contained three options for altering the Commission's "immediate effectiveness" rule (10 CFR 2.764), together with a discussion of the advantages and disadvantages of retaining the present licensing system unchanged. It should be noted that the report, and the options which it presented, dealt only with the issue of construction during adjudication, and not with the issue of operation during adjudication. The Commission is now considering whether to retain the present system or to adopt one of several possible options for change.

In January 1980, the Commission's Office of General Counsel completed and presented to the Commission a separate but related study, entitled "The Nuclear Regulatory Commission's Appellate System", (NUREG–0648). The study discussed the history and capabilities of the present appellate system, and the practices of other agencies; analyzed the workload of the Atomic Safety and Licensing Appeal Panel; evaluated options available to the Commission; and presented conclusions, including some recommendations for change of the appellate system. Persons who are interested in the proposed rules set forth below may wish to provide comments in light of the discussions and conclusions in both studies. Copies of that study are available for public inspection in the Commission's Public Document Rooms. Single copies of the appellate study (NUREG–0648) may be obtained by written request addressed to the Director, Division of Technical Information and Document Control, Nuclear Regulatory Commission, Washington, D.C. 20555. Notice of the availability of NUREG–0648 was published in the **Federal Register** on January 30, 1980 (45 FR 6873). The notice solicited public comment on NUREG–0648, to be forwarded to the Commission by March 17, 1980.

Summary of the Present Licensing System

To construct a nuclear power plant an applicant must file with the Commission a detailed application addressing both the design of the proposed facility and its potential environmental impacts. Once that application has been thoroughly reviewed by the Commission staff, an adjudicatory hearing is held on the application before an Atomic Safety and Licensing Board. Full adjudicatory procedures, including the right to present and cross-examine witnesses, are available in the hearing and, in addition to NRC staff and the applicant, any persons whose interests may be affected by the proposed plant may participate as parties. The Licensing Board's decision must be based solely on the record compiled before it. If the Board finds reasonable assurance that the plant as designed will not be inimical to the health and safety of the public, and that the overall cost-benefit balance mandated by the National Environmental Policy Act (NEPA) favors granting the application, it will authorize a construction permit. The permit will be effective immediately unless a party has shown the Board good cause why it should not be. 10 CFR 2.764 provides that the NRC staff must issue the permit

within 10 days after the Board's decision. construction may then begin.

There are two avenues available to a party who objects to the Board's initial decision. The primary mechanism is appellate review. All Licensing Board decisions, whether or not appealed, are reviewed on the merits by a three-member Atomic Safety and Licensing Appeal Board which has full authority to review the legal and factual conclusions reached by the Licensing Board. The Appeal Board's decision in turn is subject to discretionary review by the Commission itself, either on its own motion or by the granting of a petition for review (a "certiorari petition") filed by a party pursuant to 10 CFR 2.786. Finally, any party can seek judicial review of a final Commission order in one of the United States Courts of Appeals.

In addition, a party appealing a licensing board decision may seek a stay. The immediate effectiveness rule normally permits construction to proceed during this entire appelate review. The Commission recognized, however, the need for a procedure which would allow a party to seek relief from a decision while that decision was on appeal. Rules were therefore adopted which provide that a stay may be sought, first from the Appeal Board, and if the Board denies the request, then from the Commission. The criteria used to rule on the stay request were taken from those used by courts to judge requests for stay of administrative decisions. The criteria are commonly referred to as the *Virginia Petroleum Jobbers* criteria, after the case in which they were first articulated, *Virginia Petroleum Jobbers Ass'n* v. *FPC*, 259 F.2d 921 (D.C. Cir. 1958).

Options for changing the present licensing system

The three options which are being considered for changing the present system are as follows:

Option A—Effectiveness as an Additional Issue in Licensing

This option would require the Licensing Board to make a separate ruling on the question whether its initial decision should be immediately effective. The ruling would be based upon the record, and would deny effectiveness if the Board found, at close of hearing, any substantial question on an issue which could be affected by the early stages of construction at the site. Such issues would include, for example, alternative sites, site suitability, and the overall NEPA cost-benefit balance; no issue would necessarily be excluded. The merits of any substantial question on these issues would have to be resolved on appeal before construction at the site could begin. A "substantial question," for these purposes, does not require the Board to find that its own ruling may be incorrect, but rather that the party which did not prevail on the issue has demonstrated substantial, non-frivolous arguments which could be raised on appeal.

In a sense, Option A may be seen as the functional equivalent of retaining the present system of immediate effectiveness, but with liberalized stay standards in place of the strict *Virginia Petroleum Jobbers* standard. Alternatively, the Commission could simply alter its present stay standards to provide that a stay will be granted if a party demonstrates that there is a substantial question as to the correctness of the resolution of an issue which might be prejudiced by construction. (This is the approach taken in Option D.) Option A achieves approximately the same effect, except that in the case of a stay, the burden would be on the proponent of the stay to overcome the presumption in favor of immediate effectiveness; under Option A, however, there would be no presumption for or against immediate effectiveness. As a practical matter, this might be significant only in uncontested cases, where under Option A, effectiveness might be deferred if the Licensing Board found that there was substantial question as to the correctness of its own resolution of a particular issue which might be prejudiced by construction.

Chronologically, Option A would operate as follows:

A. At the hearing:

1. Applicant would advise the Board and parties early by letter of its proposed schedule of construction and expenditure.

2. If the nature of the issues warranted, discovery would be permitted on this schedule, and testimony would be required from applicant and staff (and permitted from intervenors) on the schedule. These steps would be taken toward the end of the hearing, and at the Licensing Board's discretion. The purpose of the testimony would be to identify points in the construction schedule which are critical for particular issues.

B. In the initial decision:

1. The Board would respond to the positions of the parties by ruling on the date when construction may begin. It would identify (and make findings on) any substantial issue which might be prejudiced by construction and note when construction might affect it.

2. The Licensing Board would defer construction whenever, as stated above, it found a substantial question (as defined above) on an issue which could be affected by construction. This decision would be made in light of the construction schedule, so that construction could go forward unless it affected an issue falling into the above categories. For example, where the issue is which is the best of several possible locations in a river bed for a discharge diffuser, early construction unrelated to the diffuser could not affect the ultimate resolution of that issue.

3. No construction could begin sooner than 30 days after the initial decision. This gives parties time to evaluate the decision and file papers before the Appeal Board.

C. On appellate review:

1. If an appeal is taken from the decision on effectiveness, 30 more days would be added to the period during which no construction could occur. During this total of 60 days the Appeal Board would be required to resolve the effectiveness question on appeal. The Appeal Board would use the same criteria for effectiveness as the Licensing Board, and the appeal would be limited to the effectiveness issue alone. Of course, if the Licensing Board had deferred effectiveness in its Initial Decision, these periods would be irrelevant, since construction could not begin until the date set by the Licensing Board. It could begin earlier only if the Appeal Board reversed the Licensing Board's deferral. Since it has the power to make such a reversal, the Appeal Board can, under Option A, take itself off the "critical path"—that is, remove itself as an obstacle to construction.

2. To allow for Commission review of effectiveness, a suitable period of deferral would be added at the conclusion of the Appeal Board's review.

3. Whenever effectiveness is deferred, the Appeal Board would resolve first, on the merits, all issues which had caused the deferral. It would decide other issues later. Construction could begin if and when the effectiveness-related issues were satisfactorily resolved on appeal.

Option B—A Final Decision on LWA Issues Prior to Construction

This option requires a final decision on the merits for construction-related issues before construction can begin. In essence, the Licensing Board would decide construction-related issues first, those issues would be taken up immediately on appeal, and construction would begin only after final appellate review of those issues. The issues are all those which, if resolved adversely to the

applicant, would defeat the plant at the site selected or be prejudiced by the early stages of construction. They are generally the same as those now used for limited work authorizations (LWA_1 and LWA_2) and similar to those used in the standard suggested above in Option A for granting a stay. The main difference between this option and Option A is that here these issues are defined in advance, and must be resolved on the merits before construction, whereas in Option A the issues are not defined in advance and construction depends upon whether effectiveness is stayed pending appeal.

Final decision is required on all issues related to the National Environmental Policy Act (NEPA) and all safety issues related to site suitability and construction of foundations. The NEPA issues would be addressed as they are now for the LWA_1. For the site safety issues, however, the review would go beyond the present site suitability report and determine the design basis or bases for meeting the safety regulation pertinent to each issue. Thus, for each of the site safety issues, the staff and Licensing Board would complete in full the review currently included in the Safety Evaluation Report. This added scope of review should assure that all site-related issues are completely addressed and should solidify the basis for authorizing construction. The site safety issues would include:

(1) Geography and Demography.
(2) Nearby Industrial, Transportation and Military Facilities.
(3) Meteorology.
(4) Hydrology.
(5) Geology and Seismology.
(6) Foundation Engineering
(7) Quality Assurance
(8) Any other issue which, in the opinion of the presiding officer, is related to the commencement of construction at the site.

The remaining issues on the construction permit (CP) would be heard by the Licensing Board while the above issues were on appeal. The remaining CP issues would include:

(1) Design Criteria for Structures, Components, Equipment and Systems
(2) Reactor and Reactor Coolant System
(3) Engineered Safety Features
(4) Instrumentation and Controls
(5) Electrical Power
(6) Auxiliary Systems
(7) Steam and Power Conversion System
(8) Radioactive Waste Management
(9) Radiation Protection
(10) Conduct of Operations
(11) Initial Tests and Operations
(12) Accident Analysis
(13) Technical Specifications

After appellate affirmance of the LWA issues, the applicant could do all the work authorized by LWA_1 and LWA_2. This includes site clearing, preparation and excavation (LWA_1) and safety-related foundations (LWA_2). Before this work is completed, the Licensing Board should have ample time to complete its hearing on the balance of the issues necessary for the construction permit. The grant of an LWA_2, which allows work on safety-related foundations, signifies clearly that all issues related to the safety of the *site* have already been resolved satisfactorily.

Option B would operate as follows:

a. At the hearing:

The Licensing Board takes up the LWA issues first. This is already the Board's practice where an LWA is requested. When decided, these issues are immediately ripe for appellate review. The Board's decision is not immediately effective. After deciding the LWA issues, the Licensing Board turns to the rest of the issues necessary for the CP. The LWA issues are processed on appeal while the rest of the CP issues are heard by the Licensing Board. If the intervenor's attorney is unable to pursue the appeal and continue the CP hearing at the same time, the Licensing Board suspends the CP hearing to allow for briefing time. The CP decision is normally made by the Licensing Board before construction ends under the LWA. If the applicant does not request a separate decision on LWA issues, effectiveness awaits appellate review of the CP decision. The issues which belong in the LWA category have been defined above, and are based upon actual experience in hearings. The Board rules on any dispute over which issues belong in the LWA category.

b. On appellate review:

1. The Appeal Board conducts an immediate review of the LWA issues, including disputes over which issues should be in the LWA category. Upon completing its review on the merits and rendering its opinion, the Appeal Board can authorize construction to begin. It can do so notwithstanding a remand for further proceedings on some minor issue (*e.g.*, additional stations to monitor the effect of construction on muskrats). Basically, the requirement is that all construction-related issues on appeal must go through at least one merits review before construction.

2. To allow for Commission review, an additional period of deferral is added at the conclusion of the Appeal Board's review. The Commission decides whether to accept review during this period. If the Commission does accept review it can defer construction until the review is completed. Under this option, the Commission could review all construction-related issues on the merits before construction begins.

Option C—Repeal the Immediate Effectiveness Rule

This option prevents any construction prior to the agency's final decision on all issues. It does not rely upon stays to discriminate among cases, upon parties or the Licensing Board to identify the grounds for a stay, or upon an LWA or other device to identify certain issues for early treatment. The Commission would be able to pass on the merits of all issues before construction begins. Since construction does not begin until all CP issues are affirmed on appeal, the LWA procedures would not be used.

Option C would operate as follows:

a. At the hearing:

The Licensing Board conducts its usual review, but effectiveness does not attach to its CP authorization. Since construction cannot begin on the strength of an LWA, there is little incentive to seek one. The only possible advantage is to reduce the time required for the Appeal Board to review the CP decision, because by reviewing the LWA issues earlier fewer issues would remain on appeal of the CP.

b. On appellate review:

1. The Appeal Board must resolve all issues on the merits before construction begins. If an issue is remanded for further proceedings, the Appeal Board can, as in Option B above, decide whether to allow construction pending the remand.

2. To allow for Commission review, an additional period of deferral is added at the conclusion of the Appeal Board's review. The Commission decides whether to accept review during this period. If the Commission does accept review, it can defer construction until the review is completed. Under this option the Commission could review all issues in the case before construction begins.

Option D—Retain the Present System but With Significantly Loosened Standards for Obtaining a Stay

Under this approach, the standards for determining whether to grant a stay could be the same as those articulated under Option A, above—whether the party seeking the stay has demonstrated substantial, non-frivolous arguments for the correctness of its position on the merits of its appeal. The functional effect would be similar to that outlined for Option A, except that under this approach, it would be necessary for a party to seek a stay, whereas under

Option A, the Board would examine the issue of effectiveness without the need for a party to make such a request. This would include a period of thirty (30) days after the date of service of the initial decision during which no construction could be commenced, so as to allow a party taking an appeal to prepare and present a stay request to the Appeal Board.

Option E.—Retain the present system unchanged

(See discussion of present system, above.)

Other Devices

In addition to the above options, the Commission is considering two devices—the increased use of referred rulings, and Commission monitoring of Licensing Board proceedings—which could aid either the present system or the implementation of any of the above options. These matters are described both in NUREG–0646 and in NUREG–0648, the study of the Commission's appellate system. (See "Supplementary Information", above.) Persons commenting on these devices may wish to refer to both studies.

Date of Implementation

The above options, if adopted, would be implemented by applying them to all applications for construction permits which have not begun hearings.

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended and 5 U.S.C. 553, notice is hereby given that adoption of one of the following alternatives is contemplated.

A. *Option A.*

1. 10 CFR 2.760 is revised to read as follows:

§ 2.760 Initial decision and its effect.

(a) The presiding officer, after hearing, will render an initial decision which will constitute the final action of the Commission forty-five (45) days after its date, when it authorizes the issuance or amendment of a license for a facility, or thirty (30) days after its date in any other case, unless exceptions are taken in accordance with § 2.762, or the Commission directs that the record be certified to it for final decision.

(b) Where the public interest so requires, the Commission may direct that the presiding officer certify the record to it without an initial decision, and may:

(1) Prepare its own initial decision; or

(2) Omit an initial decision on a finding that due and timely execution of its functions imperatively and unavoidably so requires.

(c) An initial decision will be in writing and will be based on the whole record and supported by reliable, probative, and substantial evidence. The initial decision will include:

(1) Findings, conclusions and rulings, with the reasons or basis for them, on all material issues of fact, law, or discretion presented on the record;

(2) All facts officially noticed and relied on in making the decision;

(3) The appropriate ruling, order or denial of relief with the effective date;

(4) A separate finding, together with a statement of the basis for it, establishing the date upon which any construction authorized by the initial decision may begin;

(5) The time within which exceptions to the decision and a brief in support of them may be filed, the time within which briefs in support of or in opposition to exceptions filed by another party may be filed and, in the case of an initial decision which may become final in accordance with paragraph (a) of this section, the date when it may become final.

2. 10 CFR 2.764 is revised to read as follows:

§ 2.764 The commencement of construction under an initial decision authorizing construction or directing issuance or amendment of a construction permit.[1]

(a) Under an initial decision directing the issuance or amendment of a construction permit or a construction authorization for a production or utilization facility subject to the provisions of § 51.5(a) of this chapter.

(1) No person shall effect commencement of construction (as "commencement of construction" is defined in § 50.10(c) of this chapter) unless specifically so authorized by the Atomic Safety and Licensing Board. If the Board finds that no substantial question remains for appeal on an issue[2] related to the commencement of construction during appellate review, the Board shall authorize commencement of construction at the expiration of thirty (30) days after the date of service of the initial decision. In the event an appeal under this chapter is taken from such an initial decision authorizing commencement of construction, construction shall not commence within ninety (90) days after the date of service of the initial decision. If the Atomic Safety and Licensing Board, the Atomic Safety and Licensing Appeal Board, or the Commission finds that there is a substantial question on an issue related to the commencement of such construction, construction shall not commence until the merits of that issue are resolved on appeal. A "substantial question," for these purposes, does not require the Board to find that its own ruling may be incorrect, but rather that the party which did not prevail on the issue has demonstrated substantial, non-frivolous arguments which could be raised on appeal.

(b) The Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, shall where authorized by an initial decision issue a construction permit or an amendment thereto or a construction authorization within 10 days after the date upon which commencement of construction is authorized pursuant to this chapter.

3. A new subparagraph (3) is added to § 2.785(b) of 10 CFR Part 2 to read as follows:

§ 2.785 Functions of Atomic Safety and Licensing Appeal Boards.

* * * * *

(b) * * *

* * * * * *

(3) In a proceeding on appeal from an initial decision by an Atomic Safety and Licensing Board directing the issuance or amendment of a construction permit or construction authorization for a nuclear power reactor or testing facility:

(i) The Atomic Safety and Licensing Appeal Board shall, within 60 days after the date of service of the initial decision, complete its review of exceptions to that part of the initial decision of the Atomic Safety and Licensing Board which, under § 2.764, establishes the date upon which construction may commence. If no such exception is filed, the Atomic Safety and Licensing Appeal Board shall conduct any review of such part of the initial decision within 30 days of the date of service of that decision. The Atomic Safety and Licensing Appeal Board may extend these periods, but if it does so, it shall at the same time extend, by an equivalent amount, the thirty- (30-) day and ninety- (90-) day periods described in § 2.764(a).

(ii) After completing the review in paragraph (b)(3)(i) of this Section, the Atomic Safety and Licensing Appeal Board shall, if it finds that there is a substantial question on an issue related to the commencement of construction, undertake review on the merits of that issue on an expedited basis, and shall order that construction not commence pending completion of that expedited review.

[1] The temporary suspension of this rule in certain proceedings and related matters are addressed in Appendix B to this part.

[2] Such issues include, for example: Alternate sites, site suitability, and the overall NEPA cost-benefit balance.

4. A new paragraph (i) is added to 10 CFR 2.788 to read as follows:

§ 2.788 Stays of decisions of presiding officers and Atomic Safety and Licensing Appeal Boards pending review.

* * * * *

(i) The provisions of this section shall not apply to an initial decision directing the issuance or amendment of a construction permit or a construction authorization.

B. *Option B.*

1. 10 CFR 2.761a is revised to read as follows:

§ 2.761a Separate hearings and decisions.

In a proceeding on an application for a construction permit for a utilization facility which is subject to § 51.5(a) of this chapter, and is of the type specified in §§ 50.21(b) (2) or (3) or 50.22 of this chapter or is a testing facility, the presiding officer shall unless the parties agree otherwise or the rights of any party would be prejudiced thereby, commence a hearing on issues covered by § 50.10(e) and Part 51 of this chapter as soon as practicable after issuance by the staff of its final environmental impact statement and its final report on the site safety issues described in § 50.10(e), but no later than thirty (30) days after issuance of such statement and report, and complete such a hearing and issue an initial decision on such matters. Prehearing procedures regarding issues covered by Part 51 and § 50.10(e) of this chapter, including any discovery and special prehearing conferences and prehearing conferences as provided in §§ 2.740, 2.740a, 2.740b, 2.741, 2.742, 2.751a, and 2.752, shall be scheduled accordingly. The provisions of §§ 2.754, 2.755, 2.760, 2.762, 2.763, and 2.764 shall apply to any proceeding conducted and any initial decision rendered in accordance with this section. This section shall not preclude separate hearings and decisions on other particular issues.

2. 10 CFR 2.764 is revised to read as follows:

§ 2.764 Beginning construction under an initial decision directing issuance or amendment of a construction permit or a construction authorization.[3]

(a)(1) In a proceeding in which a construction authorization is granted by an initial decision rendered pursuant to § 2.761a of this part, no person shall effect commencement of construction (as "commencement of construction" is defined in § 50.10(c) of this chapter) or conduct any of the activities described in § 50.10(e)(1) within 30 days after the date of service of the decision by the Atomic Safety and Licensing Appeal Board reviewing on the merits any appeal filed under § 2.762 from that initial decision. If, after such a review, further proceedings are ordered, no person shall effect commencement of construction until authorized to do so by the Atomic Safety and Licensing Appeal Board. In granting or denying such an authorization, the Atomic Safety and Licensing Appeal Board shall consider the relative importance of the matter or matters remanded, and the extent to which the commencement of construction at the site during the pendency of the remand would cause serious environmental impacts to occur at the site or assets to be placed at risk. If a petition for review is filed with the Commission regarding this authorization, construction shall not commence within thirty (30) days after the date of service of the decision by the Atomic Safety and Licensing Appeal Board which grants the authorization.

(2) In a proceeding in which no construction authorization pursuant to § 2.761a is granted, and in which an initial decision directs the issuance or amendment of a construction permit, no person shall effect commencement of construction (as defined in § 50.10(c) of this chapter) within:

(i) Thirty (30) days after the date of service of the decision by the Atomic Safety and Licensing Appeal Board reviewing on the merits at least that portion of any appeal from the initial decision which contains exceptions relating to the issues described by § 2.761a, or (ii) thirty (30) days after the date of the initial decision if no appeal from the initial decision is taken under this chapter.

(3) The initial decisions described in paragraphs (a) (1) and (2) of this section are appealable immediately in accordance with § 2.762 of this chapter.

(4) The Commission, pursuant to its appellate review under Part 2 of this chapter, may in its discretion extend any of the thirty- (30-) day periods described in paragraphs (a) (1) and (2) of this section.

(b) Where so authorized by an initial decision, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, shall issue a construction permit or an amendment thereto or a construction authorization, as appropriate, within 10 days after the date upon which commencement of construction is authorized pursuant to paragraph (a) of this section.

[3] The temporary suspension of this rule in certain proceedings and related matters are addressed in Appendix B to this part.

3. A new subparagraph (3) is added to § 2.785(b) of 10 CFR Part 2 to read as follows:

§ 2.785 Functions of Atomic Safety Licensing Appeal Boards.

* * * * *

(b) * * *

* * * * * *

(3) In a proceeding on appeal from an initial decision by an Atomic Safety and Licensing Board directing the issuance of a construction permit, the Atomic Safety and Licensing Appeal Board may in its discretion issue an early partial decision confined to the issues described in § 2.761a.

4. A new paragraph (i) is added to 10 CFR 2.788 to read as follows:

§ 2.788 Stays of decisions of presiding officers and Atomic Safety and Licensing Appeal Boards pending review.

* * * * *

(i) The provisions of this section shall not apply to an initial decision directing the issuance or amendment of a construction permit or a construction authorization.

5. Section 50.10(e) of 10 CFR Part 50 is amended to read as follows:

§ 50.10 License required.

* * * * *

(e)(1) The Director of Nuclear Reactor Regulation may authorize an applicant for a construction permit for a utilization facility which is subject to § 51.5(a) of this chapter, and is of the type specified in §§ 50.21(b) (2) or (3) or § 50.22 or is a testing facility, to conduct the following activities: (i) Preparation of the site for construction of the facility (including such activities as clearing, grading, construction of temporary access roads and borrow areas); (ii) installation of temporary construction support facilities (including such items as warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and construction support buildings); (iii) excavation for facility structures; (iv) construction of service facilities (including such facilities as roadways, paving, railroad spurs, fencing, exterior utility and lighting systems, transmission lines, and sanitary sewerage treatment facilities); (v) the installation of structural foundations, including any necessary subsurface preparation, for structures, systems and components which prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public; and (vi) the construction of structures, systems, and components which do not prevent or mitigate the consequences of postulated accidents that could

undue risk to the health and safety of the public. No such authorization shall be granted unless the staff has completed a final environmental impact statement on the issuance of the construction permit as required by Part 51 of this chapter, and has completed its safety review so as to determine the design basis or bases for meeting the safety regulation pertinent to each of the following site safety issues: Geography and Demography; Nearby Industrial, Transportation and Military Facilities; Meteorology; Hydrology; Geology and Seismology; Foundation Engineering; and Quality Assurance.

(2) Such an authorization shall be granted only after the presiding officer in the proceeding on the construction permit application has made all the findings required by § 51.52 (b) and (c) of this chapter to be made prior to issuance of the construction permit for the facility, and has determined that there are no unresolved safety issues which relate to the installation of the structural foundations described in paragraph (e)(1)(v) of this section which would constitute good cause for withholding the authorization, and has made the findings under § 50.35 of this part required for the issuance of the construction permit with respect to the following site safety issues:

(i) Geography and Demography

(ii) Nearby Industrial, Transportation and Military Facilities

(iii) Meteorology

(iv) Hydrology

(v) Geology and Seismology

(vi) Foundation Engineering

(vii) Quality Assurance

(viii) Any other issue which, in the opinion of the presiding officer, is related to the commencement of construction at the site.

C. *Option C.*

1. 10 CFR 2.761a is deleted, and Appendix A to 10 CFR Part 2 is revised accordingly.

2. 10 CFR 2.764 is amended to read as follows:

§ 2.764 Commencement of construction under an initial decision directing issuance or amendment of a construction permit.

(a) In a proceeding in which an initial decision directs the issuance or amendment of a construction permit, no person shall effect commencement of construction (as "commencement of construction" is defined in § 50.10(c) of this chapter) within thirty (30) days after the date of service of the decision by the Atomic Safety and Licensing Appeal Board reviewing on the merits any appeal under § 2.762 from the initial decision. If, after such review, the initial decision is remanded for further proceedings before the Atomic Safety and Licensing Board, no person shall effect commencement of construction within thirty (30) days after the date set for commencement of construction by the Atomic Safety and Licensing Appeal Board. In setting this date, the Atomic Safety and Licensing Appeal Board shall consider the relative importance of the matter or matters remanded, and the extent to which the commencement of construction at the site during the pendency of the remand would cause assets to be placed at risk or serious environmental impacts to occur at the site.

(b) If no appeal is taken from the initial decision in paragraph (a) of this section, no person shall effect commencement of construction within thirty (30) days after the date of any decision by the Atomic Safety and Licensing Appeal Board reviewing the initial decision *sua sponte*, or within thirty (30) days after the date of the initial decision if no review *sua sponte* is undertaken.

(c) The initial decisions described in paragraph (a) of this section are *appealable immediately in accordance with § 2.762 of this chapter.*

(d) The Commission, *pursuant to its appellate review* under Part 2 of this chapter, may in its discretion extend any of the thirty- (30-) days periods in paragraph (a) of this section.

(e) Where so authorized by an initial decision, the Director of Nuclear Reactor Regulation or the Director of Nuclear Material Safety and Safeguards, as appropriate, shall issue a construction permit or an amendment thereto within 10 days after the date which the commencement of construction is authorized pursuant to paragraphs (a), (b) and (d) of this section.

3. A new paragraph (i) is added to 10 CFR 2.788 to read as follows:

§ 2.788 Stays of decisions of presiding officers and Atomic Safety and Licensing Appeal Boards pending review.

* * * * *

(i) The provisions of this section shall not apply to an initial decision directing the issuance or amendment of a construction permit.

§ 50.10 [Amended]

4. Section 50.10(e) of 10 CFR Part 50 is deleted.

D. *Option D.*

1. 10 CFR 2.764 is amended to read as follows:

§ 2.764 Commencement of construction under an initial decision directing issuance or amendment of a construction permit or a construction authorization.

(a) Under an initial decision directing the issuance or amendment of a construction permit or a construction authorization, no person shall effect commencement of construction (as "commencement of construction" is defined in § 50.10(c) within thirty (30) days after the date of service of the initial decision. In the event an appeal under Part 2 of this chapter is taken from the initial decision, no person shall effect commencement of construction within ninety (90) days after the date of service of the initial decision.

(b) The Director of Nuclear Reactor Regulation or the Director of Nuclear Materials Safety and Safeguards, as appropriate, shall where so authorized by an initial decision issue a construction permit, or an amendment thereto, or a construction authorization within ten (10) days after the expiration of the periods described in paragraph (a) of this section.

2. In § 2.788 of 10 CFR Part 2, paragraph (e) is revised and a new paragraph (i) is added to read as follows:

§ 2.788 Stays of decisions of presiding officers and atomic Safety and Licensing Appeal Boards pending review.

* * * * *

(e) Except as provided in paragraph (i) of this section, the Commission, the Atomic Safety and Licensing Appeal Board, or the presiding officer, in determining whether to grant or deny an application for a stay, will consider:

(1) whether the moving party has made a strong showing that it is likely to prevail on the merits;

(2) whether the party will be irreparably injured unless a stay is granted; (3) whether the granting of a stay would harm other parties; and (4) where the public interest lies.

* * * * *

(i) an application for a stay pending appeal of an initial decision directing issuance or amendment of a construction permit or a construction authorization shall be granted if the appeal presents a substantial question concerning an issue related to the commencement of construction.

Option E. Retain the present system unchanged. Relevant portions of the Commission's existing regulations are as follows:

§ 2.760 Initial decision and its effect.

(a) After hearing, the presiding officer will render an initial decision which will constitute the final action of the

Commission forty-five (45) days after its date when it authorizes the issuance or amendment of a license or limited work authorization for a facility, or 30 days after its date in any other case, unless exceptions are taken in accordance with § 2.762 or the Commission directs that the record be certified to it for final decision.

(b) Where the public interest so requires, the Commission may direct that the presiding officer certify the record to it without an initial decision, and may:

(1) Prepare its own initial decision, which will become final unless exceptions are filed; or

(2) Omit an initial decision on a finding that due and timely execution of its functions imperatively and unavoidably so requires.

(c) An initial decision will be in writing and will be based on the whole record and supported by reliable, probative, and substantial evidence. The initial decision will include:

(1) Findings, conclusions and rulings, with the reasons or basis for them, on all material issue of fact, law, or discretion presented on the record;

(2) All facts officially noticed and relied on in making the decisions;

(3) The appropriate ruling, order or denial of relief with the effective date;

(4) The time within which exceptions to the decision and a brief in support of them may be filed, the time within which briefs in support of or in opposition to exceptions filed by another party may be filed and, in the case of an initial decision which may become final in accordance with paragraph (a) of this section, the date when it may become final.

§ 2.760a Initial decision in contested proceedings on applications for facility operating licenses.

In any initial decision in a contested proceeding on an application for an operating license for a production or utilization facility, the presiding officer shall make findings of fact and conclusions of law on the matters put into controversy by the parties to the proceeding and on matters which have been determined to be the issues in the proceeding by the Commission or the presiding officer. Matters not put into controversy by the parties will be examined and decided by the presiding officer only where he or she determines that a serious safety, environmental, or common defense and security matter exists. Depending on the resolution of those matters, the Director of Nuclear Reactor Regulation or Director of Nuclear Material safety and safeguards, as appropriate, after making the requisite findings, will issue, deny, or appropriately condition the license.

§ 2.761 Expedited decisional procedure.

(a) The presiding officer may determine a proceeding by an order after the conclusion of a hearing without issuing an initial decision, when:

(1) All parties stipulate that the initial decision may be omitted and waive their rights to file exceptions, to request oral argument, and to seek judicial review;

(2) No unresolved substantial issue of fact, law, or discretion remains, and the record clearly warrants granting the relief requested; and

(3) The presiding officer finds that dispensing with the issuance of the initial decision is in the public interest.

(b) An order entered pursuant to paragraph (a) of this section shall be subject to review by the Commission on its own motion within thirty (30) days after its date.

(c) An initial decision may be made effective immediately, subject to review by the Commission on its own motion within thirty (30) days after its date, except as otherwise provided in this chapter, when:

(1) All parties stipulate that the initial decision may be made effective immediately and waive their rights to file exceptions, to request oral argument, and to seek judicial review;

(2) No unresolved substantial issue of fact, or discretion remains and the record clearly warrants granting the relief requested; and

(3) The presiding officer finds that it is in the public interest to make the initial decision effective immediately.

(d) The provisions of this section do not apply to an initial decision directing the issuance or amendment of a construction permit or construction authorization, or the issuance of an operating license or provisional operating authorization.

§ 2.761a Separate hearings and decisions.

In a proceeding on an application for a construction permit for a utilization facility which is subject to § 51.5(a) of this chapter, and is of the type specified in §§ 50.21(b)(2) or (3) or 50.22 of this chapter or is a testing facility, the presiding officer shall, unless the parties agree otherwise or the rights of any party would be prejudiced thereby, commence a hearing on issues covered by § 50.10(e)(2)(ii) and Part 51 of this chapter as soon as practicable after issuance by the staff of its final environmental impact statement but no later than thirty (30) days after issuance of such statement and complete such a hearing and issue an initial decision on such matters. Prehearing procedures regarding issues covered by Part 51 and § 50.10(e)(2)(ii) of this chapter, including any discovery and special prehearing conferences and prehearing conferences as provided in §§ 2.740, 2.740a, 2.740b, 2.741, 2.742, 2.751a, and 2.752, shall be scheduled accordingly. The provisions of §§2.754, 2.755, 2.760, 2.762, 2.763, and 2.764(a) shall apply to any proceeding conducted and any initial decision rendered in accordance with this section. Paragraph 2.764(b) shall not apply to any partial initial decision rendered in accordance with this section. This section shall not preclude separate hearings and decisions on other particular issues.

§ 2.764 Immediate effectiveness of initial decision directing issuance or amendment of construction permit or operating license.

(a) An initial decision directing the issuance or amendment of a construction permit, a construction authorization or an operating license shall be effective immediately upon issuance unless the presiding officer finds that good cause has been shown by a party why the initial decision should not become immediately effective, subject to the review thereof and further decision by the Commission upon exceptions filed by any party pursuant to § 2.762 or upon its own motion.

(b) The Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, notwithstanding the filing of exceptions, shall issue a construction permit, a construction authorization, or an operating license, or amendments thereto, authorized by an initial decision, within ten (10) days from the date of issuance of the decision.[1]

§ 2.785 Functions of Atomic Safety and Licensing Appeal Board.

(a) The Commission has authorized Atomic Safety and Licensing Appeal Board to exercise the authority and perform the review functions which would otherwise have been exercised and performed by the Commission, including, but not limited to, those under §§ 2.760–2.771, 2.912, and 2.913 in (1) proceedings on applications for licenses under Part 50 of this chapter and (2) such other licensing proceedings under the regulations in this chapter as the Commission may specify.

(b)(1) In the proceedings described in paragraph (a) of this section, the Atomic Safety and Licensing Appeal Board will also exercise the authority and perform the functions which would otherwise

[1] The temporary suspension of this rule in certain proceedings and related matters are addressed in Appendix B to this part.

have been exercised and performed by the Commission under §§ 2.711, 2.717(a), 2.718(i), 2.720(f), 2.730, 2.742(b), 2.743(b), 2.752(a) and (c) and Subpart I, except those functions referred to in § 2.905(c), (e)(2), (g), and (h)(2).

(2) In a proceeding on an application for an operating license where the Atomic Safety and Licensing Appeal Board determines that a serious safety, environmental, or common defense and security matter exists that has not been raised by the parties, it may give appropriate consideration to that matter.

(c) In the proceedings described in paragraph (a) of this section, the Atomic Safety and Licensing Appeal Board shall exercise the authority and perform the functions delegated to it subject to the provisions and limitations of the referenced sections and subpart. Except as provided in § 2.786, any action taken by the Atomic Safety and Licensing Appeal Board pursuant to its delegated authority shall have the same force and effect and shall be made, evidenced, and enforced in the same manner as actions of the Commission.

(d) In the proceedings described in paragraph (a) of this section, an Atomic Safety and Licensing Appeal Board may, either in its discretion or on direction of the Commission, certify to the Commission for its determination major or novel questions of policy, law or procedure.

§ 2.788 Stays of decisions of presiding officers and Atomic Safety and Licensing Appeal Boards pending review.

(a) Within ten (10) days after service of a decision or action any party to the proceeding may file an application for a stay of the effectiveness of the decision or action pending filing of and decision on an appeal or petition for review. Except as provided in paragraph (f) of this section, such an application may be filed with the Commission, Atomic Safety and Licensing Appeal Board, or the presiding officer.

(b) An application for a stay shall be no longer than ten (10) pages, exclusive of affidavits, and shall contain the following:

(1) A concise summary of the decision or action which is requested to be stayed;

(2) A concise statement of the grounds for stay, with reference to the factors specified in paragraph (e) of this section;

(3) In the case of an application to the Commission for stay of decisions or actions by an Atomic Safety and Licensing Appeal Board, a statement where (including record citation, if available) a stay was requested from the Appeal Board and denied. If no such request was made of the Appeal Board, the application should state why it could not have been made; and

(4) To the extent that an application for a stay relies on facts subject to dispute, appropriate references to the record or affidavits by knowledgeable persons.

(c) Service of an application for a stay on the other parties shall be by the same method, e.g., telegram, mail, as the method for filing the application with the Commission, Atomic Safety and Licensing Appeal Board, or the presiding officer.

(d) Within ten (10) days after service of an application for a stay under this section, any party may file an answer supporting or opposing the granting of a stay. Such answer shall be no longer than ten (10) pages exclusive of affidavits, and should concisely address the matters in paragraph (b) of this section to the extent appropriate. No further replies to answers will be entertained. Filing of and service of an answer on the other parties shall be by the same method, e.g., telegram, mail, as the method for filing the application for the stay.

(e) In determining whether to grant or deny an application for a stay, the Commission, Atomic Safety and Licensing Appeal Board, or presiding officer will consider:

(1) Whether the moving party has made a strong showing that it is likely to prevail on the merits;

(2) Whether the party will be irreparably injured unless a stay is granted;

(3) Whether the granting of a stay would harm other parties; and

(4) Where the public interest lies.

(f) An application to the Commission for a stay of a decision or action by an Atomic Safety and Licensing Appeal Board will be denied if a stay was not, but could have been, sought before the Appeal Board. An application for a stay of a decision or action of a presiding officer may be filed before either the Atomic Safety and Licensing Appeal Board or the presiding officer, but not both at the same time.

(g) In extraordinary cases, where prompt application is made under this section, the Commission, Atomic Safety and Licensing Appeal Board, or presiding officer may grant a temporary stay to preserve the status quo without waiting for filing of any answer. The application may be made orally provided the application is promptly confirmed by telegram. Any party applying under this paragraph shall make all reasonable efforts to inform the other parties of the application, orally if made orally.

(h) A party may file an application for a stay of a decision or action granting or denying a stay. As to a decision or action of a presiding officer the application shall be filed with the Atomic Safety and Licensing Appeal Board. As to a decision or action of the Atomic Safety and Licensing Appeal Board the application shall be filed with the Commission. In each case the procedures and criteria of §§ 2.788(a)–(e) shall be followed.

Authority for options A through E: See 161, Pub. L. 83–703, 68 Stat. 948 (42 U.S.C. 2201); Sec. 102, Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332); Sec. 201, as amended, Pub. L. 94–79, 89 Stat. 413 (42 U.S.C. 5841).

Dated at Washington, D.C., this 16th day of May 1980.

For the Commission.

Samuel J. Chilk,

Secretary of the Commission.

[FR Doc. 80–15780 Filed 5–21–80; 8:45 am]

BILLING CODE 7590–01–M

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Parts 47 and 49

[Docket No. 17311; Notice No. 80–9]

Recordation of Conveyances Affecting Title to, or an Interest in, Aircraft

AGENCY: Federal Aviation Administration (FAA).

ACTION: Notice of proposed rule making (NPRM).

SUMMARY: This notice proposes rules which would amend certain provisions currently contained in the Federal Aviation Regulations dealing with aircraft registration and recordation of conveyances affecting title to aircraft. These proposed revisions are needed to eliminate the distinction between conditional sales contracts and other security instruments for purposes of those regulations. The proposed revisions are intended to provide more uniform treatment of all secured creditors in keeping with the intent of the Uniform Commercial Code.

DATES: Comments on the proposed regulation must be received before July 21, 1980.

ADDRESSES: Comments on this proposal may be mailed in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC–204), Docket No. 17311, 800 Independence Avenue, SW., Washington, D.C. 20591; or may be delivered in duplicate to: Room 916, 800 Independence Avenue, SW., Washington, D.C. 20591. Comments delivered must be marked: Docket No.

17311. Comments may be inspected at Room 916 between 8:30 a.m. and 5:00 p.m.

FOR FURTHER INFORMATION CONTACT:
Ms. Virginia Swimmer, Aircraft Registration Branch, (AAC–250), Airmen and Aircraft Registry, Aeronautical Center, P.O. Box 25082, Oklahoma City, Oklahoma 73125; Telephone (405) 686–2284.

SUPPLEMENTARY INFORMATION:

I. Comments Invited

Interested persons are invited to participate in the making of the propsed rule by submitting such written data, views, or arguments as they may desire. All communications received on or before July 21, 1980, will be considered by the Administrator before taking action on the proposed rule. The proposals contained in this notice may be changed in light of comments received. 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 substantive public contact with FAA personnel concerned with this rule making will be filed in the docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments on Docket No. 17311." The postcard will be date and time stamped and returned to the commenter.

II. Availability of NPRM

Any person may obtain a copy of this notice of proposed rule making (NPRM) by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attn: Public Information Center, APA–430, 800 Independence Avenue, SW., Washington, D.C. 20591, or by calling (202) 426–8058. Communications must identify the notice number of this NPRM. Persons interested in being placed on a mailing list for future NPRMs should also request a copy of Advisory Circular No. 11–2 which describes the application procedure.

III. Supplementary Information

A. Statutory and Regulatory Background

In 1938, Congress first enacted legislation concerning instruments for the transfer of interests in aircraft when it established a federal system for recordation of those instruments. Currently embodied in Section 503 of the Federal Aviation Act of 1958, as amended (Act), the federal recording system is designed to provide notice of interests in aircraft. Section 503(a) of the Act requires that the FAA establish and maintain a system for recording conveyances which affect title to, or interest in, civil aircraft of the United States. A transfer of an interest in an aircraft must be recorded with the FAA in order to be "valid" as against a third person without actual notice. Section 503(d) provides that each instrument recorded pursuant to the Act shall, from the time of its filing, be valid as to all persons without further or other recordation.

As the result of the O'Connor decision by the Civil Aeronautics Authority (1 C.A.A. 5 (1939)), the buyer of an aircraft under a contract of conditional sale is recognized as the owner of the aircraft for registration purposes. This is true, even though the conditional seller retains legal title until the buyer meets the conditions of the contract. The Federal Aviation Regulations currently provide that the assignment of the interest of a buyer in an aircraft sold under a contract of conditional sale cannot be recorded, and the aircraft cannot be registered in the name of the buyer's assignee, without the consent of the conditional seller. On the other hand, if a person has a security interest in the aircraft as the result of any other arrangement, such as a chattel mortgage or a security agreement, that person's consent is not required under the regulations for recordation of the transfer and registration of the aircraft to the purchaser.

B. Cessna Finance Corp. Petition

In 1975, the Cessna Finance Corporation (CFC) petitioned the FAA to amend the regulations to remove the regulatory distinction between conditional sales contracts and other security instruments. CFC asked the FAA to require the written consent of the holder of every outstanding recorded security interest prior to recording a bill of sale or other conveyance from the debtor to a third party and as a prerequisite to issuing a certificate of aircraft registration to the debtor's transferee.

The CFC petition pointed out that pertinent sections of the Uniform Commercial Code (U.C.C.) make no distinction between such instruments as conditional sales contracts, chattel mortgages and trust deeds. The U.C.C. considers all of these instruments agreements under which a creditor holds an interest in property, and treats them alike.

C. ANPRM

The CFC Petition prompted the FAA to issue an advance notice of proposed rule making (ANPRM) on October 20, 1977 (Notice No. 77–24; 42 FR 55897) which, in keeping with the spirit of the U.C.C., proposed to abolish the distinction between contracts of conditional sale and other security interests recorded with the FAA. The FAA proposed to accomplish this, not in the manner requested by CFC, but by eliminating the current requirement of written consent of the conditional vendor to the assignment of the original buyer's interest before the assignment can be recorded and the aircraft registered to the assignee. The FAA explained in the ANPRM that an amendment similar to the one proposed by CFC would discourage transfer of the buyer's interest in the aircraft and thus be contrary to the spirit of the U.C.C. In addition, the amendment would involve a substantial increase in the administrative costs and workload of the FAA Aircraft Registry. The ANPRM further solicited suggestions of alternate courses of action which would be consistent with the U.C.C., administratively reasonable, and which would also afford protection to persons who hold security interests in aircraft.

D. Comments Recieved

The FAA received a total of 20 comments in response to the ANPRM. All of the comments favored the proposal contained in the CFC Petition and opposed the FAA proposal set out in the ANPRM. Six of the twenty comments suggested alternative courses of action. Due consideration was given to all comments recieved. The comments submitted are discussed below.

One commenter suggested that the FAA refuse to record a transfer of ownership without the written consent of the secured party or the release of the secured party's security interest. That commenter believes that a requirement of written consent or release prior to FAA recordation of a bill of sale would place the burden on the seller of the aircraft to notify the secured party of the sale and to obtain the secured party's consent.

A rulemaking petition by the Aircraft Finance Association (AFC), dated March 16, 1979, proposed the same requirement without specifying whether the burden would fall upon the buyer or the seller of the aircraft to obtain the consent or release of the security interest by the creditor.

The Act does not specifically authorize the administrator to refuse to record a conveyance affecting title to, or

an interest in, aircraft in the absence of a secured creditor's assent to that conveyance. For several years, the FARs have required evidence of the conditional vendor's assent to the transfer of an aircraft by the conditional vendee to a third party to be submitted with an application for aircraft registration and in order for the instrument evidencing such a transfer to be recorded. The special character of the contract of conditional sale, that is, the retention of legal title by the vendor, was thought to have warranted the special protection of consent to transfer.

However, Section 503(c) of the Act leaves the determination of the substantive validity of any conveyance to state law, specifically, the law of the state where the instrument is delivered. To the extent that the Act does not regulate the rights of parties to, and third parties affected by, these transactions, security interests in aircraft are controlled by Article 9 of the U.C.C., which has been adopted in forty-nine of the fifty states.

As the CFC, the commenters, and the AFC have pointed out, the U.C.C. Has eliminated the distinction between conditional vendors and other secured creditors. In view of this virtually uniform policy of state law, the FAA continues to believe that the distinction should be abolished for purposes of aircraft registration and recordation.

Furthermore, it is the policy of the U.C.C. that debtor's rights in collateral be freely transferable notwithstanding a provision in the security agreement making such a transfer a default. It would be contrary to the policy of the U.C.C. to restrain such transfers by requiring, as a condition of aircraft registration and recordation, the assent of the secured creditor to a conveyance of the aircraft. The FAA believes that it is improper to override these state laws, in the absence of specific Federal statutory authority, unless it is necessary to carry out the provisions of a Federal statute or treaty.

Four commenters suggested that the FAA notify each holder of an outstanding recorded security interest when there is a change in the registered owner of the aircraft. One of these commenters also suggested that the FAA should advise the prospective purchaser of the existence of a recorded lien against the aircraft.

Such an undertaking would require a complete examination of each aircraft record to obtain a compilation of the outstanding liens, the lien holders, debtors, dates, and recorded document number for the liens on each U.S. registered civil aircraft. This compilation would require continual updating by the FAA to reflect the attachment and removal of liens as releases and repossessions are received. The FAA could accomplish this task by computerizing the records of all U.S. registered aircraft. However, FAA studies indicate that the minimum cost of implementing an automatic data processing (ADP) system would be in excess of $80,000 and a continuing annual personnel cost in excess of $236,000 would be incurred in examining and updating the appropriate aircraft records.

As already stated, the aircraft recordation system was established as a centralized system which interested persons could access to locate documents relating to the title of a particular aircraft. As such, the system was designed to provide construction notice upon filing of any document affecting aircraft title. None of the submitted comments put forth legal arguments which persuade the FAA to go beyond the intent of Congress and undertake such an expenditure of public funds.

Finally, one commenter suggested that the FAA notify and seek the consent of each creditor of an aircraft before recording an aircraft bill of sale. Not only would such an undertaking by the FAA require an even larger expenditure of funds than the proposal already discussed, but it would embroil the FAA in aircraft financing transactions—a role clearly not contemplated by Titles III and V of the Act.

The CFC petition and comments received in support of it argue not only that the FAA should refuse to record a bill of sale in the absence of a secured creditor's consent, but that the FAA should refuse to register any aircraft where that consent has not been given. Again, there is no specific statutory authority for such a refusal.

Section 501(c) provides that, upon the request of the owner of any aircraft eligible for aircraft registration under Section 501(b), the FAA must issue an aircraft registration certificate. The application for aircraft registration must be in such a form, filed in such a manner, and contain such information as the Administrator may require. Evidence as to ownership, such as a bill of sale, is only relevant to the FAA insofar as it identifies the owner of the aircraft for purposes of determining eligibility for registration under Section 501(b). The limited interest of the FAA in the ramifications of aircraft financing transactions upon aircraft title is evidenced in Section 501(f). That section provides that the Certificate of Aircraft Registration is only evidence of nationality for international purposes. Registration is not to be used as evidence of aircraft ownership in any proceeding in which ownership by a particular person is in issue.

For these reasons and those already stated with regard to consent as a prerequisite for aircraft recordation, it would be improper to refuse to register an aircraft on the grounds that a secured creditor's consent to the transfer of that aircraft is absent.

Section 47.47(a), which requires the secured creditor's consent to deregistration of an aircraft for export purposes, is not affected by this proposal. The consent requirement in that regulation is based upon different grounds than the regulations prescribing requirements for registration of aircraft and recordation of conveyances affecting title to, or an interest in, aircraft. Section 47.47(a) relates to international transactions and gives effect to the requirement of the Convention on International Recognition of Rights in Aircraft (4 U.S.T. 1830) that the holder of a recorded right in an aircraft be satisfied or consent to the transfer of an aircraft to the register of another country.

Therefore, it is appropriate to delete regulations affording special consideration to conditional sales contracts in view of modern state statutes which treat alike all instruments executed for security purposes as they concern the rights, duties and remedies of the parties. Specifically, the proposed amendment to § 47.11(a) would eliminate the current requirement that the assignee under a contract of conditional sale submit, with an Application for Aircraft Registration, written assent of the seller, bailor, lessor, or assignee thereof, under the original contract, to the assignment. The proposed amendment to § 49.17 would consolidate the recordation requirements for instruments executed for security purposes.

IV. Economic Impact of Proposed Regulation

The FAA has determined that the expected impact of the proposed regulation is so minimal that it does not require an evaluation. Approximately 15 per cent of the total security interest conveyances filed for recordation with the FAA are contracts of conditional sale under which legal title is retained by the conditional vendor. In the majority of cases, a release of the contract of conditional sale is filed for recordation prior to transfer of ownership. Consequently, the elimination of the current regulatory provision that the assignment of the interest of the buyer in an aircraft sold

under a contract of conditional sale cannot be recorded, and the aircraft cannot be registered in the name of the buyer's assignee, without the consent of the conditional seller, will have little effect upon the majority of aircraft financing transactions. However, interested persons are invited to comment on the economic impact of the proposed rule by submitting such written statistical data or other factual information as they may desire.

V. Proposed Amendments

Accordingly, the Federal Aviation Administration proposes to amend Parts 47 and 49 of the Federal Aviation Regulations (14 CFR Parts 47 and 49) as follows:

PART 47—AIRCRAFT REGISTRATION

1. By revising § 47.11(a) to read as follows:

§ 47.11 Evidence of ownership.

* * * * *

(a) The buyer in possession, the bailee, or the lessee of an aircraft under a contract of conditional sale must submit the contract. The assignee under a contract of conditional sale must submit both the contract (unless it is already recorded at the FAA Aircraft Registry) and the assignment from the original buyer, bailee, lessee or a prior assignee.

* * * * *

PART 49—RECORDATION OF AIRCRAFT TITLE AND SECURITY DOCUMENTS

2. By deleting paragraph (e) of § 49.17 and revising paragraph (d) of § 49.17 to read as follows:

§ 49.17 Conveyances recorded.

* * * * *

(d) The following rules apply to instruments executed for security purposes and assignments thereof:

(1) A chattel mortgage must be signed by the mortgagor. If the mortgagor is not the registered owner of the aircraft, the chattel mortgage must be accompanied by the mortgagor's Application for Aircraft Registration and evidence of ownership, as prescribed in Part 47 of this chapter, unless the mortgagor:

(i) Holds a Dealer's Aircraft Registration Certificate and submits evidence of ownership as provided in § 47.67 of this chapter (if applicable);

(ii) Was the owner of the aircraft on the date the mortgage was signed, as shown by documents recorded at the FAA Aircraft Registry; or

(iii) Is the vendor, bailor, or lessor under a contract of conditional sale.

(2) The name of a co-signor may not appear in the mortgage as a mortgagor (owner). If a person other than the registered owner signs the mortgage, that person must show the capacity in which that person signs, such as "co-signor" or "guarantor."

(3) An assignment of an interest in a contract of conditional sale, chattel mortgage, or other security instrument must be signed by the assignor and, unless it is attached to and is a part of the original agreement, must describe the agreement in sufficient detail to identify it, including its date, the names of the parties, the date of FAA recording, and the recorded document number.

(4) An amendment of or a supplement to an instrument executed for security purposes that has been recorded by the FAA must meet the requirements for recording the original instrument and must describe the original instrument in sufficient detail to identiy it, including its date, the names of the parties, the date of FAA recording, and the recorded document number.

(5) Immediately after a debt secured by an instrument given for security purposes has been satisfied, or any of the encumbered aircraft have been released from the instrument, the holder shall execute a release of AC Form 8050–41, "Conveyance Recordation Notice and Release," provided to him by the FAA when the conveyance was recorded by the FAA, or its equivalent, and shall send it to the FAA Aircraft Registry for recording. If the debt is secured by more than one aircraft and all of the collateral is released, the collateral need not be described in detail in the release document. However, the original instrument must be clearly described in enough detail to identify it, including its date, the names of the parties, the date of FAA recording, the recorded document number.

(6) A contract of conditional sale, as defined in Section 101(19) of the Federal Aviation Act of 1958 (49 U.S.C. 1301(19)), must be signed by all parties to the contract.

(Secs. 313(a), 501, 503, 1102, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1401, 1403 and 1502); sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)))

Note.—The FAA has determined that this document involves a proposed regulation which is not significant under Executive Order 12044 as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). In addition, the FAA has determined that the expected impact of the proposed regulation is so minimal that it does not require an evaluation.

Issued in Oklahoma City, Oklahoma, on May 7, 1980.

Benjamin Demps, Jr.,

Director, Aeronautical Center.

[FR Doc. 80–15347 Filed 5–21–80; 8:45 am]

BILLING CODE 4910–13–M

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14 CFR Part 71

[Airspace Docket No. 80–AAL–5]

Proposed Designation of Transition Area Valdez, Alaska

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes to establish a 1,200-foot transition area at Valdez, Alaska, to provide protected controlled airspace for aircraft conducting an instrument approach procedure to the Valdez Airport. This proposed action will also enable ATC to more efficiently control aircraft operations using radar control procedures from an en route radar facility at Middleton Island, Alaska. This action is made necessary by a recently approved instrument approach procedure for the Valdez Airport and the imminent establishment of an en route radar facility on Middleton Island.

DATE: Comments must be received on or before June 23, 1980.

ADDRESSES: Send comments on the proposal in triplicate to: Director, FAA Alaskan Region, Attn: Chief, Air Traffic Division, Docket No. 80–AAL–5, Federal Aviation Administration, Box 14, 701 C Street, Anchorage, Alaska 99513.

The official docket may be examined at the following location: Office of the Regional Counsel, Alaskan Region, Federal Aviation Administration, Box 14, 701 C Street, Anchorage, Alaska 99513.

An informal docket may be examined at the office of the Chief, Operations, Procedures and Airspace Branch, Air Traffic Division, at the above address.

FOR FURTHER INFORMATION CONTACT: John G. Costello, Operations, Procedures and Airspace Branch, Air Traffic Division, Federal Aviation Administration, Box 14, 701 C Street, Anchorage, Alaska 99513, telephone (907) 271–5902.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons may participate in the proposed rulemaking by submitting such written data, views, or arguments as they may desire. Communications should identify the airspace docket number and be submitted in triplicate to

the Director, Alaskan Region, Attention: Chief, Air Traffic Division, Federal Aviation Administration, Box 14, 701 C Street, Anchorage, Alaska 99513. All communications received on or before June 23, 1980, will be considered before action is taken on the proposed amendment. The proposal contained in this notice may be changed in the light of comments received. 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 public contact with FAA personnel concerned with this rulemaking will be filed in the public docket.

Availability of NPRM

Any person may obtain a copy of this notice of proposed rulemaking (NPRM) by submitting a request to the Chief, Operations, Procedures and Airspace Branch, Air Traffic Division, Alaskan Region, Federal Aviation Administration, Box 14, 701 C Street, Anchorage, Alaska 99513, or by calling (907) 271–5902. Communications must identify the docket number of this NPRM. Persons interested in being placed on a mailing list for future NPRMs should also request a copy of Advisory Circular No. 11–2, which describes application procedures.

The Proposal

The FAA is considering an amendment of Subpart G of Part 71 of the Federal Aviation Regulations (14 CFR Part 71) to designate a transition area at Valdez, Alaska. An instrument approach procedure, based on recently commissioned localizer, DME and NDB facilities, has been developed for the Valdez Airport. This amendment would provide controlled airspace to protect aircraft conducting instrument approach and departure procedures while operating above 1,500 feet above the surface. The proposed amendment would also provide controlled airspace to allow air traffic control to more efficiently handle aircraft operations using radar control procedures from an en route radar facility soon to be established on Middleton Island.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration proposes to amend Subpart G § 71.181 (45 FR 445), of Part 71 of the Federal Aviation Regulations (14 CFR Part 71) to designate a transition area as follows:

Valdez, Alaska

That airspace extending upward from 1,200 feet above the surface within an area beginning at latitude 60° 43′ 11.7″N, longitude 147° 50′ 36.3″W, thence north along the 85-mile radius arc centered on the Anchorage VORTAC to latitude 61° 27′ 37″N, longitude 147° 44′ 10″W, thence east to latitude 61° 16′ 05″N, longitude 146° 13′ 04″W, thence south along the west boundary of V-481 to the north boundary of V-319, thence west along the north boundary of V-319 to the point of beginning.

(Sec. 307 (a), Federal Aviation Act of 1958, as amended (49 U.S.C. 1348 (a)); sec. 6(c) of the Department of Transportation Act (49 U.S.C. 1655 (c)); and 14 CFR 11.65.)

Note.—The FAA has determined that this document involves a proposed regulation which is not significant under Executive Order 12044, as implemented by DOT Regulatory Policies and Procedures (44 FR 1134, February 26, 1979). Since this regulatory action involves an established body of technical requirements for which frequent and routine amendments are necessary to keep them operationally current and promote safe flight operations, and anticipated impact is so minimal that this action does not warrant preparation of a regulatory evaluation and a comment period of less than 45 days is appropriate.

Issued in Anchorage, Alaska on May 7, 1980.

Robert L. Faith,

Director, Alaskan Region.

[FR Doc. 80–15348 Filed 5–21–80; 8:45 am]

BILLING CODE 4910–13–M

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14 CFR Part 71

[Airspace Docket No. 80–NE–17]

Proposed Designation of a Control Zone, Quonset State Airport, North Kingston, R.I.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice (NPRM) proposes to designate a new control zone at Quonset State Airport, North Kingston, Rhode Island, to coincide with the commissioning of a new part-time Air Force traffic control tower at Quonset State Airport on or about August 1, 1980. The facility will be manned by certified traffic control personnel and will provide certified weather observations.

DATES: Comments must be received on or before June 16, 1980.

ADDRESS: Send comments to the Federal Aviation Administration, Office of the Regional Counsel, ANE–7, Attention: Rules Docket Clerk, Docket No. 80–NE–17.

A public docket will be available for examination by interested persons in the Office of the Regional Counsel, Federal Aviation Administration, 12 New England Executive Park, Burlington, Massachusetts.

FOR FURTHER INFORMATION CONTACT: Richard G. Carlson, Operations Procedures and Airspace Branch, ANE–536, Federal Aviation Administration, Air Traffic Division, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (617) 273–7285.

Comments Invited

Interested persons may participate in the proposed rulemaking process by submitting such written data, views, or arguments as they may desire. Communications should identify the airspace docket number and be submitted to the Office of the Regional Counsel, ANE–7, Attention: Rules Docket Clerk, Docket No. 80–NE–17, Federal Aviation Administration, 12 New England Executive Park, Burlington, Massachusetts 01803. All communications received on or before June 16, 1980, will be considered before action is taken on the proposed amendment. The proposal contained in this notice may be changed in light of comments received. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons.

Availability of NPRM

Any person may obtain a copy of this Notice of Proposed Rulemaking (NPRM) by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA–430, 800 Independence Avenue, S.W., Washington, D.C. 20591, or by calling (202) 426–8085. Communications must identify the number of this NPRM.

Persons interested in being placed on a mailing list for future NPRMs should also request a copy of Advisory Circular No. 11–2 which describes the application procedures.

The Proposal

The FAA is considering an amendment to Subpart F or Part 71 of the Federal Aviation Regulations to designate a control zone at North Kingston, Rhode Island (Quonset State Airport). The zone will control a portion of airspace approximately 5 miles in radius around the airport, extending 6.5 miles to the south. The effectivity of the control zone will be dependent on weather and communications availability provided by the new tower, and will provide added controlled airspace protection to aircraft

conducting instrument approach and departure procedures.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration proposes to amend § 71.171 of Part 71 of the Federal Aviation Regulations (14 CFR Part 71) by designating a control zone at Quonset State Airport, North Kingston, Rhode Island as follows:

"With a 5-mile radius of the Center, (latitude 41 degree 35"43" N, Longitude 71 degree 24"35") of the Quonset State Airport, North Kingston, Rhode Island; within 2 miles each side of the Providence, Rhode Island VORTAC 171 degree T (185 degree M) radial, extending from the 5-mile radius zone to 15.5 miles south of the VORTAC excluding that airspace within the Providence, Rhode Island Control Zone.

This control zone will be effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time thereafter will be continuously published in the Airport/Facility Director."

(Section 307(a) of the Federal Aviation Act of 1958 (72 Stat. 749; 49 USC 1348(a)) and Section 6(c) of the Department of Transportation Act (49 USC 1655(c) and (14 CFR 11.69))

Note.—The FAA has determined that this document involves a regulation which is not considered to be significant under the procedures and criteria prescribed by Executive Order 12044 and as implemented by Interim Department of Transportation guidelines (43 FR 9582; March 8, 1978). The anticipated impact is so minimal that this action does not warrant preparation of a regulatory evaluation.

Issued in Burlington, Massachusetts, on May 7, 1980.

Robert E. Whittington,

Director, New England Region.

[FR Doc. 80-15674 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

CIVIL AERONAUTICS BOARD

14 CFR Part 221

[EDR-340A; Economic Regulations Docket 31769]

Suspension/Replacement Agreements: Termination of Rulemaking

Dated: May 16, 1980.

AGENCY: Civil Aeronautics Board.

ACTION: Termination of proposed rulemaking.

SUMMARY: The CAB is closing a stale rulemaking proceeding. In 1977, it proposed to require each certificated airline to include in its tariffs on file with the CAB a notice describing agreements whereby an air taxi provides service on behalf of the certificated airline. It proposed this requirement to provide public notice of the substitution relationship and fare restrictions, imposed as a condition to approval of the agreements, that required the replacement carrier to adhere to the suspending carrier's tariffs. In view of the fact that the Board has removed those fare restrictions and granted replacement carriers unrestrianed fare freedom on flights using small aircraft, the rulemaking is terminated.

FOR FURTHER INFORMATION CONTACT: George S. Baranko, Office of the General Counsel, Civil Aeronautics Board, 1825 Connecticut Avenue, N.W., Washington, D.C. 20428, 202-673-5205.

SUPPLEMENTARY INFORMATION: In 1977, the board issued a notice of proposed rulemaking EDR-340 (42 FR 61870, December 7, 1977), proposing to require each certificated air carrier to include in its tariffs a notice describing suspension/replacement agreements with air taxis.

Before the Airline Deregulation Act was enacted the Board permitted carriers on numerous occasions to suspend service between points in the 48 contiguous States, so long as the carrier entered into an agreement whereby an air taxi, which operates under 14 CFR Part 298, would provide substitute service. Similarly, in 14 CFR part 293, the Board permitted (as it still does) certificated air carriers to subcontract with air taxi operators to provide scheduled service over the Alaskan bush routes of the certificated carrier. In both situations, the replacement air taxis satisfied the service obligations of the certificated air carrier, and the Board, typically, required the replacement service to be subject to various rate conditions in the certificated carrier's tariff—e.g., maintenance of joint fares at the level that certificated carriers would charge. The Board proposed to require tariff notice of suspension/replacement agreements because such a notice would provide formal and legal notice of the replacement service to the public and ensure that the tariff of the certificated carrier would be applicable to the substitute service.

In PS-92, adopted April 3, 1980, the Board considered whether it should vacate those orders dealing with replacement service by commuters for local service carriers which provide that the commuter cannot charge fares higher than those charged by local service carriers. We concluded that the public would best be served if those orders were superceded and commuters providing replacement service had unrestrained fare freedom on flights using small aircraft. See 14 CFR 399.33(b). As a result, the tariff condition, on which this proposed rule is predicated, is of limited value to the passenger utilizing replacement services.

Thus the type of regulation proposed in EDR-340 is no longer sufficiently useful to continue this rulemaking.

Accordingly, the Civil Aeronautics Board terminates the proposed rulemaking proceeding in Docket 31769.

Phyllis T. Kaylor,

Secretary.

[FR Doc. 80-15758 Filed 5-21-80; 8:45 am]

BILLING CODE 6320-01-M

FEDERAL TRADE COMMISSION

16 CFR Part 13

[File No. 791-0146]

Darvel, Inc.; Consent Agreement, With Analysis To Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Consent Agreement.

SUMMARY: In settlement of alleged violations of federal law prohibiting unfair acts and practices and unfair methods of competition, this consent order, accepted subject to final Commission approval, among other things, would require a Bellgarden, Calif. manufacturer and distributor of wearing apparel and related accessories to cease fixing or otherwise controlling the resale prices at which its products are sold or advertised; seeking the identity of dealers who fail to adhere to suggested resale prices and sales periods, and taking any adverse action against them. The firm would be barred from restricting the lawful use of brand names and trademarks in the advertising and sale of its products, and from granting any consideration, service or benefit to any dealer because of the resale price that another dealer has advertised or sold a product. Additionally, the order would prohibit the firm from suggesting retail prices for its products for a period of one year.

DATE: Comments must be received on or before July 21, 1980.

ADDRESS: Comments should be directed to: Office of the Secretary, Federal Trade Commission, 6th St. and Pennsylvania Ave., N.W., Washington, D.C. 20580.

FOR FURTHER INFORMATION CONTACT: William A. Arbitman, Director, 9R, San Francisco Regional Office, Federal Trade Commission, 450 Golden Gate Ave., San Francisco, Calif. 94102. (415) 556–1270.

SUPPLEMENTARY INFORMATION: Pursuant to Section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 46 and § 2.34 of the Commission's Rules of Practice (16 CFR 2.34), notice is hereby given that the following consent agreement containing a consent order to cease and an explanation thereof, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of sixty (60) days. Public comment is invited. Such comments or views will be considered by the Commisison and will be available for inspection and copying at its principal office in accordance with Section 4.9(b)(14) of the Commission's Rules of Practice (16 CFR 4.9(b)(14)).

In the matter of Darvel, Inc., a corporation agreement containing consent order to cease and desist.

The Federal Trade Commission having initiated an investigation of certain acts and practices of Darvel, Inc., a corporation, and it now appearing that Darvel, Inc., a corporation, hereinafter sometimes referred to as proposed respondent, is willing to enter into an agreement containing an order to cease and desist from the use of the acts and practices being investigated.

IT IS HEREBY AGREED by and between Darvel, Inc., by its duly authorized officer and its attorney, and counsel for the Federal Trade Commission that:

1. Proposed respondent Darvel, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of California, with its office and principal place of business located at 6891 Florence Place, in the City of Bellgarden, State of California.

2. Proposed respondent admits all the jurisdictional facts set forth in the draft of complaint here attached.

3. Proposed respondent waives:

(a) Any further procedural steps

(b) The requirement that the Commission's decision contain a statement of findings of fact and conclusions of law; and

(c) All rights to seek judicial review or otherwise to challenge or contest the validity of the order entered pursuant to this agreement.

4. This agreement shall not become a part of the public record of the proceeding unless and until it is accepted by the Commission. If this agreement is accepted by the Commission it, together with the draft of the complaint contemplated thereby and related material pursuant to Rule 2.34, will be placed on the public record for a period of sixty (60) days and information in respect thereto publicly released. The Commission thereafter may either withdraw its acceptance of this agreement and so notify the proposed respondent, in which event it will take such action as it may consider appropriate, or issue and serve its complaint (in such form as the circumstances may require) and decision, in disposition of the proceeding.

5. This agreement is for settlement purposes only and does not constitute an admission by proposed respondent that the law has been violated as alleged in the draft of complaint here attached.

6. This agreement contemplates that, if it is accepted by the Commission, and if such acceptance is not subsequently withdrawn by the Commission pursuant to the provisions of Section 2.34 of the Commission's Rules, the Commission may, without further notice to proposed respondent, (1) issue its complaint corresponding in form and substance with the draft of complaint here attached and its decision containing the following order to cease and desist in disposition of the proceeding and (2) make information public in respect thereto. When so entered, the order to cease and desist shall have the same force and effect and may be altered, modified or set aside in the same manner and within the same time provided by statute for other orders. The order shall become final upon service. Delivery by the U.S. Postal Service of the complaint and decision containing the agreed-to order to proposed respondent's address as stated in this agreement shall constitute service. Proposed respondent waives any right it may have to any other manner of service. The complaint may be used in construing the terms of the order, and no agreement, understanding, representation, or interpretation not contained in the order or the agreement may be used to vary or contradict the terms of the order.

7. Proposed respondent has read the proposed complaint and order contemplated hereby. It understands that once the order has been issued, it will be required to file one or more compliance reports showing that it has fully complied with the order. Proposed respondent further understands that it may be liable for civil penalties in the amount provided by law for each violation of the order after it becomes final.

Order

For the purposes of this Order, the following definitions shall apply:

"Product" is defined as any item of wearing apparel or related accessory which is manufactured, offered for sale or sold by respondent.

"Dealer" is defined as any person, partnership, corporation or firm which sells any product in the course of its business.

"Resale Price" is defined as any price, price floor, price ceiling, price range, or any mark-up, formula or margin of profit used by any dealer for pricing any product. Such term includes, but is not limited to, any suggested, established or customary resale price as well as the retail price in effect at any dealer.

"Sale Period" is defined as any time during which any dealer offers to sell any product at resale prices lower than those in effect during the usual and ordinary course of said dealer's business; or any suggested, authorized or customary time for selling or advertising any product at prices lower than the suggested, established or customary resale prices.

IT IS ORDERED that respondent Darvel, Inc., a corporation, its successors and assigns, and respondent's officers, agents, representatives and employees, directly or indirectly, or through any corporation, subsidiary, division or other device, in connection with the manufacture, advertising, offering for sale, sale or distribution of any product in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from:

I

1. Fixing, establishing, controlling or maintaining, directly or indirectly, the resale price at which any dealer may advertise, promote, offer for sale or sell any product, or the sale period of any dealer.

2. Requesting, requiring or coercing, directly or indirectly, any dealer to maintain, adopt or adhere to any reseale price or sale period.

3. Requesting or requiring, directly or indirectly, any dealer to report the identity of any other dealer who deviates from any resale price or sale period; or acting on any reports or information so obtained by threatening, intimidating, coercing or terminating said dealer.

4. Requesting or requiring that any dealer refrain from or discontinue

selling or advertising any product at any resale price.

5. Hindering or precluding the lawful use by any dealer of any brand name, trade name or trademark of respondent in connection with the sale or advertising of any product at any resale price.

6. Making any payment or granting any consideration, service or benefit to any dealer because of the resale price at which any other dealer has advertised or sold any product.

7. Conducting any surveillance program to determine whether any dealer is advertising, offering for sale or selling any product at any resale price, where such surveillance program is conducted to fix, maintain, control or enforce the resale price at which any product is sold or advertised.

8. Terminating or taking any other action to restrict, prevent or limit the sale of any product by any dealer because of the resale price at which said dealer has sold or advertised, is selling or advertising, or is suspected of selling or advertising any product.

II

1. For a period of one (1) year from the date of service of this Order, orally suggesting or recommending any resale price or sale period to any dealer.

2. For a period of one (1) year from the date of service of this Order, communicating in writing any resale price or sale period to any dealer; provided however, that after said one (1) year period, respondent shall not suggest any resale price or sale period on any list, or in any advertising, book, catalogue or promotional material, unless it is clearly and conspicuously stated on each page where any suggested resale price or sale period appears, the following:

"THE [RESALE PRICES OR SALE PERIODS] QUOTED HEREIN ARE SUGGESTED ONLY. YOU ARE FREE TO DETERMINE YOUR OWN [RESALE PRICES OR SALE PERIODS]."

III

IT IS FURTHER ORDERED that respondent shall within ninety (90) days after service of this Order, mail a copy of the enclosure set forth in the attached Exhibit A to each of its present accounts. An affidavit shall be sworn to by an official of the respondent verifying that the attached Exhibit A was so mailed.

IV

IT IS FURTHER ORDERED that respondent shall forthwith distribute a copy of this order to all operating divisions of said corporation, and to present or future personnel, agents or representatives having sales, advertising or policy responsibilities with respect to the subject matter of this order, and that respondent secure from each such person a signed statement acknowledging receipt of said order.

V

IT IS FURTHER ORDERED that respondent notify the Commission at least thirty (30) days prior to any proposed change in the corporate respondent, such as dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or any other change in the corporation which may affect compliance obligations arising out of the order.

VI

IT IS FURTHER ORDERED that respondent shall within sixty (60) days after service upon it of this order, file with the Commission a report, in writing, setting forth in detail the manner and form in which it has complied with this order.

Exhibit A

Dear Retailer:

Without admitting any violation of the law, Darvel, Inc. has agreed to the entry of an Order by the Federal Trade Commission regulating certain distribution practices. In connection therewith, the Company is required to send you this letter describing the Order.

The Order provides, among other things, as follows:

1. You can advertise and sell Darvel and Zepplin products at any price you choose.

2. Darvel will not take any action against you, including termination, because of the price at which you advertise or sell Darvel and Zepplin products.

3. Darvel will not suggest retail prices for any product until [1 year from the date of service of the Order].

The price at which you sell or advertise Darvel or Zepplin products will not affect your right to use Darvel or Zepplin trademarks or other identification in your sale or advertising of products bearing Darvel or Zepplin trademarks or identification.

If you have any questions regarding the Order or this letter, please call———

For Darvel, Inc.

Analysis of Proposed Consent Order To Aid Public Comment

The Federal Trade Commission has accepted an agreement to a proposed consent order from Darvel, Inc., a manufacturer of wearing apparel marketed under the "Zepplin" label.

The proposed consent order has been placed on the public record for sixty (60) days for reception of comments by interested persons. Comments received during this period will become part of the public record. After sixty (60) days, the Commission will again review the agreement and the comments received and will decide whether it should withdraw from the agreement or make final the agreement's proposed order.

The complaint in this matter alleges that Darvel restrained trade by fixing the resale prices at which its dealers advertise, offer for sale and sell Darvel products.

The consent agreement provides as follows:

1. Darvel cannot fix or otherwise control the resale prices at which its products are sold or advertised.

2. Darvel cannot take any action against any dealer, including termination, because of the resale prices at which the dealer sells or advertises any Darvel product.

3. As to products which bear any of its trademarks or other identifications, Darvel cannot restrict any dealer from lawfully using any such trademark or other identification in the sale or advertising of such products.

4. Darvel cannot suggest retail prices for any product for one year from service of the order.

The purpose of this analysis is to facilitate public comment on the proposed order, and it is not intended to constitute an official interpretation of the agreement and proposed order or to modify in any way their terms.

James A. Tobin,

Acting Secretary.

[FR Doc. 80-15655 filed 5-21-80 8:45 am]

BILLING CODE 6750-01-M

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16 CFR Part 13

[File No. 791 0166]

Towle Manufacturing Co.; Consent Agreement With Analysis To Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Consent agreement.

SUMMARY: In settlement of alleged violations of federal law prohibiting unfair acts and practices and unfair methods of competition, this consent order, accepted subject to final Commission approval, among other things, would require a Newburyport, Mass. manufacturer, importer and distributor of silver products to cease establishing, maintaining or enforcing any agreement or arrangement with its dealers that has the effect of fixing and enforcing resale prices for its products, and conditioning retention of dealerships on adherence to suggested

resale prices. The firm would be prohibited from inducing dealers or prospective dealers to report those who fail to adhere to suggested resale prices and barred from taking adverse action against reported dealers. Materials containing resale pricing information would have to include a statement advising that dealers are not bound to listed prices. The order would further require that the company reinstate those dealers who were terminated for failing to comply with the firm's pricing policy and maintain a file containing specified data for a period of three years.

DATE: Comments must be received on or before July 21, 1980.

ADDRESS: Comments should be directed to: Office of the Secretary, Federal Trade Commission, 6th St. and Pennsylvania Ave., N.W., Washington, D.C. 20580.

FOR FURTHER INFORMATION CONTACT: Lois G. Pines, Director, 2R, Boston Regional Office, Federal Trade Commission, 150 Causeway St., Room 1301, Boston, Mass. 02114. (617) 223–6621.

SUPPLEMENTARY INFORMATION: Pursuant to Section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 46 and § 2.34 of the Commission's Rules of Practice (16 CFR 2.34), notice is hereby given that the following consent agreement containing a consent order to cease and desist and an explanation thereof, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of sixty (60) days. Public comment is invited. Such comments or views will be considered by the Commission and will be available for inspection and copying at its principal office in accordance with Section 4.9(b)(14) of the Commission's Rules of Practice (16 CFR 4.9 (b)(14)).

In the Matter of Towle Manufacturing Company, a corporation; agreement containing consent order to cease and desist.

The Federal Trade Commission having initiated an investigation of certain acts and practices of Towle Manufacturing Company, a corporation, and it now appearing that Towle Manufacturing Company, hereinafter sometimes referred to as proposed respondent, is willing to enter into an agreement containing an order to cease and desist from the use of the acts and practices being investigated.

IT IS HEREBY AGREED by and between Towle Manufacturing Company, a corporation, by its duly authorized officer, and its attorney, and counsel for the Federal Trade Commission that:

1. Proposed respondent Towle Manufacturing Company is a corporation organized, existing and doing business under and by virtue of the laws of the Commonwealth of Massachusetts, with its office and principal place of business located at 260 Merrimac Street, Newburyport, Massachusetts 01950.

2. Proposed respondent admits all the jurisdictional facts set forth in the draft of complaint here attached.

3. Proposed respondent waives:

(a) Any further procedural steps;

(b) The requirement that the Commission's decision contain a statement of findings of fact and conclusions of law; and

(c) All rights to seek judicial review or otherwise to challenge or contest the validity of the order entered pursuant to this agreement.

4. This agreement shall not become a part of the official record of the proceeding unless and until it is accepted by the Commission. If this agreement is accepted by the Commission it, together with the draft of complaint contemplated thereby and related material pursuant to Rule 2.34, will be placed on the public record for a period of sixty (60) days and information in respect thereto publicly released. The Commission thereafter may either withdraw its acceptance of this agreement and so notify proposed respondent, in which event it will take such action as it may consider appropriate, or issue and serve its complaint (in such form as the circumstances may require) and decision, in disposition of the proceeding.

5. This agreement is for settlement purposes only and does not constitute an admission by proposed respondent that the law has been violated as alleged in the draft of complaint here attached.

6. This agreement contemplates that, if it is accepted by the Commission, and if such acceptance is not subsequently withdrawn by the Commission pursuant to the provisions of § 2.34 of the Commission's Rules, the Commission may, without further notice to proposed respondent, (1) issue its complaint corresponding in form and substance with the draft of complaint here attached and its decision containing the following order to cease and desist in disposition of the proceeding, and (2) make information public in respect thereto. When so entered, the order to cease and desist shall have the same force and effect and may be altered, modified or set aside in the same manner and within the same time provided by statute for other orders. The order shall become final upon service. Delivery by the U.S. Postal Service of the complaint and decision containing the agreed-to order to proposed respondent's address as stated in this agreement shall constitute service. Proposed respondent waives any right it may have to any other manner of service. The complaint may be used in construing the terms of the order, and no agreement, understanding, representation, or interpretation not contained in the order or the agreement may be used to vary or contradict the terms of the order.

7. Proposed respondent has read the proposed complaint and order contemplated hereby. It understands that once the order has been issued, it will be required to file one or more compliance reports showing that it has fully complied with the order. Proposed respondent further understands that it may be liable for civil penalties in the amount provided by law for each violation of the order after it becomes final.

ORDER

Definition

For purposes of this order the following definition shall apply:

"Dealer" means any person, partnership, corporation or other business entity who purchases Towle Manufacturing Company products for resale.

I

IT IS ORDERED that Towle Manufacturing Company, a corporation, its successors and assigns, and its officers, and respondent's agents, representatives and employees, directly or through any corporation, subsidiary, division or other device in connection with the manufacture, importation, distribution, offering for sale or sale of sterling silver flatware and holloware, silver plated and pewter holloware, stainless steel flatware, cutlery, sterling silver jewelry, candlesticks, hurricane lamps, napkin rings, table top trays, tabletop mats, or other products in or affecting commerce as "commerce" is defined in the Federal Trade Commission Act, as amended, do forthwith cease and desist from:

1. Entering into, maintaining, or enforcing any contract, agreement, understanding, arrangement, combination, or course of conduct which fixes, maintains, establishes, sets or enforces the price at which dealers sell any of respondent's products.

2. Requiring any dealer or prospective dealer to enter into any oral or written agreement or understanding that such

dealer or prospective dealer will adhere to any resale price for any of respondent's products as a condition to receiving or retaining its dealership.

3. Refusing to sell or threatening to refuse to sell, either directly or indirectly, to any dealer or prospective dealer who desires to engage in the sale of respondent's products for the reason that such dealer will not enter into an understanding or agreement with respondent to advertise or sell any of respondent's products at only those prices established or suggested by respondent.

4. Securing or attempting to secure any promises or assurances, either directly or indirectly, from any dealer or prospective dealer regarding the prices at which such dealer will advertise or sell any of respondent's products, or requesting any dealer or prospective dealer, either directly or indirectly, to obtain approval from respondent for the price offered by said dealer in any advertisement for any of respondent's products.

5. Requesting or requiring any dealer or prospective dealer, either directly or indirectly, to report any dealer who does not sell any of respondent's products at any particular price, or acting on a report so obtained by refusing or threatening to refuse sales to any dealer so reported, or otherwise to discriminate against any such dealer.

6. Directing or requiring respondent's salesmen, or any other agents, representatives, or employees, directly or indirectly, to report dealers who do not sell any of respondent's products for any particular price, or to act on such a report by refusing or threatening to refuse sales to any dealer so reported.

7. Refusing to sell or threatening to refuse to sell any of respondent's products to any dealer for the reason that said dealer had been reported as not adhering to or observing those prices established or suggested by respondent.

8. Requiring from any dealer charged with price cutting or failure to adhere to any particular price, either directly or indirectly, promises or assurances of the observance of any particular price as a condition precedent to future sales to said dealer.

9. Terminating, threatening, intimidating, coercing, delaying shipments, or taking any other action to prevent or hinder the sale of any of respondent's products by a dealer because said dealer has advertised or sold, is advertising or selling, or is suspected of advertising or selling any of respondent's products at other than prices that respondent has dictated.

10. Requiring or inducing by any means, any dealer or prospective dealer to refrain or to agree to refrain from reselling any of respondent's products to any other dealer.

11. Requiring, directly or indirectly, any dealer to resell to respondent any unsold stock of any of respondent's products in the event that business relations between respondent and the dealer are terminated; provided that respondent shall not be prohibited from repurchasing such unsold stock with the consent of the dealer, or where respondent has a "security interest" in said products or where the dealer is unable to meet its financial obligations to the respondent.

12. Publishing, disseminating, circulating or providing by any other means, any resale price for any of respondent's products unless it is clearly and conspicuously stated on each page of any price list, book, tag, advertising or promotional material or other document that the price is "suggested" and that the dealer is free to sell respondent's products at whatever price he chooses.

II

IT IS FURTHER ORDERED that respondent herein shall, within thirty (30) days after service upon it of this Order, mail or deliver, and obtain a signed receipt therefor, a copy of this Order to every present dealer, to every dealer terminated by respondent since January 1, 1974, unless respondent can establish that the dealer terminated did not at the time of termination have good credit or reasonably adequate facilities for selling respondent's products, and for a period of three (3) years from the date of service of this Order, to every new dealer within ten days of receipt of the first order from said new dealer, under cover of the letter annexed hereto as Exhibit A.

III

IT IS FURTHER ORDERED that respondent shall within sixty (60) days from the date of service of this Order, mail or deliver and obtain a signed receipt therefor, a written offer of reinstatement, upon the same terms and conditions available to respondent's other dealers, to any dealer who was terminated by respondent from January 1, 1974 to the date of service of this Order, unless respondent can establish that the applicant does not or did not at the time of termination have good credit or that the dealer does not have reasonably adequate facilities for selling respondent's products, and forthwith reinstate any such dealer who within thirty (30) days thereafter requests, in writing, reinstatement.

IV

IT IS FURTHER ORDERED that respondent herein shall within thirty (30) days of service upon it of this Order, distribute a copy of this Order to each of its operating divisions and subsidiaries and to all officers, sales personnel, sales agents and sales representatives, and secure from each such entity or person a signed statement acknowledging receipt of said Order.

V

IT IS FURTHER ORDERED that respondent:

1. Notify the Commission at least thirty (30) days prior to any proposed change in the respondent such as dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or any other such change in the corporation which may affect compliance obligations arising out of the Order.

2. For a period of three (3) years from the date of this Order becomes final, establish and maintain a file of all records referring or relating to respondent's refusal during such period to sell its products to any dealer, which file shall contain a record of a communication to each such dealer explaining respondent's refusal to sell, and which file will be made available for Commission inspection on reasonable notice.

VI

IT IS FURTHER ORDERED that the respondent herein shall, within sixty (60) days after service upon it of this Order, file with the Commission a report in writing setting forth in detail the manner and form in which it has complied with the Order.

Exhibit A

(Letterhead of Towle Manufacturing Company)

Dear Dealer:

Towle Manufacturing Company has entered into an agreement with the Federal Trade Commission relating to the distributional activities and pricing policy of Towle. A copy of the consent order entered into pursuant to that agreement is enclosed herewith.

Towle has entered into this agreement solely for the purpose of settling a dispute with the Commission, and the agreement and consent order is not to be construed as an admission by Towle that it has violated any of the laws administered by the Commission, or that any of the allegations in the complaint are true and correct. Instead, the order merely relates to the activities of Towle in the future.

In order that you may readily understand the terms of the consent order, we have set

forth the essentials of the agreement with the Commission, although you must realize that the consent order itself is controlling rather than the following explanation of its provisions:

(1) Our dealers are free to set their own resale prices for our products.

(2) Towle will not solicit, invite or encourage dealers, or any other persons to report any dealer not following any resale price for any of said products, and, furthermore, will not act on any such reports sent to it.

(3) Towle will not require or induce its dealers to refrain from advertising said products at any price or from selling or offering said products at any prices to any person.

Sincerely yours,

Edward W. Mulligan,

President.

Enclosure.

Towle Manufacturing Company

[File No. 791 0166]

Analysis of Proposed Consent Order to Aid Public Comment

The Federal Trade Commission has accepted an agreement to a proposed consent order from Towle Manufacturing Company (Towle) a manufacturer and importer of sterling silver flatware and holloware, silver plated and pewter holloware, stainless steel flatware, cutlery and sterling silver jewelry.

The proposed consent order has been placed on the public record for sixty (60) days for reception of comments by interested persons. Comments received during this period will become part of the public record. After sixty (60) days, the Commission will again review the agreement and the comments received and will decide whether it should withdraw from the agreement or make final the agreement's proposed order.

The complaint accompanying the proposed order alleges that Towle had engaged in certain anticompetitive practices which had the effect of enforcing and fixing Towle's resale prices for its products and for their dealers, thereby eliminating price competition among dealers. More specifically, the complaint charges that with reference to the aforementioned products Towle has (1) established agreements, understandings or arrangements with dealers that dealerships would be granted to or retained by only those dealers who maintained certain resale prices; (2) informed some of its dealers that it expected such dealers to maintain certain resale prices or such dealerships would be terminated; (3) obtained from its dealers cooperation and assistance in identifying and reporting those dealers who failed to observe Towle's pricing policy by advertising, offering to sell or selling Towle's products at prices below certain resale prices; (4) threatened to terminate certain dealers who failed or refused to maintain the prices dictated by Towle or who advertised Towle's products at prices below the prices suggested or dictated by Towle; and (5) required certain of its dealers to agree not to sell or otherwise supply or furnish Towle's products to other dealers.

The proposed consent order requires Towle to cease and desist from the practices set forth in numbered items 1 through 5 above.

The proposed consent order further requires Towle (1) to indicate on each page of any price list, price book, price tag, advertising or promotional material indicating any resale or retail prices for its products that the resale or retail price is suggested; and (2) to maintain for the next three years a file pertaining to Towle's refusal to sell its products to any dealer, which file shall contain a copy of any written communication to any such dealer explaining Towle's refusal to sell, and, which file will be made available for Commission inspection on reasonable notice.

The terms of the aforementioned order will have the effect of preventing Towle from fixing the resale prices of their dealers for these products thereby encouraging price competition in the sale of these products. Ultimately, this action should result in lower prices to the purchasing public for the aforementioned products.

The purpose of this analysis is to facilitate public comment on the proposed order and it is not intended to constitute an official interpretation of the agreement and proposed order or to modify in any way their terms.

James A. Tobin,

Acting Secretary.

[FR Doc. 80-15656 Filed 5-21-80; 8:45 am]

BILLING CODE 6750-01-M

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16 CFR Part 13

[File No. 772 3041]

Bill Crouch Foreign, Inc., d.b.a. Bill Crouch Imports, Inc.; Consent Agreement With Analysis To Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Consent Agreement.

SUMMARY: In settlement of alleged violations of federal law prohibiting unfair acts and practices and unfair methods of competition, this consent order, accepted subject to final Commission approval, among other things, would require a Boulder, Colo. retail dealer for new Honda automobiles to cease from charging customers more than its actual cost for transporting vehicles to its showroom; misrepresenting that any optional equipment is installed by the manufacturer or required by law; and failing to disclose to customers any additional charges that would be included in the purchase price of the automobile. The order would further require the firm to make refunds, in a prescribed manner, to eligible Honda Accord customers who had paid more than $30.00 above the actual cost for freight; and retain specified records for a period of two years.

DATE: Comments must be received on or before July 21, 1980.

ADDRESS: Comments should be directed to: Office of the Secretary, Federal Trade Commission, 6th St. and Pennsylvania Ave., N.W., Washington, D.C. 20580.

FOR FURTHER INFORMATION CONTACT: Paul C. Daw, Director, Denver Regional Office, 6R, Federal Trade Commission, Suite 2900, 1405 Curtis St., Denver, Colo. 80202. (303) 837-2271.

SUPPLEMENTARY INFORMATION: Pursuant to Section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 46 and § 2.34 of the Commission's Rules of Practice (16 CFR 2.34), notice is hereby given that the following consent agreement containing a consent order to cease and desist and an explanation thereof, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of sixty (60) days. Public comment is invited. Such comments or views will be considered by the Commission and will be available for inspection and copying at its principal office in accordance with § 4.9(b)(14) of the Commission's Rules of Practice (16 CFR 4.9(b)(14)).

In the matter of Bill Crouch Foreign, Inc., d.b.a. Bill Crouch Imports, Inc. (formerly Mazda of Boulder, Inc.), a corporation. File No. 772 3041, Agreement Containing Consent Order To Cease and Desist.

The Federal Trade Commission having initiated an investigation of certain acts and practices of Bill Crouch Foreign, Inc., d.b.a. Bill Crouch Imports, Inc. (formerly Mazda of Boulder, Inc.), a corporation, hereinafter some times referred to as "Bill Crouch Foreign, Inc." or "proposed respondent," and it appearing that Bill Crouch Foreign, Inc., is willing to enter into an agreement containing an order to cease and desist from the use of the acts and practices being investigated,

It is hereby agreed by and between Bill Crouch Foreign, Inc., by its duly authorized officer, and its attorneys, and counsel for the Federal Trade Commission that:

1. Proposed respondent is a corporation organized, existing and doing business under and by virtue of the laws of the State of Colorado, with its offices and principal place of business located at 2555 Thirtieth Street, in the City of Boulder, State of Colorado.

2. Proposed respondent admits all the jurisdictional facts set forth in the draft of complaint here attached.

3. Proposed respondent waives:

(a) Any further procedural steps;

(b) The requirement that the Commission's decision contain a statement of findings of fact and conclusions of law; and

(c) All rights to seek judicial review or otherwise to challenge or contest the validity of the order entered pursuant to this agreement.

4. This agreement shall not become part of the public record of the proceeding unless and until it is accepted by the Commisison. If this agreement is accepted by the Commission, it together with the draft of complaint contemplated thereby, will be placed on the public record for a period of sixty (60) days and information in respect thereto publicly released. The Commission thereafter may either withdraw its acceptance of this agreement and so notify the proposed respondent, in which event it will take such other action as it may consider appropriate, or issue and serve its complaint (in such form as the circumstances may require) and decision, in disposition of the proceeding.

5. The signing of this agreement is for settlement purposes only and does not constitute an admission by proposed respondent that the law has been violated as alleged in the draft of complaint here attached.

6. This agreement contemplates that, if it is accepted by the Commission, and if such acceptance is not subsequently withdrawn by the Commission pursuant to the provisions of § 2.34 of the Commission's Rules, the Commission may, without further notice to proposed respondent, (1) issue its complaint corresponding in form and substance with the draft complaint here attached and its decision containing the following order to cease and desist in disposition of the proceeding and (2) make information public in respect thereto. When so entered, the order to cease and desist shall have the same force and effect and may be altered, modified, or set aside in the same manner and within the same time provided by statute for other orders. The order shall become final upon service. Delivery by the U.S. Postal Service of the complaint and decision containing the agreed-to order to proposed respondent's corporate president at the address as stated in this agreement shall constitute service. Proposed respondent waives any right it may have to any other manner of service. The complaint may be used in construing the terms of the order, and no agreement, understanding, representation, or interpretation not contained in the order or the agreement may be used to vary or contradict the terms of the order.

7. It is agreed that the relief for consumers set forth in Part II of the Order contained herein fully satisfies any claim for consumer redress which the Commission has under Sections 5(b) and 19 of the Federal Trade Commission Act, as amended, arising out of the acts and practices alleged in the complaint. By its final acceptance of this Agreement, with such modifications, if any, which the parties may make prior to said final acceptance, the Commission waives its right to commence a civil action under Section 19 of the Federal Trade Commission Act, as amended, with respect to the acts and practices alleged in the Commission's complaint.

8. Proposed respondent has read the proposed complaint and order contemplated hereby. It understands that once the order has been issued, it will be required to file one or more compliance reports showing that it has fully complied with the order. Proposed respondent further understands that it may be liable for civil penalties in the amount provided by law for each violation of the order after it becomes final.

Order

For purposes of this Order:

1. "New automobile" shall mean any passenger car or station wagon the equitable or legal title to which has never been transferred by a manufacturer, distributor, or dealer to an ultimate purchaser.

2. "Optional equipment" shall mean, with respect to any new automobile, any equipment or features not included within the manufacturer's suggested retail price, as defined in 15 U.S.C. 1232(f)(1).

I

It is ordered that respondent Bill Crouch Foreign, Inc., a corporation, its successors and assigns, and its officers, and respondent's agents, representatives and employees, directly or through any corporate or other device, in connection with any sale, offering for sale, advertising or distribution of new automobiles, in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from:

1. Listing on stickers affixed to any new automobile, or on purchase orders, bills of sale, or sales contracts, and collecting from consumers, and freight, transportation or destination charges that exceed respondent's cost as determined herein for the shipment of the new automobile from any port-of-entry to respondent's showrooms. For purposes of this order, respondent's cost shall be deemed to be the amount shown on the most recent invoice received by respondent covering the shipment of comparable automobiles from a comparable port-of-entry to respondent's showrooms plus five dollars ($5.00).

2. Affirmatively representing that any optional equipment is recommended, required, or installed by the manufacturer or is required by law, unless such is in fact the case; provided, however, that this requirement shall not be construed to impose a duty on respondent or its agents to affirmatively disclose information regarding such optional equipment, including but not limited to the nature or source of or requirement for such equipment, except in response to a specific consumer inquiry.

3. Failing to disclose clearly and conspicuously, prior to signing of a completed purchase order, if the total purchase price exceeds the manufacturer's suggested retail price, the precise amount of any handling, service, or similar charges which will be included in the purchase price of a new automobile.

II

It is further ordered that:

1. The respondent shall submit to the Commission, within fifteen (15) days after the date this order is served on respondent's corporate president (hereinafter "date of service"), a notarized affidavit, executed by the president of respondent to the effect that the respondent has made or has caused to be made a good faith search of documents that pertain to purchasers of new Honda Accord automobiles from the respondent and that the respondent, to the best of its knowledge, has previously or simultaneously with said affidavit submitted to the Commission the names of all purchasers of such automobiles covered by this order.

2. The respondent shall submit to the Commission, within sixty (60) days after

the date of service, all necessary documents, including but not limited to, purchase orders, bills of sale, buyer's orders, freight invoices and billings, internal worksheets, and invoices and all other materials necessary for the Commission to determine the amount paid by the respondent to third parties for freight. Based upon the information supplied to the Commission by the respondent pursuant to this paragraph and paragraph II(1), the Commission or its designee shall deliver to respondent a list of all purchasers of new Honda Accord automobiles who are "eligible class members," setting forth the amount of refund due from the respondent to each such class member, derived in accordance with Part II of this order, which list shall be served on the respondent.

3. On the ninetieth (90th) day after service on the respondent of the list of eligible class members as provided in paragraph II(2) above, the respondent shall make refunds to eligible class members in the following manner:

(a) Except as provided in subparagraph (b) below, submit to the Commission or its designee a refund check, undated, drawn on the account of respondent made payable to each eligible class member or his or her legal representative in the amount provided by the Commission;

(b) In the event of refund check for any eligible class member is not so submitted, submit to the Commission or its designee a list of "disputed eligible class members" stating the reasons why the purchaser whose name is shown on the list prepared by the Commission is not an eligible class member or is not entitled to the refund in the amount specified by the Commission, as the case may be. If necessary, counsel for the Commission and counsel for the respondent shall there after confer and determine if and/or in what amount a refund is due and owing to any such disputed eligible class member.

4. Thereafter, the Commission or its designee shall send to each eligible class member, by registered mail, with return receipt requested, and with copy to respondent, a letter in the language, manner, and form shown in Appendix A, with an enclosed stamped envelope showing the address of the Commission or its designee. Upon receipt of the executed Receipt and Waiver form from an eligible class member, as provided in Appendix A, the Commission or its designee shall thereafter enter a current date on the appropriate refund check submitted to the Commission by respondent in accordance with paragraph II(3) above and forward the check to such eligible class member.

5. On or before the three-hundredth (300th) day after date of service, the Commission or its designee shall serve on respondent (a) a list of names, addresses and received refunds in accordance with the provisions of this Part II, and (b) a list of names, addresses and refund amounts of those eligible class members whose initial mailing in the form of Appendix A or refund check was returned by the United States Postal Service. The Federal Trade Commission shall have one year from the date of service of this list to locate such eligible class members. At such time as any class member is located, the Federal Trade Commission shall follow the procedure authorized in paragraph II(4) above with respect to the initial mailing of a letter in the form of Appendix A and subsequent mailing, if appropriate, of a refund check to such eligible class member.

6. The respondent shall, on the three-hundred and thirtieth (330th) day after the date of service, file with the Commission a report in writing setting forth the manner and form in which it has complied with Part II of this order.

7. At the end of the one-year period described in paragraph II(5) above, the Commission shall return to the respondent all refund checks payable to eligible class members whom the Commission is unable to locate and respondent shall thereupon be relieved of any further obligation to make payments to such eligible class members.

8. Except as modified by paragraph II(9) below, "eligible class member" means those persons who purchased any new Honda Accord automobile at the respondent's showrooms between July 15, 1976 and the date of service of this order, and who paid any amount for "freight," or charge of similar import, in excess of respondent's actual outlays to third parties to transport the automobile from the port-of-entry to respondent's showrooms, if such actual outlays are known, or, if unknown, in excess of respondent's outlays as computed pursuant to subparagraph 10(b) below.

9. If at the time of sale the charge made by the respondent for "freight" to a person who purchased a new Honda Accord automobile between July 15, 1976 and the date of service of this order was a "good faith estimate" of the respondent's actual freight outlays to third parties, such person shall not be an "eligible class member" within the meaning of this Consent Order. Any charge for freight made by the respondent shall be deemed a "good faith estimate" by the respondent if such charge cannot be shown to have exceeded the respondent's subsequent actual outlays, or, if unknown, its estimated outlays, as determined under subparagraph 10(b) below, to third parties for transportation of the automobile from the port-of-entry to the respondent's showrooms by more than thirty dollars ($30.00).

10. The respondent shall make refund payments to each eligible class member as follows:

(a) Each eligible class member shall receive as a refund one-half (½) of that amount by which the charge paid by the class member to the respondent for "freight" exceeded the respondent's actual outlays to third parties for transportation of the automobile purchased by the class member from the port-of-entry to respondent's showrooms.

(b) If such actual outlay is unknown, each eligible class member shall receive as a refund one-half (½) of that amount by which the charge paid by the class member to the respondent for "freight" exceeded the average sum paid by the respondent to third parties to transport automobiles comparable to that purchased by the class member from comparable ports-of-entry to respondent's showrooms during the three (3) calendar months preceding the month of sale to the class member.

The amount of each refund under this section shall be determined by the Commission on the basis of the information supplied by the respondent under Paragraph II(2) above.

11. The respondent shall maintain records and documents for two (2) years after the filing of the report referred to in Paragraph 6 of Part II of this order, which demonstrate that the respondent has complied with Part II of this order.

12. If any duty required to be performed on a certain day under Part II of this order falls upon a nonbusiness day, the respondent herein shall perform such duty on the next following business day.

III

It is further ordered that:

1. Respondent shall notify the Commission at least thirty (30) days prior to any proposed changes in the corporate respondent such as dissolution, assignment or sale resulting in the emergency of a successor corporation, the creation or dissolution of subsidiaries, or any other changes in the corporation which may affect compliance obligations arising out of the order.

2. Respondent shall forthwith deliver a copy of this order to each of its operating divisions and to each of its present and future officers; and forthwith deliver a summary of this

order, stating that the respondent is subject to an order of the Commission and enumerating the requirements of Part I of this order, to each employee or agent who is engaged in the sale of new automobiles, or who, directly or indirectly, has any responsibility relating in any way to the pricing of new automobiles, or who is engaged in any aspect of the preparation, creation, or placing of advertising; and the respondent shall secure a signed statement acknowledging receipt of said order or summary from each such person.

3. Respondent shall retain each of its sales contracts and freight invoices for new automobiles for two (2) years after the date of the sales transaction, and shall make such records available for inspection and copying upon reasonable request by the Commission or any of its duly authorized representatives.

4. Respondent shall, at reasonable times, afford the Commission, or any of its duly authorized representatives, access to such records, memoranda, and other documents relating to the provisions contained herein as may be appropriate to enable the Commission to determine respondent's compliance with the order.

5. Respondent shall within sixty (60) days after service of this order upon respondent file with the Commission a report, in writing, setting forth in detail the manner and form in which it has complied with this order.

Analysis of Proposed Consent Order To Aid Public Comment

The Federal Trade Commission has accepted an agreement to a proposed consent order from Bill Crouch Foreign, Inc., Boulder Colorado.

The proposed consent order has been placed on the public record for sixty (60) days for reception of comments by interested persons. Comments received during this period will become part of the public record. After sixty (60) days, the Commission will again review the agreement and the comments received and will decide whether it should withdraw from the agreement or make final the agreement's proposed order.

The proposed Commission complaint which underlies the consent agreement contains two principal allegations against Bill Crouch Foreign, Inc., an authorized retail dealer for new Honda automobiles. First, the complaint alleges that in selling new Honda automobiles the dealer induced customers to pay "freight" charges that exceeded the actual cost of transporting vehicles to the dealer's showroom. Second, it is alleged that in some instances Crouch misrepresented that some dealer-installed items, such as undercoating, had been recommended, required, or installed by the manufacturer.

The proposed order provided for by the consent agreement covers both of the complaint allegations. Under the order, the dealer will be required to cease and desist from charging more than its actual cost for freight. [The order also prohibits the dealer from making misrepresentations concerning the source of dealer-installed items.] Additionally, the order provides that the dealer will make refunds to all Honda Accord customers who paid more than $30.00 above the actual cost for freight. These refunds will be for one-half the entire amount which customers overpaid for freight.

The purpose of this analysis is to facilitate public comment on the proposed order, and it is not intended to constitute an official interpretation of the agreement and proposed order or to modify in any way their terms.

James A. Tobin,

Acting Secretary.

[FR Doc. 80-15757 Filed 5-21-80; 8:45 am]

BILLING CODE 6750-01-M

DEPARTMENT OF ENERGY

Economic Regulatory Administration

18 CFR Part 284

Transportation Certificates for Natural Gas for the Displacement of Fuel Oil

AGENCY: Economic Regulatory Administration, Department of Energy.

ACTION: Proposed rulemaking.

SUMMARY: The Economic Regulatory Administration of the Department of Energy is publishing this proposed rule for action by the Federal Energy Regulatory Commission (Commission) pursuant to section 403 of the Department of Energy Organization Act. The proposed rule would amend the definition of "fuel shortage emergency period" (18 CFR Part 284, Chapter I, Subpart F, Section 284.201(e)) so that it would extend through June 1, 1981. If the proposal is adopted, the Commission's Order No. 30 fuel oil displacement program would be extended for one year.

DATES: Dates for comments and public hearings have been determined by the Commission and are published in a notice elsewhere in this **Federal Register.**

FOR FURTHER INFORMATION CONTACT:

Albert F. Bass (Division of Natural Gas Regulations), Economic Regulatory Administration, 2000 M Street, N.W., Room 7108, Washington, D.C. 20461, (202) 653-3286

James G. Beste (Office of General Counsel), Department of Energy, 1000 Independence Ave., S.W., Room 5E-064, Washington, D.C. 20585, (202) 252-2900

William L. Webb (Office of Public Information), Economic Regulatory Administration, 2000 M Street, N.W., Room B-110, Washington, D.C. 20461, (202) 653-4055

Robert C. Gillette (Office of Public Hearing Management), Economic Regulatory Administration, 2000 M Street, N.W., Room 2214, Washington, D.C. 20461, (202) 653-3757

SUPPLEMENTARY INFORMATION:

I. Background

II. Need for Continuation of the Order No. 30 Program

III. Discussion of the Rule

I. Background

Because of an urgent national need to reduce reliance on oil imports and to increase stocks of middle distillate fuel oils, the Economic Regulatory Administration (ERA) of the Department of Energy (DOE) on March 18, 1979, (44 FR 17644, March 22, 1979) proposed a rule to the Federal Energy Regulatory Commission (Commission) under section 403 of the Department of Energy Organization Act (DOE Act, 42 U.S.C. 7173) designed to encourage and facilitate the granting of applications of interstate pipelines to authorize the transportation of natural gas used to displace fuel oil. A basic premise underlying that proposal was DOE's finding that there existed a temporary surplus of natural gas deliverability that could be utilized for the dual purposes of reducing our reliance on foreign oil and helping to alleviate a middle distillate fuel oil shortage that existed at that time. DOE made that proposal only as a short-term response to the problem. In proposing the rule, DOE did not reverse its position that long-term use of natural gas for boiler fuel is not in the public interest nor did it alter its commitment to coal conversion. The proposed rule provided that as a prerequisite to each authorization by the Commission the Administrator of ERA (Administrator) would certify to the Commission that the gas to be transported would be used to displace fuel oil and not coal.

On April 2, 1979, (44 FR 20398, April 5, 1979) ERA adopted an interim-final rule which established the procedures and criteria under which the Administrator would make certifications of "eligible use." On May 17, 1979, the Commission adopted Order No. 30 authorizing transportation of certified fuel oil

displacement gas (44 FR 30323, May 25, 1979). ERA issued a final rule on August 9, 1979 (44 FR 47920, August 16, 1979). Order No. 30 was amended by Order No. 30–A, Order on Rehearing, issued September 12, 1979, (44 FR 54472, September 20, 1979) and further rehearing was denied by Order Denying Rehearing, issued November 13, 1979.[1]

Order No. 30 authorizes the transportation of user-owned natural gas by interstate pipelines in cases where the gas transported would be used to displace fuel oil. In Order No. 30, the Commission stated "At this time, the Commission is unable to conclude that this program will be necessary beyond June 1, 1980" (slip order at 13), the termination date of the "fuel shortage emergency period" (18 CFR Part 284, Chapter I, Subpart F, Section 284.201(e)). Accordingly, the fuel oil displacement program, as established by Order No. 30, will terminate on June 1, 1980, unless the Commission extends the program.

II. Need for Continuation of the Order No. 30 Program

As originally conceived, the Order No. 30 fuel oil displacement program had the dual purpose of reducing our reliance on oil imports and increasing stocks of fuel oil, particularly middle distillates. Today there is an adequate stock level of fuel oils, including middle distillates. There remains, however, a need to reduce the Nation's reliance on imported oil that is even more urgent than that which existed a year ago. President Carter articulated the underlying basis for the oil displacement program in his national energy policy address on April 5, 1979:

> We are dangerously dependent on uncertain and expensive sources of foreign oil * * * This growing dependence has left us dangerously exposed to sudden price rises and interruptions in supply.

The Commission recognized this dependence in Order No. 30–A in its discussion of the necessity for the oil displacement program. The Commission stated:

> The Commission finds that the fuel oil displacement program announced in Order No. 30 remains vital to the several important national objectives outlined in Order No. 30.
>
> First, the nation's security requires a reduced reliance on imported oil products * * * Such a dependence leaves the nation particularly vulnerable to changes stemming from international events. Second, this level of oil imports is a major factor in the nation's balance of payments deficit, especially after the recent OPEC price increases. Slip order at 2–3.

A year later, we are still "dangerously dependent" on imported oil, and we have the continuing task of reducing that dependence. The President again emphasized this concern on March 14 of this year in his address to the Nation on economic policy when he stated:

> The plain truth is that we will never be completely strong at home or secure abroad until we have at last solved our Nation's excessive dependence on foreign oil.
>
> The price of imported oil has more than doubled in the last 12 months. Last year's increase alone was greater than all other increases combined since the oil embargo of 1973.
>
> We must forge ahead toward the goal I set last July-cutting in half the amount of oil we import by 1990. To do this will require increased production of domestic oil, natural gas and coal—unrelenting efforts for conservation—and the rapid development of alternative energy sources.

It is necessary, therefore, that consumption of all forms of oil be curtailed through the use of all practicable means, including displacement by other available fuels and conservation.

There has been a measure of success in reducing our reliance on foreign oil. During the four-week period ending March 14, 1979—the period immediately prior to ERA's proposal of a fuel oil displacement transportation rule—gross petroleum imports (crude oil and products) averaged 8.4 million barrels per day or 44 percent of our total average daily petroleum supply of 19.1 million barrels for that period.[2] For the same four-week period in 1980, average daily imports were 7.4 million barrels or almost 12 percent less than the previous year. Total supply decreased slightly to 18.5 million barrels.

However, imports are still 40 percent of our total supply. Moreover, although imports of petroleum are lower in volume than a year ago, the economic impact of those imports on our balance of payments and national inflation rate is even greater. In 1979, the total cost of imported oil was $60 billion. This figure is expected to rise to $90 billion in 1980. Furthermore, the world price of internationally traded oil increased by over 100 percent from $14.55 per barrel in March 1979 to $29.65 per barrel in March 1980.[3] In light of these figures, it is clear that the urgent need to reduce oil imports still exists.

ERA has issued 48 certifications from March 1979 through March 1980 certifying the displacement of fuel oil with gas. Through February 1980 approximately 68 Bcf of natural gas have been transported to displace approximately 11 million barrels of fuel oil. The Order No. 30 program plays a particularly significant role in the Nation's oil displacement effort because it allows displacement of oil by large volume users who do not have access to enough gas supplies from their historic suppliers to displace large amounts of fuel oil. For example, at the Commission's conference on April 2, 1980, concerning "Supply of Natural Gas and Fuel Oil Displacement Opportunities," Mr. Bertram Moll, Vice President for Fuel Supply of Consolidated Edison of New York, stated that "[d]uring calendar 1979, we displaced a total of 9.6 million barrels of oil. Of this amount 6.1 million was specifically oil replacement or oil displacement gas and the rest was excess pipeline gas." The effect of this displacement was to reduce our oil bill by some $200 million." (Docket No. CP80–76, tr. at 316.) Mr. Moll also stated in his written comments that "[i]t is likely that the vast preponderance of the residual oil we buy—in the order of 85 percent or more—is produced from foreign oil" (Tr. Vol. IV, Section T, p. 3). Consolidated Edison recently filed an application with ERA requesting recertification of the use of natural gas to displace fuel oil (45 FR 27468, April 23, 1980). In that application Consolidated Edison requested recertification to displace approximately 7.8 million barrels of fuel oil between April 27, 1980, and April 26, 1981. On April 25, 1980, ERA granted the recertification as requested (45 FR 29628, May 5, 1980).

The evidence indicates that supplies of natural gas continue to be available to displace large volumes of fuel oil. For example, ERA completed a limited survey in mid-March 1980 of 105 companies including intrastate pipelines, distribution companies, and producers. The survey indicated that 53 billion cubic feet of gas from these intrastate companies would be available for short-term sales through June 1, 1980. The companies surveyed expect a similar amount to be available in the third quarter of 1980. Similarly, the Commission's informal conference on April 2, 1980, elicited testimony that a "substantial surplus" of gas presently exists. (See, *e.g.*, Docket No. CP80–76, tr. at 126.)

There are indications that a surplus also exists in the interstate market. The Commission's Office of Pipeline and Producer Regulations has issued a number of reports based on its "1979–80 Winter Curtailment Monitoring Survey

[1] Order Nos. 30 and 30–A are under review in the United States Court of Appeals for the D.C. Circuit in *Process Gas Consumers Group, et al.* v. *FERC*, No. 79–2336.

[2] Energy Information Administration—Weekly Petroleum Status Report, March 14, 1980, "U.S. Petroleum Balance Sheet."

[3] Ibid, "World Price of Oil."

of 28 Major Interstate Pipeline Companies." These reports indicate that, over the past winter months, total working gas storage inventories have on the average been higher than projected in the pipelines' Form 16 reports filed with the Commission last year and that curtailment levels have been lower. Finally, a broad survey made by the American Gas Association (AGA) in December 1979, and submitted to ERA in response to an "Extension of Time for Issuance of Final Orders and Invitation to Submit Comments" (45 FR 78, January 2, 1980), related to the special temporary public interest exemptions program indicates that natural gas is also available in the interstate market to displace oil.

On the other hand, there is a potential for reduction of a significant volume of imported supplies of natural gas. ERA recently authorized the importation of Canadian and Mexican gas at a price of $4.47 per million Btu on an interim basis through May 15, 1980. ERA is currently reviewing whether to authorize imports from Canada and Mexico at that price beyond May 15. While no decision has yet been reached regarding those imports, historically Canadian and Mexican gas imports have been secure sources of supply.

A more serious problem has arisen with regard to liquefied natural gas (LNG) imported from Algeria. The Algerian government terminated most of its LNG exports to the United States effective April 1, 1980, subject to renegotiation of the contract price. No application has yet been filed with ERA requesting authorization to import Algerian LNG at a higher price. At this time it is uncertain whether those imports will be reinstated.

As ERA stated at the Commission's conference on April 2, the termination of Algerian LNG imports could affect the amount of gas available for use in the Order No. 30 program. For at least the coming year, however, two of the three interstate pipelines that have been receiving most of the Algerian supply will have abundant system supplies without Algerian LNG. ERA will carefully monitor the impact of the Algerian supply interruption, and, if circumstances warrant, ERA will deny applications for certifiactes in the Order No. 30 program in order to make gas available to pipelines adversely affected by the termination of gas imports.

It has been alleged that ERA's oil displacement programs should be terminated, or at least narrowed in scope, because the programs have caused a decreased demand for fuel oil, thereby creating the potential for reduced refinery runs. The allegation has been made by refiners in Petroleum Administration for Defense District 2 (PADD 2) in the upper midwest that stockpiles of high sulfur residual fuel oil have risen so high that refiners will be forced to cut back on refinery runs until the surplus can be absorbed.

ERA has investigated this allegation and has concluded that any surplus of residual fuel oil that may exist in PADD 2 cannot be attributed to the Order No. 30 program because, through February 1980, the few certifications issued by ERA to end-users in PADD 2 have not resulted in the displacement of any residual fuel oil. In connection with ERA's special public interest exemptions program, which permits certain utility powerplants to use natural gas in excess of Powerplant and Industrial Fuel Use Act (FUA) prohibitions to displace fuel oil as long as coal is not displaced, an informal telephone survey of utilities applying for exemptions and their suppliers, both refiners and marketers, was conducted by ERA. This survey indicated that potential refinery containment problems appear to be localized and that, otherwise, there is no indication of unmanageable stocks. Based on the findings of that survey, ERA recently granted eighteen-month special public interest exemptions from the restrictions on gas use under FUA to electric powerplants in PADD 2 that would displace fuel oil and not coal (45 FR 27470, April 3, 1980). In granting those exemptions, ERA determined that denying public interest exemptions for utilities that would displace residual oil in PADD 2 would not significantly add to the surplus of residual oil or affect the supply of other refined products.

In proposing that the Commission extend the Order No. 30 oil displacement program for an additional year, ERA has attempted to balance a number of competing considerations. The critical need to build up fuel oil stocks, particularly distillate stocks, that we faced last spring no longer exists. As discussed above, however, there remains an urgent need to reduce the Nations' reliance on imported oil. The use of natural gas to displace fuel oil is one of the most effective means of reducing oil consumption in the near term. ERA has determined that there are presently surplus supplies of natural gas that can be used to reduce oil consumption through dsplacement. On the other hand, we are sensitive to the fact that there is uncertainty about the security of imported gas supplies, particularly Algerian LNG. In addition, potential refinery containment problems exist on a regional basis due to a surplus of residual oil.

On balance, in light of the urgent need to reduce our reliance on imported oil, ERA has determined that the Order No. 30 program should be extended for one year. We believe there is a sufficient surplus of natural gas to warrant this extension notwithstanding the possibility that imports of Algerian LNG may not be reinstated. We are particularly persuaded by the fact that there remain over the short-term at least several users (Consolidated Edison being the most conspicuous but by no means the only concrete example) that can continue to displace substantial volumes of imported oil with gas without causing any discernible adverse impact on gas or refined petroleum product supplies or on longer range energy policies.

In proposing this extension, we emphasize that we support the use of gas to displace oil only where the choice is between the use of oil or gas and not coal. In the long-term, ERA continues to believe that conversion to coal remains a principal means by which we can reduce our reliance on oil imports. We intend to deny certificates of eligible use in those instances where the use of gas might have a direct or indirect effect on future coal use.

If the Order No. 30 program is continued, we would consider the need of interstate pipelines for short-term gas supplies targeted for oil displacement as a factor in determining whether to grant certifications of eligible use. Direct sales of natural gas for boiler fuel use, such as those in the Order No. 30 program, are not appropriate if those sales would deprive interstate pipelines of gas for system supplies. If it is demonstrated to us during our notice and comment period for a certificate application that an interstate pipeline would be deprived of particular natural gas supplies by allowing an Order No. 30 transaction to take place, ERA will deny a certification of eligible use for those particular supplies. Under this approach, the system supplies of interstate pipelines should be adequately protected, while users will otherwise have access to short-term gas supplies in order to displace fuel oil. In addition, if at any time it is demonstrated that the granting of a certification of eligible use would create or contribute to refinery containment problems in a given region, ERA will not hesitate to exclude that region from participation in the program pursuant to its authority under 10 CFR Part 595, § 595.05.

III. Discussion of the Rule

For the above reasons, ERA proposes that the Commission amend its regulations to extend the Order No. 30 program for an additional year. The proposed rule amends the "fuel shortage emergency period" (18 CFR Part 284, Chapter I, subpart F, section 284.201(e)) so that it would extend through June 1, 1981. "Fuel shortage emergency period", as amended, would mean "the period between May 17, 1979 and June 1, 1981." If this proposed amendment is adopted, the Commission's Order No. 30 fuel oil displacement program would continue to operate in its present form through June 1, 1981. ERA would continue to certify, pursuant to 10 CFR Part 595, that the natural gas to be transported will displace fuel oil and not coal.

Department of Energy Organization Act, Pub. L. No. 95–91, 91 Stat. 565 (42 U.S.C. 7101 *et seq.*); Department of Energy Delegation Order No. 0204–4 (42 FR 60726).

In consideration of the foregoing, it is proposed that the Commission amend Part 284 of Chapter I of Title 18, subchapter F, § 284.201(e), as set forth below.

Issued in Washington, D.C., May 12, 1980.

Hazel R. Rollins,

Administrator, Economic Regulatory Administration.

18 CFR, Part 284, Chapter I, Subchapter F, § 284.201, paragraph (e) is amended as follows:

§ 284.201 Definitions.

* * * * *

(e) "Fuel shortage emergency period" means the period between May 17, 1979 and June 1, 1981."

[FR Doc. 80–15777 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–01–M

Federal Energy Regulatory Commission

18 CFR Part 284

Transportation Certificate for Natural Gas for the Displacement of Fuel Oil

Cross Reference: For a document issued by the Federal Energy Regulatory Commission (Commission) which announces public hearing and comment procedures on a proposal by the Economic Regulatory Administration for action by the Commission see FR Doc. 80–15776 published in the Rules and Regulations section of this issue. Refer to the table of contents at the front of this issue under Federal Energy Regulatory Commission for the correct page number.

DEPARTMENT OF STATE

22 CFR Part 51

[Docket No. SD–154]

Persons Born in the United States Applying for a Passport, or Inclusion in a Passport, for the First Time

AGENCY: Department of State.

ACTION: Proposed rule.

SUMMARY: The proposed revision would allow a passport issuing office to accept as evidence of birth within the United States documents other than certified birth certificates. The revision would assist a person who cannot obtain primary evidence of birth in the United States by modifying the requirement that the person submit a "no record" certification from the custodian of birth records where the individual was born. The revision also specifies additional types of documents which the passport issuing office will consider as secondary evidence of birth in the United States.

This notice invites comments from the public in the Department of State's proposal to revise the regulation relating to persons born in the United States who apply for a passport, or inclusion in a passport, for the first time.

EFFECTIVE DATE: Comments must be received no later than July 21, 1980.

ADDRESS: Send comments to Elliott B. Light, Department of State, Office of Citizenship Appeals and Legal Assistance (PPT/C), 2201 C Street, N.W., Washington, D.C. 20520.

FOR FURTHER INFORMATION CONTACT: Elliott B. Light, (202) 632–7172/0897.

PART 51—PASSPORTS

Accordingly, it is proposed to revise § 51.43 of Title 22, Code of Federal Regulations as set forth below:

§ 51.43 Persons born in the United States applying for a passport, or inclusion in a passport, for the first time.

(a) Primary evidence of birth in the United States. A person born at a place in the United States where official records of birth were maintained at the time of such birth shall submit with the application for a passport a birth certificate, or documentary evidence of birth issued by competent authority in the locality of birth under the seal or other certification of the official custodian of such records. Such document must contain, but need not be limited to, the full name, date and place of birth of the person to whom the record pertains. The document must have been recorded at the time of birth or shortly thereafter.

(b) *Secondary evidence of birth in the United States.* If primary evidence of birth cannot be submitted, or is not available, the person shall submit with the application for a passport the best obtainable secondary evidence of birth. A person born at a place in the United States where official records of birth were maintained at the time of birth should submit a certification of "no record" from the official custodian of such birth records before secondary evidence will be considered. The passport issuing office will consider, as secondary evidence: delayed certificates of birth, baptismal certifications, census records, school records, and similar documents issued or created by governmental, public and private organizations, which were created shortly after birth or which reflect that the facts of birth contained therein are based on information or knowledge obtained from persons other than the person whose birth in the United States is to be proved; and/or affidavits of persons having independent personal knowledge of the facts of the birth.

(c) *Additional evidence of birth in the United States.* Any official receiving an application for a passport, or any passport issuing office, may require the submission of such additional evidence in addition to that set forth in subsection paragraph (a) and (b) of this section as may be deemed necessary to verify the person's birth in the United States.

(Sec. 1, 44 Stat. 887; Sec. 4, 63 Stat. 111, as amended (22 U.S.C. 211a 2658); E.O. 11295, 36 FR 10603; 3 CFR 1966–70 comp., p. 507.)

Dated: April 10, 1980.

For the Secretary of State.

Barbara M. Watson,

Assistant Secretary for Consular Affairs.

[FR Doc. 80–15666 Filed 5–21–80; 8:45 am]

BILLING CODE 4710–06–M

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

23 CFR Part 625

[FHWA Docket No. 80–2, Notice 2]

Design Standards for Highways

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Extension of comment period.

SUMMARY: This document extends the period for comments on the notice of proposed amendments published on February 14, 1980 (45 FR 10236), requesting comment by May 14, 1980, on the design standards which apply to most highway projects eligible for funding under the Federal-aid highway

program. The comment period is being extended until June 13, 1980, in order to provide interested parties additional time to respond to the notice. The current and proposed design standards are on file at the Office of the Federal Register in Washington, D.C., and are available for inspection and copying from the FHWA Washington Headquarters and all FHWA division and regional offices as prescribed in 49 CFR Part 7, Appendix D. The supply of extra copies of the proposed standards has been exhausted.

DATE: Comments will be received until June 13, 1980.

ADDRESS: FHWA Docket No. 80–2, Federal Highway Administration, HCC–10, Room 4205, 400 Seventh Street NW., Washington, D.C. 20590. All comments received will be available for examination at the above address between 7:45 a.m. and 4:15 p.m. ET, Monday through Friday. Those desiring notification of receipt of comments must include a self-addressed, stamped postcard.

FOR FURTHER INFORMATION CONTACT: Mr. Wilson B. Harkins, Highway Design Division, Office of Engineering, 202—426–0313, or Mr. Stan Abramson, Office of the Chief Counsel, 202–426–0761, Federal Highway Administration, 400 Seventh Street SW., Washington, D.C. 20590. Office hours are from 7:45 a.m. to 4:15 p.m. ET, Monday through Friday.

(23 U.S.C. 109, 315, and 402; 49 CFR 1.48(b))

Issued on: May 14, 1980.

L. P. Lamm,

Executive Director.

FR Doc. 80–15346 Filed 5–21–80; 8:45 am]

BILLING CODE 4910–22–M

DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[LR–230–78]

Income Tax; Moving Expense Reduction for Foreign Moves and for Retirees or Decedents Who Were Working Abroad

AGENCY: Internal Revenue Service, Treasury.

ACTION: Notice of proposed rulemaking.

SUMMARY: This document contains proposed Income Tax regulations relating to special rules for foreign moving expenses and the allowance of moving expense deductions in the case of retirees or dependents of decedents who were working abroad. Changes to the applicable tax law were made by the Foreign Earned Income Act of 1978. The regulations would provide necessary guidance to the public for compliance with the law.

DATES: Written comments and requests for a public hearing must be delivered or mailed by July 21, 1980. The amendments are proposed to be effective for expenses paid or incurred in taxable years beginning after December 31, 1978, and for expenses paid or incurred in the taxable year beginning during 1978 of taxpayers who do not make an election pursuant to section 209(c) of the Foreign Earned Income Act of 1978 (Pub. L. 95–615, 92 Stat. 3109) to have section 911 under prior law apply to that taxable year.

ADDRESS: Send comments and requests for a public hearing to: Commissioner of Internal Revenue, Attention: CC:LR:T (LR–230–78), Washington, D.C. 20224.

FOR FURTHER INFORMATION CONTACT: Barbara B. Coughlin of the Legislation and Regulations Division, Office of the Chief Counsel, Internal Revenue Service, 1111 Constitution Ave., NW, Washington, D.C. 20224 (Attention: CC:LR:T) (202–566–6618).

SUPPLEMENTARY INFORMATION:

Background

This document contains proposed amendments to the Income Tax regulations (26 CFR Part 1) under section 217 (h) and (i) of the Internal Revenue Code of 1954. These amendments are proposed to conform the regulations to section 204 of the Foreign Earned Income Act of 1978 (92 Stat. 3106). The amendments are to be issued under the authority contained in section 7805 of the Internal Revenue Code of 1954 (68A Stat. 917; 26 U.S.C. 7805).

Special rules for Foreign Moves

The proposed regulations reflect the special rules for the deduction of moving expenses in the case of foreign moves. In the case of a foreign move, the new rules change the 30-day limitation on the deduction of the cost of temporary quarters to 90 days. The new rules increase the ceiling on deductibility of these temporary living costs and costs of searching for a new residence from $1,500 to $4,500 for a foreign move. The $3,000 limitation applicable for the deductibility of the aggregate qualified residence sale, purchase or lease expenses is raised to $6,000 for a foreign move. Deductible foreign moving expenses are changed to include the cost of certain storage fees.

Moving Expense Deduction for Retirees or Decedents Who Were Working Abroad

The proposed regulations reflect the new rules allowing for the deduction of qualified retiree moving expenses and qualified survivor moving expenses. Qualified retiree moving expenses are expenses that are incurred by an individual whose former principal place of work and former residence were outside the United States and that are incurred for a move to a new residence in the United States in connection with the bona fide retirement of the individual.

The proposed regulations define "bona fide retirement" generally to mean the permanent withdrawal from gainful full-time employment and self-employment. An individual who at the time of withdrawal from gainful full-time employment or self-employment, intends the withdrawal to be permanent shall be considered to be a bona fide retiree even though the individual ultimately resumes gainful full-time employment or self-employment. An individual's intention is determined by relevant facts and circumstances.

Qualified survivor moving expenses are expenses that are paid or incurred by the spouse or any dependent of a decedent who had a principal place of work outside the United States. The expenses must be incurred for a move to the United States from a former residence outside the United States that was the residence of the decedent and the taxpayer. The move must begin within 6 months after the death of the decedent. The proposed regulations provide that a move begins when either the taxpayer's household goods and personal effects are packed and in-transit to a residence in the United States or the taxpayer leaves the former residence to travel to a new place of residence in the United States or both.

Comments and Requests for a Public Hearing

Before adopting these proposed regulations, consideration will be given to any written comments that are submitted (preferably six copies) to the Commissioner of Internal Revenue. All comments will be available for public inspection and copying. A public hearing will be held upon written request to the Commissioner by any person who has submitted written comments. If a public hearing is held, notice of the time and place will be published in the **Federal Register.**

Drafting Information

The principal author of these proposed regulations is Barbara B. Coughlin of the Legislation and Regulations Division, Office of the Chief Counsel, Internal Revenue Service. However, personnel from other offices of the Internal Revenue Service and Treasury Department participated in developing the regulations, both on matters of substance and style.

Proposed Amendments to the Regulations

The proposed amendments to 26 CFR Part 1 are as follows:

Section 1.217–2 is revised by redesignating paragraph (h) as paragraph (j) and inserting new paragraphs (h) and (i), to read as follows:

§ 1.217–2 Deduction for moving expenses paid or incurred in taxable years beginning after December 31, 1969.

* * * * *

(h) *Special rules for foreign moves*—(1) *Increase in limitations.* In the case of a foreign move (as defined in paragraph (h) (3) of this section), paragraph (b) (6) of this section shall be applied by substituting "90 consecutive" for "30 consecutive" each time it appears. Paragraph (b) (9) (ii), (iii) and (v) of this section shall be applied by substituting "6,000" for "3,000" each time it appears and by substituting "4,500" for "1,500" each time it appears. Paragraph (b) (9) (ii) of this section shall be applied by substituting "the $2,000" for "only $1,000". Paragraph (b) (9) (v) of this section shall be applied by substituting "$2,250" for "$750" each time it appears. Paragraph (b) (9) (vi) of this section does not apply.

(2) *Allowance of certain storage fees.* In the case of a foreign move, for purposes of this section, the moving expenses described in paragraph (b) (3) of this section shall include the reasonable expenses of moving household goods and personal effects to and from storage, and of storing such goods and effects for part or all of the period during which the new place of work continues to be the taxpayer's principal place of work.

(3) *Foreign move.* For purposes of this paragraph, the term "foreign move" means a move in connection with the commencement of work by the taxpayer at a new principal place of work located outside the United States. Thus, a move from the United States to a foreign country or from one foreign country to another foreign country qualifies as a foreign move. A move within a foreign country also qualifies as a foreign move. A move from a foreign country to the United States does not qualify as a foreign move.

(4) *United States.* For purposes of this paragraph and paragraph (i) of this section, the term "United States" includes the possessions of the United States.

(5) *Effective date.* The provisions of this paragraph apply to expenses paid or incurred in taxable years beginning after December 31, 1978. The paragraph also applies to the expenses paid or incurred in the taxable year beginning during 1978 of taxpayers who do not make an election pursuant to section 209(c) of the Foreign Earned Income Act of 1978 (Pub. L. 95–615, 92 Stat. 3109) to have section 911 under prior law apply to that taxable year.

(i) *Allowance of deductions in case of retirees or decedents who were working abroad*—(1) *In general.* In the case of any qualified retiree moving expenses or qualified survivor moving expenses, this section (other than paragraph (h)) shall be applied to such expenses as if they were incurred in connection with the commencement of work by the taxpayer as an employee at a new principal place of work located within the United States and the limitations of paragraph (c)(4) of this section (relating to the minimum period of employment) shall not apply. See paragraph (h)(4) of this section for the definition of United States.

(2) *Qualified retiree moving expenses.* For purposes of this paragraph, the term "qualified retiree moving expenses" means any moving expenses which are incurred by an individual whose former principal place of work and former residence were outside the United States and which are incurred for a move to a new residence in the United States in connection with the bona fide retirement of the individual. "Bona fide retirement" means the permanent withdrawal from gainful full-time employment and self-employment. An individual who at the time of withdrawal from gainful full-time employment or self-employment, intends the withdrawal to be permanent shall be considered to be a "bona fide retiree" even though the individual ultimately resumes gainful full-time employment or self-employment. An individual's intention may be evidenced by relevant facts and circumstances which include the age of the individual, the customary retirement age of employees engaged in similar work, whether the individual is receiving a retirement allowance under a pension annuity, retirement or similar fund or system, and the length of time before resuming full-time employment or self-employment.

(3) *Qualified survivor moving expenses.* For purposes of this paragraph, the term "qualified survivor moving expenses" means any moving expenses (i) which are paid or incurred by the spouse or any dependent (as defined in section 152) of any decedent who (as of the time of his death) had a principal place of work outside the United States, and (ii) which are incurred for a move which begins within 6 months after the death of the decedent and which is to a residence in the United States from a former residence outside the United States which (as of the time of the decedent's death) was the residence of such decedent and the individual paying or incurring the expense. For this purpose, a move begins when either the taxpayer's household goods and personal effects are packed and in-transit to a residence in the United States or the taxpayer leaves the former residence to travel to a new place of residence in the United States or both.

(4) *Effective date.* The provisions of this paragraph apply to expenses paid or incurred in taxable years beginning after December 31, 1978. The paragraph also applies to the expenses paid or incurred in the taxable year beginning during 1978 of taxpayers who do not make an election pursuant to section 209(c) of the Foreign Earned Income Act of 1978 (Pub. L. 95–615, 92 Stat. 3109) to have section 911 under prior law apply to that taxable year.

(j) *Effective date.* * * *

Jerome Kurtz,

Commissioner of Internal Revenue.

[FR Doc. 80–15778 Filed 5–21–80; 8:45 am]

BILLING CODE 4830–01–M

DEPARTMENT OF COMMERCE

International Trade Administration

32A CFR Parts 651 and 663

Titanium (DPS) Order 3: Proposed Rulemaking

AGENCY: Office of Industrial Mobilization, ITA, Department of Commerce.

ACTION: Withdrawal of Proposed Rule.

SUMMARY: On March 13, 1980, the Department of Commerce (DOC) proposed, in the **Federal Register** (45 FR 16202), 1) to issue DPS Order 3—Titanium—to provide for titanium ingot and titanium mill product set-asides and 2) to add titanium sponge to the exclusion list by amending Schedule II to DPS Regulation 1—Materials and Services Not Subject to BDC (now OIM) Rating Authority. Comments were requested to be submitted to the

Department by April 11, 1980. The proposed rulemaking was made in the interest of creating a more orderly and equitable environment for the titanium industry.

DOC has considered all comments received. DOC has reviewed the circumstances which led to the decision to issue the proposal and has studied certain events affecting the titanium situation since the publication of the proposed rule. DOC concludes that the Defense Priorities System Regulation 1 (Basic rules of the defense priorities system) provides sufficient authority to assure the availability of required supplies of titanium and titanium products to meet defense program requirements and, thus, is withdrawing the proposal.

DATE: This withdrawal is effective May 22, 1980.

FOR FURTHER INFORMATION CONTACT: Iain S. Baird, Director, Priorities and Allocations Division, Office of Industrial Mobilization, International Trade Administration, U.S. Department of Commerce, Washington, D.C. 20230, (202) 377–2233.

SUPPLEMENTARY INFORMATION: In total, twelve written comments were received: six from titanium producers, three from titanium users and three from U.S. Government agencies. Of the twelve comments received, ten opposed the proposal. Many comments were concerned with the adequacy of the basic data (i.e. defense projected requirements) needed to develop set-aside percentages and to administer the program. The comments also stated that the proposed set-aside percentages appeared too high based on past experience with defense business and based on perceptions of likely future defense program requirements. Therefore, the proposed levels were seen as potentially disruptive to the conduct of normal commercial business.

Many expressed concern that any appearance of uncertainty in the U.S. market would serve as an incentive for customers to seek supplies from foreign countries. In addition to the short-run balance of payment effects and reduced sales in the United States, one company noted that diversion to foreign sources would be an incentive to foreign expansion and modernization and, thus, a disincentive to the expansion of the domestic titanium industry.

Some commenters identified sponge availability as an immediate problem and were concerned that the proposed exclusion of sponge from the priorities system would impact the ability to acquire sponge to fill defense orders. However, no mention was made of the fact that the Department would retain authority to direct sales of sponge if normal methods of supply failed to provide adequate materials for defense programs.

Several comments stated that the set-aside proposal did not address the more fundamental problems of inadequate market incentives for capital investment and plant expansion; potentially sizable increases in demand for energy applications; the disruptive effects of unpredicable defense procurements; and the problem of funding for long lead time items for defense.

To satisfy the long-term problems of the industry, many comments favored the use of the National Defense Stockpile as a market stabilizing influence through sales during short periods of tight supply, combined with long term stockpile procurement policies. The industry proposals also covered investment incentives, funding for long-term defense procurement, investment tax credits, changes in tariff policy, extension of priorities to commercial transport aircraft, and short-term export restrictions. A proposal which would permit further exploration of these and other ideas was to continue industry and Government dialogue and cooperation through the formation of some form of working committee. While all these proposals are of interest to the Department with respect to its concern for a strong industrial base for titanium and other products and will be considered in that context, they were not considered germane to the issue at hand as the proposal was concerned solely with the distribution of currently available resources.

The proposed rulemaking was issued because the Department, in its effort to assure timely satisfaction of defense program requirements, sought to respond to certain titanium producers' concerns that there did not exist a mechanism for ensuring that defense requirements were distributed equitably.

Since the March 13 proposal, DOC has concluded that both industry and Government have significantly increased their awareness of 1) the principles and purposes of the DMS/DPS system, and 2) the rights and obligations of those subject to DPS Reg. 1. As a direct result of this activity, there has been a sharp decline in special priorities assistance requests for titanium products and an improved receptivity on the part of individual companies to resolve issues involving supply availability. With respect to industry's concern for establishing a mechanism to ensure an equitable distribution of approved defense program requirements, the comments received from industry did not support establishing a set-aside as the mechanism to ensure that equitable distribution. Thus, the Department is withdrawing its proposed rulemaking.

All existing provisions of the DMS/DPS, which implement the provisions of Title I of the Defense Production Act of 1950, as amended, remain in effect. All elements of the titanium producing and consuming industries are legally obligated to follow all the provisions of the DMS/DPS.

The DMS/DPS regulations can be found in the Code of Federal Regulations, Title 32A, National Defense Appendix, Chapter 6.

Copies of the individual regulations may be obtained from OIM or from the Department of Commerce District Offices.

Dated: May 19, 1980.

Eric L. Hirschhorn,

Deputy Assistance Secretary for Export Administration.

[FR Doc. 80-15754 Filed 5-21-80; 8:45 am]

BILLING CODE 3510-25-M

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 117

[CGD 79-114]

Drawbridge Operation Regulations; Yazoo River, Mississippi

AGENCY: Coast Guard, DOT.

ACTION: Proposed Rule.

SUMMARY: The Coast Guard is considering revising the regulations governing the operation of the drawbridges across the Yazoo River from its mouth to Greenville, Mississippi, to require at least two hours notice for the Illinois Central Gulf Railroad at Redwood and the Satartia Highway bridge at Satartia and at least four hours notice for the drawbridges at Yazoo City, Belzoni, Silent Shade, Roebuck, Fort Loring, and Greenwood at all times. This proposal is being made in an effort to promote uniformity and facilitate commercial navigation. This action should relieve the bridge owners of having a person constantly available to open the draw while still providing for the reasonable needs of navigation.

DATE: Comments must be received on or before June 23, 1980.

ADDRESS: Comments should be submitted to and are available for examination during normal working hours at the office of the Commander (obr), Second Coast Guard District, 1430 Olive Street, St. Louis, MO 63103.

FOR FURTHER INFORMATION CONTACT: Frank L. Teuton, Jr., Chief, Drawbridge Regulations Branch (G–NBR/TP14), Room 1414, Transpoint Building, 2100 Second Street, S.W., Washington, D.C. 20593 (202–426–0942).

SUPPLEMENTARY INFORMATION: On August 6, 1979, the Coast Guard published a proposed rule (44 FR 45969) concerning this amendment. The Commander, Second Coast Guard District, also published these proposals as a Public Notice dated August 9, 1979. Interested parties were given until September 7, 1979 to submit comments.

DRAFTING INFORMATION: The principal persons involved in drafting this proposal are: Frank L. Teuton, Jr., Project Manager, Office of Navigation, and Coleman Sachs, Project Attorney, Office of Chief Counsel.

Discussion of Comments

As originally proposed, all drawbridges across the Yazoo River from the mouth through Greenville would have required at least four hours notice. Three comments were received that were pertinent to the proposal. Two opposed any change. One suggested a maximum of two and one-half hours notice. After reviewing these objections, the Coast Guard concluded that the Illinois Central Gulf Railroad bridge at Redwood and the Satartia Highway bridge at Satartia should open after at least two hours notice, and the remaining bridges after at least four hours notice. Subsequently, in informal meetings held by the Coast Guard, all interested parties agreed to this change. The Coast Guard is now presenting this revised proposal to the public for comment.

In consideration of the foregoing, it is proposed that Part 117 of Title 33 of the Code of Federal Regulations be amended by:

PART 117—DRAWBRIDGE OPERATION REGULATIONS

1. Deleting 33 CFR 117.560(f)(18).
2. Revising 33 CFR 117.560(f)(17) to read as follows:

§ 117.560 Mississippi River and its tributaries and outlets; bridges where constant attendance of draw tenders is not required.

* * * * * * *

(f) * * *

(17) Yazoo River, Miss. (a) The draws of the Illinois Central Gulf Railroad bridge at Redwood and the Satartia Highway bridge at Satartia shall open on signal if at least two hours notice is given. When a vessel has given notice and fails to arrive within the two-hour period specified, the draw tender shall remain on duty for two additional hours and open the draw if the requesting vessel appears. After this time, an additional two-hour notice is required.

(b) The draws of the drawbridges upstream from the Satartia Highway bridge shall open on signal if at least four hours notice is given. When a vessel has given notice and fails to arrive within the four-hour period specified, the draw tender shall remain on duty for two additional hours and open the draw if the requesting vessel appears. After this time, an additional four-hour notice is required.

* * * * * * *

(Sec. 5, 28 Stat. 362, as amended, sec. 6(g)(2), 80 Stat. 937; 33 U.S.C. 499, 49 U.S.C. 1655(g)(2); 49 CFR 1.46(c)(5))

Dated: May 19, 1980.

Peter J. Rots,

Captain, U.S. Coast Guard, Acting Chief, Office of Navigation.

[FR Doc. 80-15734 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-14-M

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33 CFR Part 157

[CGD 79–126]

Procedure for Exemption From the Requirement for Segregated Ballast Tanks, Dedicated Clean Ballast Tanks or a Crude Oil Washing System for Existing Tank Vessels

AGENCY: Coast Guard, DOT.

ACTION: Proposed Rule.

SUMMARY: This document proposed regulations which would exempt certain existing U.S. tank vessels from the requirements for segregated ballast tanks (SBT), dedicated clean ballast tanks (CBT) or crude oil washing (COW) systems. These regulations would implement subsection (7)(N) of section 5 of the Port and Tanker Safety Act of 1978 which allows the exemption, if shore-based reception facilities are a preferred method of handling dirty ballast and adequate reception facilities are readily available. Adoption of the proposal would recognize that in certain trades where existing tank vessels have set loading locations, it is as effective to use shore-based reception facilities for the treatment of oil residues as it is to use SBT, CBT, or COW.

DATES: Comments must be received on or before July 7, 1980.

ADDRESSES: Written comments should be submitted to Commandant (G–CMC/TP–24) (CGD 79–126), U.S. Coast Guard, Washington, D.C. 20593. Between the hours of 7:00 a.m. and 5:00 p.m. Monday through Thursday, comments may be delivered to and will be available for inspection or copying at the Marine Safety Council (G–CMC/TP–24), Room 2418, Trans Point Building, 2100 2nd Street, S.W., Washington, D.C. 20593. Copies of the combined draft regulatory evaluation and draft environmental assessment are available during the same hours and days at the preceding address.

FOR FURTHER INFORMATION CONTACT: LCDR Alan E. Spackman, Merchant Marine Technical Division (G–MMT–1/TP–13), Room 1308 Trans Point Building, 2100 2nd St. S.W., Washington, D.C. 20593 (202–426–4431).

SUPPLEMENTARY INFORMATION: Interested persons are invited to participate in this proposed rulemaking by submitting written views, data, or arguments. Persons submitting comments should include their names and addresses, identify this notice (CGD 79–126) and the specific section of the proposed regulations to which their comments apply and give reasons for their comments. Persons desiring acknowledgement that their comments were received should include a stamped self-addressed envelope or postal card. 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 at a time and place to be set in a later notice in the **Federal Register** if requested in writing by an interested person who can demonstrate that the opportunity to make an oral presentation will aid this rulemaking.

Drafting Information

The principal persons involved in the drafting of this rule are LCDR Alan E. Spackman, Project Manager, Office of Merchant Marine Safety and Mr. Stanley M. Colby, Project Attorney, Office of Chief Counsel.

Discussion

Regulations implementing portions of the equipment and construction standards contained in subsection 7 of section 5 of the Port and Tanker Safety Act of 1978 (PTSA) (92 Stat 1480, 1484; 46 USC 391a) were published in the **Federal Register** of November 19, 1979 (46 FR 66502). These regulations are consistent with the equipment and construction standards developed at the International Conference on Tanker Safety and Pollution Prevention (TSPP) as adopted in the *Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973* (MARPOL Protocol).

Regulation 13C of the MARPOL Protocol and subsection (7)(N) of section 5 of the PTSA provide for the granting of

exemptions from the requirements for SBT, CBT, and COW. Both also specify conditions or place limitations on the granting of exemptions.

The development of the PTSA was greatly influenced by the MARPOL Protocol. These proposed regulations are intended to implement subsection (7)(N) of section 5 of the PTSA in a manner which will conform to the MARPOL Protocol.

The PTSA requires the exemptions to be in accordance with any "relevant international agreement to which the United States is a party". The Coast Guard has concluded that the MARPOL Protocol is the controlling agreement, even though it is not yet in force for the United States. The Coast Guard reached this conclusion based in the following: The construction and equipment requirements of subsection (7) have specific applicability dates. Resolution 1 adopted by the TSPP Conference recommends that the Protocol enter into force not later than June 1981. It is upon this entry into force that the effective dates of the several construction and equipment standards are based. Regulation 13C of the MARPOL Protocol, upon which subsection (7)(N) is based, would also have effect by June 1981 if the target date of the Protocol is met. Viewing subsection (7)(N) in this light, the phrase "relevant international agreements" can be read principally as an identification of the international agreement governing exemptions, which is, of course, the MARPOL Protocol. The phrase "is a party" could only have been inserted with expectation that the MARPOL Protocol would enter into force by its target date. The fact that the target date may not be met should not change the concept by not allowing for those exemptions from the construction and equipment requirements that do not require further international agreement under Regulation 13C of the MARPOL Protocol. It is reasonable to assume that Congress intended the issuance of exemptions if the qualifying criteria are satisfied.

There are four basis requirements that stem from the MARPOL Protocol that have been incorporated in this proposed rulemaking:

(1) Granting of exemptions is limited to vessels defined as "existing" vessels. This is an acknowledgment that the MARPOL requirements for SBT, CBT or COW on existing vessels placed the emphasis on reducing operational oil pollution. By limiting exemptions to existing vessels, it recognizes that the design requirements for "new" vessels, primarily the requirement for protectively located SBT on both crude oil and product carriers, should provide an additional reduction in accidental oil pollution.

(2) Exemptions may be granted only to tank vessels engaging in three types of trade. Those which engage in trades wherein their voyages are wholly between ports or terminals within a state (country); those whose trade consist of voyages that are entirely within a "Special Area" as defined by the Protocol; and those whose voyages are entirely within other limits designated by the Inter-Governmental Maritime Consultative Organization (IMCO). The first of these trades is addressed by this rulemaking and is the source of a restriction limiting cargo loading and discharge to ports or places within the United States. Resolution 16 to the MARPOL Protocol calls for further study by IMCO with regard to the consequences, including the environmental effects, of the possible extension of exemptions into the latter two categories. Because of the need for further international action under MARPOL, which requires entry into force of the MARPOL Protocol, these trades are not addressed in this proposal.

(3) Exemptions may be granted only if those ports or terminals where cargo is to be loaded have shore-based reception facilities that are adequate for the treatment of all the ballast and tank washing water from the tank vessels that use them.

(4) Except in certain emergency conditions, an exempted vessel would have to retain on board and transfer to a reception facility all ballast water, including clean ballast water, and all tank washing residues.

The PTSA further requires that shore-based reception facilities be determined to be "a preferred method of handling dirty ballast", and that adequate reception facilities be "readily available."

The Coast Guard has made the determination that for the existing vessels, to which the proposed exemptions would be granted, shore-based reception facilities are a preferred method of handling dirty ballast provided the exempted vessels operate in accordance with the restrictions as set forth in the proposed regulations. It is the Coast Guard's position that this determination can be made for all existing U.S. tank vessels in domestic trade of 40,000 DWT and over, and it is the Coast Guard's intention to issue only one environmental assessment to cover any exemptions the Coast Guard may issue, if this proposal is adopted. The determination of preference has been based upon the following:

1. A review of the U.S. tank vessel fleet that determined which vessels would be likely candidates for the proposed exemption;

2. A draft regulatory evaluation which indicates a probable savings to the affected segment of the marine industry; and,

3. An assessment of the probable environmental effects of the proposed regulations which could identify no significant environmental impact as a result of granting the proposed exemptions. On the basis of this assessment the issuance of a Finding of No Significant Impact is envisioned.

Prior to granting an exemption the Coast Guard must be assured that each reception facility that is proposed for use by an exempted vessel is adequate and will remain readily available. The proposed rules would require that certain information regarding each reception facility accompany each vessel's application for exemption. This information would include copies of the National Pollutant Discharge Elimination System (NPDES) permits for the reception facilities named in the application and statements from the reception facility owners regarding the adequacy of their reception facility and their capability to provide continued service to the vessel. A premise of the environmental assessment is that the reception facility will discharge a high quality effluent. Submission of a valid NPDES permit is proposed as proof of a high quality effluent. The Coast Guard proposes to rely upon the judgement and past experience of the owner of each reception facility to determine whether his reception facility can provide a continuous service to the candidate vessel while remaining readily available for use by other vessels.

In order to ensure that the limits within which the determination of the "preference of method" was based are not exceeded by exempted vessels and that the reception facilities used by exempted vessels remain both adequate and readily available, provision has been made in the proposal for revocation of exemptions. As proposed, the exemption of a vessel may be revoked if the vessel fails to comply with the regulations, a reception facility is rendered incapable of processing the vessel's discharges, or it becomes apparent that the use of a reception facility by exempted vessels is causing undue delay to non-exempt vessels. A delay of six hours has been proposed as an undue delay. Comments regarding the time period which would constitute an undue delay, or comments which would provide alternative approaches that could be used to ensure that

reception facilities handling exempted vessels continue to meet the needs of the other vessels using them, without causing undue delay to those vessels, are specifically solicited.

The Coast Guard has evaluated this proposal under the Department of Transportation's "Regulatory Policies and Procedures" (44 FR 11034, February 26, 1979). A combined draft regulatory evaluation and draft environmental assessment has been prepared and is included in the public docket. This document is available as indicated in addresses.

Accordingly, it is proposed that Part 157 of Title 33, Code of Federal Regulations be amended by adding a new Subpart F to read as follows:

Subpart F—Exemptions from § 157.10a

Sec.

157.300 Qualifications for exemptions under this part.
157.302 Applying for an exemption or requesting modification of an exemption.
157.304. Shore-based reception facility: standards.
157.306 Granting, denying or modifying an exemption.
157.308 Revocation of exemption: procedure and appeals.
157.310 Exempted Vessels: operations.

Authority: 92 Stat. 1480 (Sec. 5, Port and Tanker Safety Act of 1978; 46 U.S.C. 391a); 49 CFR 1.46(n)(4).

§ 157.300 Qualifications for exemptions under this part.

Each U.S. tank vessel under § 157.10a of this part may qualify for an exemption from the requirements of § 157.10a of this part if—

(a) The vessel loads and discharges cargo only at ports or places within the United States, its territories, or its possessions;

(b) The application for exemption meets § 157.302; and

(c) The vessel never has been granted an exemption under this subpart that was revoked by the Coast Guard under § 157.308(a)(1) or § 157.308(a)(2).

§ 157.302 Applying for an exemption or requesting modification of an exemption.

(a) Each application for an exemption or modification must be in writing and submitted to the Commandant (G-MMT/TP-13), U.S. Coast Guard, Washington, D.C. 20593.

(b) Each application for exemption must include the following:

(1) The name and official number of the vessel for which the exemption is requested.

(2) A list of each port or place where the vessel would call.

(3) A list of each port or place where the vessel would load cargo.

(4) The name, address, and telephone number of the shore-based reception facilities at each port listed under paragraph (b)(3) of this section where the vessel would discharge its ballast water and cargo residues, including—

(i) The name of the person at each facility who should be contacted for information concerning the operation of the reception facility; and

(ii) A statement from the facility owner disclosing whether or not, based on current operating conditions, the facility has the capability of processing the anticipated volume and type of discharges from the vessel without adversely affecting the service of the facility to current users.

(5) A copy of a valid National Pollutant Discharge Elimination System (NPDES) permit for each listed shore-based reception facility.

(6) A list of each type of cargo that the vessel would load.

(7) A description of the method by which the vessel would discharge ballast water and cargo residues to each listed shore based reception facility.

(c) Each request for modification of an exemption must include the following:

(1) The name and official number of the vessel for which the modification to the exemption is requested.

(2) The reason for requesting modification of the exemption.

(3) Any additional information which is pertinent to the modification.

§ 157.304 Shore-based reception facility: standards.

No shore-based reception facility may be listed to meet § 157.302(b)(4) unless that reception facility has—

(a) a valid NPDES permit which allows it to process the ballast water and cargo residues of the vessel for which the exemption is being requested; and

(b) the capacity to receive and store a volume of dirty ballast water equivalent to 30 percent of the deadweight, less the segregated ballast volume, of the vessel for which the exemption is being requested.

§ 157.306 Granting, denying or modifying an exemption.

(a) The Chief, Office of Merchant Marine Safety issues a written decision concerning the grant or denial of each exemption or modification requested under § 157.302.

(b) If the exemption or request for modification is denied, the decision under paragraph (a) of this section includes the reasons for the denial.

(c) Any person directly affected by, and not satisfied with, a decision made under paragraph (a) of this section may appeal that decision, in writing, to the Commandant, U.S. Coast Guard, Washington, D.C. 20593. The appeal may contain any supporting documentation or evidence that the appellant wishes to have considered.

(d) The Commandant, U.S. Coast Guard issues a ruling after reviewing the appeal submitted under paragraph (c) of this section. This ruling is final agency action.

§ 157.308 Revocation of exemption: procedure and appeals.

(a) The Officer in Charge, Marine Inspection may consider the revocation of the exemption granted under this subpart when—

(1) Requested by the vessel's owner;

(2) There is evidence that the vessel's owner, operator, or master has failed to comply with the requirements of this subpart; or

(3) There have been changes to the NPDES permit of a reception facility listed to meet § 157.302(b)(4) that would adversely affect the ability of that facility to process the vessel's discharges.

(b) The Officer in Charge, Marine Inspection, of the zone in which an occurence under paragraphs (a)(2) or (a)(3) of this section takes place notifies the owner, operator, and master of the exempted vessel of the specific reasons for considering the revocation of the exemption.

(c) Evidence or arguments for the retention of the exemption that are submitted to the Officer in Charge, Marine Inspection within thirty days of receipt of the notice under paragraph (b) of this section will be considered before a ruling is made.

(d) If the owner is not satisfied with the ruling made under this section by the Officer in Charge, Marine Inspection, that ruling may be appealed under the procedure in § 157.06 of this part.

§ 157.310 Exempted vessels: operations.

The owner, operator, and master of each vessel that has been granted an exemption under this subpart must ensure that—

(a) The vessel trades only between ports or places listed in the exemption;

(b) The vessel loads cargo only at ports or places listed in the exemption;

(c) The vessel loads only those cargoes listed in the exemption;

(d) Except as allowed under § 157.41(a) and (b) of this part, any ballast water, except segregated ballast discharged in accordance with § 157.43(b) of this part, and any tank washing or cargo residues are—

(1) Retained on board; or

(2) Transferred to a shore-based reception facility that is listed in the application for exemption, or an alternative acceptable to the Coast Guard;

(e) The vessel, while discharging to a reception facility listed to meet § 157.302(b)(4), does not delay access to that facility by non-exempt vessels for six hours or more; and

(f) The letter under § 157.306 that grants the exemption is on board the vessel; or

(g) The certificate of inspection bearing the following endorsement is on board the vessel:

Exempted under 33 CFR 157.306 from the requirements of 33 CFR 157.10a. This vessel may not discharge cargo in any foreign port, nor may it load cargo in a port other than the following: (a list of ports listed in the application that is accepted by the Coast Guard for the exempted vessel will be inserted here).

(92 Stat. 1480 (Sec. 5, Port and Tanker Safety Act of 1978; 46 U.S.C. 391a); 49 CFR 1.46(n)(4))

Henry H. Bell,

Rear Admiral, U.S. Coast Guard Chief, Office of Merchant Marine Safety.

[FR Doc. 80-15735 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-14-M

POSTAL RATE COMMISSION

39 CFR Chapter III

[Docket No. RM80-1]

Annual Review of Regulations

May 16, 1980.

AGENCY: Postal Rate Commission.

ACTION: Notice of Proposed Rulemaking (NPRM).

SUMMARY: On Febraury 20, 1980, the Postal Rate Commission's Advance Notice of Proposed Rulemaking was published in the **Federal Register** (45 FR 11139–40) for public comment. The Advance Notice was the initial step in the Commission's procedures for annual review of its rules of practice pursuant to its plan for voluntarily implementing Executive Order No. 12044 (43 FR 12661, March 24, 1978). In it the Commission proposed rules expressly authorizing it to reject Postal Service requests for rate or classification requests under 39 U.S.C. 3622 and 3623 that do not comply with the Commission's rules governing such requests.

This Notice of Proposed Rulemaking is the second step in our annual review procedures. It proposes revisions to the amendments proposed in our Advance Notice, prompted by comments received from the Postal Service. In addition, this Notice proposes to amend our rules concerning the use of discovery, witnesses' workpapers, and library references in Commission proceedings. These proposed amendments are based upon proposals submitted by the Officer of the Commission in response to our Advance Notice, which solicited proposals from the public for improving our rules of practice. Finally, our Notice of Proposed Rulemaking proposes to amend our rules concerning *ex parte* communications. The public is invited to comment on these proposed amendments to our rules. Vice-Chairman Duffy and Commissioner O'Doherty dissent from the proposed changes in the Commission's rules under this notice.

DATES: Comments responsive to our Notice of Proposed Rulemaking should be submitted by June 23, 1980.

ADDRESSES: Comments should be directed to David F. Harris, Secretary, Postal Rate Commission, Suite 500, 2000 L Street, N.W., Washington, D.C. 20268.

FOR FURTHER INFORMATION CONTACT: David F. Stover, General Counsel, Postal Rate Commission, Suite 500, 2000 L Street, N.W., Washington, D.C. 20268; (202) 254–3824.

SUPPLEMENTARY INFORMATION:

Rejection of Defective Requests

On February 20, 1980, the Commission proposed to amend rules 56 and 66 of its rules of practice (39 CFR 3001.56, 3001.66) specifically to authorize the Commission to reject Postal Service requests for rate changes made under 39 U.S.C. 3622 and classification changes under 39 U.S.C. 3623, where such requests failed to comply with the Commission's rules governing their form and content (45 FR 11139–40). In support of its proposal the Commission commented that this authority is analogous to the authority of regulatory bodies generally to reject tariffs that do not comply with their regulations governing the form and content of tariffs filed with them. It identified 39 U.S.C. 3603 as the source of its authority to promulgate such rules. It noted, also, that the proposed rules were intended to be consistent with the scope of such authority as delimited by the courts in *Municipal Light Boards* v. *FPC*, 450 F. 2d 1341 (D.C. Cir. 1971), *cert. denied* 405 U.S. 989 (1972) and related decisions.

Two sets of comments upon these proposed amendments to our rules were received. The Officer of the Commission, the Commission's independent public interest advocate, filed comments supporting the Commission proposal. The Postal Service filed lengthy comments opposing the Commission's proposed amendments.

The Postal Service denies that the Commission has legal authority to adopt rules authorizing it to reject Postal Service requests filed under §§ 3622 or 3623 of the Act. It argues two basic points, one semantic, the other theoretical.

It asserts that the Commission is precluded from rejecting its requests by the language of §§ 3622 and 3623 which states that the Commission "shall make a recommended decision on the request . . . ." It asserts that this language not only imposes an affirmative duty upon the Commission to issue a formal recommended decision on each Postal Service request, but precludes any other response by the Commission.

We think that carefully limited tariff rejection authority not only can, but must be reconciled with the above quoted language of §§ 3622 and 3623 to avoid irrational results which Congress could not have intended in establishing the ratemaking mechanism of the Act.

Tariff rejection authority, as defined by the courts, gives agencies limited discretion to determine when a tariff filing reaches a minimal level of viability in terms of form, content, and prima facie lawfulness that will allow the agency and parties in interest to give a meaningful response to the filing. It is properly applied in the extreme situation where a filing is "so deficient on its face" that "administrative efficiency and justice are furthered by obviating any docket at the threshold rather than opening a futile docket." *Municipal Light Boards* v. *FPC*, 450 F. 2d 1341, 1346 (D.C. Cir. 1971).

Tariff rejection is essentially an "interim" procedural "technique for calling upon the filing party to put its papers in proper form and order" (*Municipal Light Boards, ID.*), a procedure analogous to a dismissal of a complaint without prejudice in civil practice. As such it is consistent with and, indeed, furthers the Commission's exercise of its duty under §§ 3622 and 3623, if those sections are construed to impose a duty *ultimately* to render a recommended decision on the merits of a Postal Service request. Construing the language of §§ 3622 and 3623 as requiring the Commission ultimately to render a decision on the merits of a Postal Service request does no violence to its mandatory language, and accommodates the need for interim procedural responses to Postal Service requests, such as rejection of those that are patently defective.

Numerous other agencies have affirmative duties to render decisions on industry applications for certificates of public convenience and necessity. The

Postal Service itself concedes that these duties are procedurally analogous to the Commission's duty under §§ 3622 and 3623 to issue decisions on Postal Service requests. They are framed in statutory language as absolute and unqualified as the corresponding language of §§ 3622 and 3623. Notwithstanding such unqualified language, many of these agencies have adopted rules authorizing them to reject applications, even though, like the Commission, they have no explicit statutory authority to do so. *See, e.g.,* 18 CFR 157.8 implementing 15 U.S.C. 717f(c) (Natural Gas Act), 18 CFR 4.31(a) and 4.31(d) implementing 16 U.S.C. 797(e) (Federal Power Act), 47 CFR 1.746 and 63.51 implementing 47 U.S.C. 214 (Federal Communications Act of 1934). By necessary implication, these agencies construe their statutory duty, framed in directly analogous statutory language, as we do—as a duty ultimately to issue a decision on the merits of an application. So construed, that statutory duty is entirely consistent with the interim procedural technique of rejecting applications with patent formal or substantive defects so that the filer may make them suitable for processing in the context of an evidentiary hearing. The consequences of denying agencies limited discretion to reject defective applications are administrative inefficiency and injustice to the parties, in terms of proceedings conducted, time consumed, and resources spent in an effort to evaluate the merits of a filing so deficient that its merits cannot or need not be examined.

With respect to the Commission in particular, the consequences of denying it limited discretion to reject non-viable Postal Service requests would be especially irrational, due to the uncommonly formal and elaborate ratemaking mechanism of the Act. The Postal Service could, for example, file a request for a general rate increase that contained only a gross revenue requirement figure and proposed rates for each category of service. If the Commission's § 3622 duty to issue a recommended decision on each Postal Service filing were construed to be unqualified, as the Postal Service advocates, such a request would obligate the Commission and all parties in interest to proceed with a full evidentiary hearing, followed by a formal recommended decision by the Commission applying the detailed criteria of § 3622, and further review by the Governors. The decisional criteria of § 3622 could not meaningfully be applied to such a request. Commission disapproval would be mandatory and a successful judicial appeal of any modification by the Governors would be inevitable. Yet the Commission's duty to conduct a formal hearing and issue a recommended decision, if unqualified as the Postal Service asserts, would permit no other course of action.

Such a result is inconsistent with the elaborate ratemaking mechanism of the Act, which is clearly designed for thorough consideration of a request on its merits, and, just as clearly, is not designed for processing a request "so deficient on its face" that responsive pleadings are unwarranted.

To our knowledge, no federal regulatory agency's authority to reject tariffs or applications for certificates of public convenience and necessity has been questioned by the courts, although the manner in which they have applied that authority has at times been found inappropriate.

The Postal Service argues, nevertheless, that the authority of agencies to reject tariff filings attaches only to those regulatory schemes ". . . where a filing once lodged is permitted to go into effect either at once, if not suspended, or at any rate after a suspension period subject to a time limit." But the foregoing language from *Municipal Light Boards,* on which the Postal Service relies, appears in the following context:

> The pertinent considerations [in using tariff rejection authority] may go beyond mere administrative choice in docketing techniques, as appears from the statutes governing rate filings, where a filing once lodged is permitted to go into effect, either at once if not suspended, or at any rate after a suspension period subject to a time limit. In these situations a rate filing may be rejected both when the governing statute explicitly provides for rejection and when it does not [footnote omitted]. 450 F. 2d 1341, at 1346.

This language of the court does not refer to the file-and-suspend ratemaking structure as a prerequisite to tariff rejection authority. Instead, it offers that ratemaking structure as one example of circumstances in which tariff rejection has consequences that go beyond mere selection of docketing techniques. In that example, the court adds, tariff rejection does not require express statutory authority. Tariff rejection authority, then, is not restricted to any specific ratemaking structure by *Municipal Light Boards* or any other decision of the courts to which we have been referred.

The Postal Service theorizes that Congress intended not to give agencies the general authority to regulate the form and content of rate or classification filings or the specific authority to reject them, where a private hearing is required, since any defects of form or content could be corrected during the course of the hearing. Contrary to the Postal Service's assertions, Congress has seen fit to grant express statutory authority to prescribe the form and content of applications for certificates of public convenience and necessity even though a prior hearing is mandatory under the statute. 15 U.S.C. 717f(d) (Natural Gas Act). In addition, as we have noted, many agencies obligated to dispose of such applications after a hearing have interpreted their organic act to authorize rejection of defective applications.

This summarizes, briefly, our reasons for disagreeing with the Postal Service's assertion that the Commission may not lawfully adopt rules governing the rejection of defective Postal Service requests.

In addition to their lawfulness, the Postal Service expresses concern about the specific formulation of the amendments to our rules proposed in our Advance Notice. The Postal Service complains that those amendments state our rejection authority more broadly than the analogous rules of other agencies and more broadly than would be permitted by the courts. A review of the rules of other federal regulatory agencies discloses that they typically authorize rejection of tariff filings and certificate applications for any noncompliance whatever with applicable agency rules or orders [*see, e.g.,* 47 CFR 1.746, 61.69, 63.51 (FCC), 49 CFR 1300.14(e) (ICC); 14 CFR 221.180 (CAB)] and are therefore more sweeping than the amendments proposed in our Advance Notice.

We do not view the Postal Service's apprehensions about the breadth of those proposed amendments as justified, particularly in view of our express assurance that they were intended to be consistent with the narrow standards formulated by the courts. Nevertheless, to alleviate the concerns of the Postal Service as to the breadth of the rejection authority intended, we have revised our proposed amendments to expressly limit our rejection authority to Postal Service requests that "patently fail to substantially comply" with applicable Commission rules, a standard as restrictive as that expressed by any court or incorporated in any analogous agency regulation of which we are aware.

The Postal Service also infers that the Commission intends to include as a basis for rejection an evaluation of the adequacy of the direct evidence submitted in support of Postal Service requests. It arrives at this inference by focusing upon a comment in our Advanced Notice that our proposed

rejection authority would apply to either "formal or substantive defects" in Postal Service requests. Because our proposed amendments defined requests subject to rejection in terms of noncompliance with Commission rules prescribing the form and content of Postal Service requests, and those rules currently do not include any substantive requirements *per se*, the Postal Service infers that our mention of substantive defects pertained to the adequacy of the direct evidence that it must submit with its request under our rules.

That is not our intent. Our reference to substantive defects pertained to such substantive defects as would qualify for rejection under the standards established by the courts, *i.e.*, those that render filings "patent nullities as a matter of substantive law" (*Municipal Light Boards, Id.*) because they plainly violate an applicable substantive statue or regulation. A hypothetical example of the former would be a Postal Service request for zoned rates for special-rate fourth-class matter in violation of § 3683. An hypothetical example of the latter would be a rate request based upon a method of calculating service-related costs if such method were specifically prohibited by some future regulation to be inserted in subpart B of our rules of practice. The Commission disclaims authority to reject tariffs for substantive defects the determination of which requires a factual inquiry, in whole, or in part.

The amendments proposed in our Advanced Notice combined our proposed rules regarding tariff rejection with current rules 56 and 66, each of which is entitled "Failure to Comply" and authorizes the Commission to stay proceedings brought by the Postal Service under §§ 3622 and 3623, respectively. The stay is a technique intended for use after a proceeding has commenced to secure relevant information the need for which appears during the course of the proceeding. Rejection of a request, in contrast, is intended for use before the proceeding begins. It is a technique for prompting the Postal Service to cure substantial formal or substantive defects that are apparent on the face of the request, and without which the request is not suitable for processing under formal evidentiary procedures.

Because we combined authorization of the two techniques in the same rule, the Postal Service infers that the Commission intended to use the two techniques interchangeably.

We agree that combining the two techniques in the same rule may result in a misunderstanding of their distinct functions. We therefore propose that our amendments take the form of separate new subsections under rules 54 and 64, which currently enumerate the Commission's requirements as to form and content of Postal Service rate requests filed under § 3622, and classification requests filed under § 3623, respectively.

The Postal Service further speculates that the Commission has an ulterior motive for proposing rules authorizing rejection of its requests. Our motive, it suggests, is to affect the Postal Service's ability to implement temporary rate or classification changes by altering the beginning of the statutory interval that must precede the implementation of such changes. That is not the case. Our motive is to fill a gap in our rules of practice with a procedural technique common to virtually all agencies with rate or classification determining functions, a gap which became apparent to us upon our annual comprehensive review of our rules of practice that our plan for implementing Executive Order 12044 requires.

For the reasons outlined above we have revised the amendments to our rules that we proposed in our Advance Notice concerning Commission authority to reject defective Postal Service requests. We propose to add the following new subsection to § 3001.54 of Subpart B, of Part 3001, 39 CFR:

(f) *Rejection of requests.* The Commission may reject any request under this Subpart that patently fails to substantially comply with any requirements of this Subpart and to add the following new subsection to § 3001.64 of Subpart C of Part 3001, 39 CFR:

(i) *Rejection of requests.* The Commission may reject any request under this Subpart that patently fails to substantially comply with the requirements of this Subpart.

Discovery

Rules 25–27 of our rules of practice (39 CFR 3001.25–27) outline discovery procedures for interrogatories, requests for production of documents, and requests for admissions. We contemplate amending Rules 25–27 by adding the language set forth in brackets below, and deleting the portions in italics of the existing rules:

Proposed Rule Change:

§ 3001.25 Interrogatories for purpose of discovery.

(a) **Service and contents.** In the interest of expedition and limited to information which appears reasonably calculated to lead to the discovery of admissible evidence, any participant may serve upon any other participant in a proceeding written interrogatories requesting nonprivileged information relevant to the subject matter in such proceeding, to be answered by the participant served, who shall furnish such information as is available to the participant. A participant through interrogatories may require any other participant to identify each person whom the other participant expects to call as a witness at the hearing and to state the subject matter on which the witness is expected to testify. The participant serving the interrogatories shall file a copy thereof with the Secretary pursuant to § 3001.9 and shall serve copies upon other participants who request them.

(b) **Answers** *[.] and objections.* Each interrogatory shall be answered separately and fully in writing under oath, unless it is objected to, in which event the reasons for objection shall be stated in lieu of an answer [in the manner prescribed by paragraph (c) of this section.] *An interrogatory otherwise proper is not necessarily objectionable because an answer would involve an opinion or contention that relates to fact or the application of law to fact, but the Commission or presiding officer may order that such an interrogatory need not be answered until a prehearing conference or other later time.* The answers are to be signed by the person making them. *and the objection signed by the attorney making them.* The party responding to the interrogatories shall serve the answers *and objections,* if any, on the party who served the interrogatories within 20 days of the service of the interrogatories or within such other period as may be fixed by the presiding officer, but before the conclusion of the hearing. Copies of the answers *and objections, if any,* to interrogatories shall be filed with the Secretary pursuant to § 3001.9 and shall be served upon other participants who request them.

[(c) **Objections.** In the interest of expedition, the bases for objection shall be clearly and fully stated. A participant claiming privilege shall identify the specific evidentiary privilege asserted and state the reasons for its applicability. A participant claiming undue burden shall state with particularity the effort which would be required to answer the interrogatory, providing estimates of cost and man-hours required, to the extent possible. An interrogatory otherwise proper is not necessarily objectionable because an answer would involve an opinion or contention that relates to fact or the application of law to fact, but the

Commission or presiding officer may order that such an interrogatory need not be answered until a prehearing conference or other later time. Objections are to be signed by the attorney making them. The party objecting to interrogatories shall serve the objections on the party who served the interrogatories within 10 days of the service of the interrogatories. Copies of objections to interrogatories shall be filed with the Secretary pursuant to § 3001.9 and shall be served upon other participants who request them.

(d) **Compelled answers.** The Commission, or the presiding officer, upon motion of any participant to the proceeding, may compel an answer to an interrogatory to which an objection has been raised if the objection is found not to be valid, or may compel an additional answer if the initial answer is found to be inadequate. Such compelled answers shall be served on the party who moved to compel the answer within 10 days of the date of the order compelling an answer or within such other period as may be fixed by the presiding officer, but before the conclusion of the hearing. Copies of the answers shall be filed with the Secretary pursuant to § 3001.9 and shall be served upon other participants who request them.]

(e) [(e)] **Supplemental answers.** A participant who has answered interrogatories is under the duty to seasonably amend a prior answer if he obtains information upon the basis of which he knows that the answer was incorrect when made or is no longer true. [A participant filing a supplemental answer shall indicate whether the answer merely supplements the previous answer to make it current, or whether it is intended as a complete replacement for the answer previously given.]

(d) [(f)] **Orders.** The Commission or the presiding officer may order that any participant or person shall answer on such terms and conditions as are just and may for good cause make any protective order, including an order limiting or conditioning interrogatories, as justice requires to protect a party or person from undue annoyance, embarrassment, oppression, or expense.

§ 3001.26 Requests for production of documents or things for purpose of discovery.

(a) **Service and contents.** In the interest of expedition and limited to information which appears reasonably calculated to lead to the discovery of admissible evidence, any participant may serve on any other participant to the proceeding a request to produce and permit the participant making the request, or someone acting in his behalf, to inspect and copy any designated documents or things which constitute or contain matters, not privileged, which are relevant to the subject matter involved in the proceeding and which are in the custody or control of the participant upon which the request is served. The request shall set forth the items to be inspected either by individual item or category, and describe each item and category with reasonable particularity, and shall specify a reasonable time, place and manner of making inspection. The participant requesting the production of documents or things shall file a copy of the request with the Secretary pursuant to § 3001.9 and shall serve copies thereof upon other participants who ask for them.

(b) **Answers**[.] *and objections.* The participant upon whom the request is served shall serve a written answer on the participant who filed the request within 20 days after the service of the request, or within such other period as may be fixed by the presiding officer. The answer shall state, with respect to each item or category, that inspection will be permitted as requested unless the request is objected to [pursuant to subsection (c) below.] *in which event the reason for the objection shall be stated. If objection is made to part of an item or category, the part shall be specified.* The participant answering the request shall [sign and] file a copy of the answer with the Secretary pursuant to § 3001.9 and shall serve copies thereof upon other participants who request them.

[(c) **Objections.** In the interest of expedition, the bases for objection shall be clearly and fully stated. A participant claiming privilege shall identify the specific evidentiary privilege asserted and state the reasons for its applicability. A participant claiming undue burden shall state with particularity the effort which would be required to answer the request, providing estimates of cost and man-hours required, to the extent possible. Objections are to be signed by the attorney making them. The party objecting to requests shall serve the objections on the party requesting production of documents or things, upon the Secretary pursuant to § 3001.9 and upon other participants who request them, within 10 days of the request for production.]

(c) [(d)] **Orders.** The Commission or the presiding officer may, on such terms and conditions as are just and reasonable, order that any participant in a proceeding shall respond to a request for inspection, and may make any protective order of the nature provided in paragraph (d) [(f)] of § 3001.25 as may be appropriate. [Upon motion of any participant to the proceeding, the Commission or the presiding officer may compel production of documents or things to which an objection has been raised if the objection is found not to be valid. Such compelled documents or things shall be made available to the party making the motion within 10 days of the date of the order compelling production or within such other period as may be fixed by the presiding officer, but before the conclusion of the hearing. Documents or things ordered to be produced shall also be made available to the Secretary pursuant to § 3001.9 and to the other participants who request them.]

§ 3001.27 Requests for admissions for purpose of discovery.

(a) **Service and content.** In the interest of expedition any participant may serve upon any other participant a written request for the admission, for purposes of the pending proceeding only, of any relevant, unprivileged facts, including the genuineness of any documents or exhibits to be presented in the hearing. The participant requesting the admission shall file a copy of the request with the Secretary pursuant to § 3001.9 and shall serve copies thereof upon other participants who request them.

(b) **Answers** [.] *and objections.* Each matter of which an admission is requested shall be separately set forth and is admitted unless within 20 days after service of the request, or within such other period as may be fixed by the presiding officer, the participant to whom the request is directed serves upon the participant requesting the admission a written answer or [files] an objection [pursuant to subsection (c) below.] *addressed to the matter, which shall be signed by the participant or his attorney.* A participant who answers or objects to a request for admission shall file a copy of the answer or objection with the Secretary pursuant to § 3001.9 and shall serve copies thereof upon other participants who request them.

[(c) **Objections.** In the interest of expedition, the bases for objection shall be clearly and fully stated. A participant claiming privilege shall identify the specific evidentiary privilege asserted and state the reasons for its applicability. A participant claiming undue burden shall state with particularity the effort which would be required to answer the request, providing estimates of cost and man-

hours required to the extent possible. Objections are to be signed by the attorney making them.]

(c) [(d)] **Orders.** If the Commission or presiding officer determines that an answer does not comply with the requirements of this rule, it may order either that the matter is admitted or that an amended answer be served, or may determine that final disposition of the request be made at a pretrial conference or at a designated time prior to the hearing. [Upon motion of any participant to the proceeding, the Commission or the presiding officer may compel answers to a request for admissions to which an objection has been raised if the objection is found not to be valid. Such compelled answers shall be served on the party who moved to compel the answers within 10 days of the date of the order compelling production or within such other period as may be fixed by the presiding officer, but before the conclusion of the hearing. Copies of the answers shall be filed upon the Secretary pursuant to § 3001.9 and served upon other participants who request them.]

The contemplated changes, with minor revisions, were proposed by the Commission's Officer of the Commission, who is responsible for representing the interests of the general public in Commission proceedings. We believe the amendments will enhance our ability to carry out our statutory mandate of conducting proceedings "with utmost expedition" 39 U.S.C. § 3624. There have been occasions in recent proceedings when the resolution of motions relating to dscovery practice has caused delays. We believe the proposed amendments would reduce the possibility of repeating this experience.

In addition, the proposed change to Rule 25(e) would require a participant filing supplemental answers to interrogatories to indicate whether the answers are intended as clarifications of previous answers or replacements. The absence of such a requirement has, at times in the past, resulted in a certain amount of ambiguity regarding the status of supplemental answers. We believe the amendment would improve our rules without placing any undue burden on the participants in our proceedings.

Library References

Rule 31 of our rules of practice (39 CFR 3001.31) governs the submission of evidence in Commission proceedings. We contemplate amending Rule 31 by adding the following paragraph:

[(1) Designation of a document as a library reference is a procedure for facilitating reference to such document in Commission proceedings and does not, by itself, confer any particular evidentiary status upon such document. The evidentiary status of such document is governed by the preceding paragraphs of this section.]

The added paragraph is intended to clarify the status of library references. It makes it clear that designating a document as a library reference is merely a technique for allowing participants in our proceedings to make accurate and convenient reference to such document, and explains that the evidentiary status of library references is governed by paragraphs (a)–(k) of Rule 31.

Workpapers

Rules 54 and 64 of our rules of practice (39 CFR 3001.54 and 3001.64) set forth filing requirements for formal Postal Service requests for changes in rates or the Domestic Mail Classification Schedule. Rule 92 governs the filing of testimony by intervenors. We contemplate amending Rules 54, 64 and 92 as follows:

§ 54(p)(4).

(4) *When workpapers do not contain all the supporting data, the omitted data shall be indicated in a manner allowing the data to be retrieved upon request.* [Workpapers shall be sufficient to enable a reviewer to trace the derivation of numbers in the testimony back to published documents or, if necessary, primary data sources. Citations shall be sufficiently detailed to enable a reviewer to identify and locate the specific data used, e.g., by reference to document, page, line, column, etc.]

§ 64(g)(4).

(4) *When workpapers do not contain all the supporting data, the omitted data shall be indicated in a manner allowing the data to be retrieved upon request.* [Workpapers shall be sufficient to enable a reviewer to trace the derivation of numbers in the testimony back to published documents, or, if necessary, primary data sources. Citations shall be sufficiently detailed to enable a reviewer to identify and locate the specific data used, e.g., by reference to document, page, line, column, etc.]

§ 92(1)(4).

(4) *When supporting data are not supplied, a clear indication shall be made of the source of the data so that they might be retrieved easily upon request.* [Workpapers shall be sufficient to enable a reviewer to trace the derivation of numbers in the testimony back to published documents, or, if necessary, primary data sources. Citations shall be sufficiently detailed to enable a reviewer to identify and locate the specific data used, e.g., by reference to document, page, line, column, etc.]

The Commission believes clear and legible workpapers are essential to the analysis of the technical frequently offered by both the Postal Service and intervernors. Specific citations to workpapers will expedite the Commission's own analytical processes and facilitate the task of opposing parties, thereby reducing the time needed to prepare for cross-examination or rebuttal.

Ex Parte Communications

Rule 7 of our Rules of Practice (39 CFR 3001.7) contains prohibition on *ex parte* communications with members of the agency. We contemplate amending Rule 7 by adding the language set forth in brackets below and deleting the italicized material:

§ 3001.7 Ex parte communications.

[(a) **Definitions.**

(1) **Decision-making Commission personnel.** Subject to the exception stated in paragraph (a)(2)(ii) of this section, the following categories of persons are designated "decision-making Commission personnel":

(i) The Commission and their personal office staffs;

(ii) The General Counsel and his staff;

(iii) The Director of the Office of Technical Analysis and Planning and his staff.

(iv) Any other employee who may reasonably be expected to be involved in the decisional process.

(2) **Non-decision-making Commission personnel.** The following categories of persons are designated "non-decision-making Commission personnel":

(i) All Commission personnel other than decision-making Commission personnel;

(ii) Decision-making Commission personnel not participating in the decisional process owing to the prohibitions of § 3001.8 or 39 CFR 3000.735, Subpart C.]

(b) **Prohibition.** In any agency proceeding which [that] is required to be conducted in accordance with § 556 of title 5 or a proceeding conducted pursuant to Subpart H of this Part, except to the extent required for the disposition of ex parte matters as authorized by law—

(1) *No interested person outside the Commission or the Officer of the Commission designated to represent the interest of the general public shall* [Interested persons outside the Commission and non-decision-making Commission personnel shall not] make or knowingly cause to be made to any

member of the body comprising the Commission, administrative law judge, or other employee who is or may reasonably to expected to be involved in the decisional process of the proceeding [Commission decision-making personnel] on ex parte communication[s] relevant to the merits of the proceeding;

(2) *No member of the body comprising the Commission, administrative law judge, or other employee who is or may reasonably be expected to be involved in the decision process of the proceeding,* [Commission decision-making personnel] shall [not] make or knowingly cause to be made to any interested person outside the Commission [or to nondecision-making Commission personnel] *or the Officer of the Commission designated to represent the interest of the general public* an ex parte communication[s] relevant to the merits of the proceeding.

(3) *A member of the body comprising the Commission, administrative law judge, or other employee who is or may reasonably be expected to be involved in the decisional process of the proceeding,* [Commission decision-making personnel] who receive *s an* ex parte communication[s] relevant to the merits of the proceeding shall decline to listen to such communication[s] and explain that the matter is pending for determination. [Any] recipient thereof shall advise the communicator that he will not consider the communication and shall promptly and fully inform the Commission in writing of the substance of and the circumstances attending the communication, so that the Commission will be able to take appropriate action.

(4) *A member of the body comprising the Commission, administrative law judge, or other employee who is or may reasonably be expected to be involved in the decisional process of such proceeding* [Commission decision-making personnel] who receives, or who makes or knowingly causes to be made, a communication[s] prohibited by this paragraph shall place on the public record of the proceeding:

(i) All such written communications;

(ii) Memoranda stating the substance of all such oral communications; and

(iii) All written responses, and memoranda stating the substance of all oral responses, to the materials described in paragraph *(a)(4)(i)* [(b)(4)(i)] and *(a)(4)(ii)* [(b)(4)(ii)] of this section.

(5)(a) Requests for an opportunity to rebut, on the record, any facts or contentions contained in an ex parte communication which have been placed on the public record of the proceeding pursuant to paragraph [(b)(4)] *(a)(4)* of this section may be filed in writing with the Commission. The Commission will grant such requests only where it determines that the dictates of fairness so require. Generally, in lieu of actually receiving rebuttal material, the Commission will direct that the alleged factual assertion and the proposed rebuttal be disregarded in arriving at a decision.

(b) *Officer of the Commission. The prohibitions of paragraph (a) of this section shall apply to the Officer of the Commission designated to represent the interest of the general public (or his staff or the technical staff designated to support him); however, the prohibitions of paragraph (a) of this section do not apply to a communication between a participant, a limited participator, or a commenter and the Officer of the Commission (or his staff or the technical staff designated to support him), if such communication relates to matters of procedure only, including matters arising in the course of requests for interrogatories or discovery and informal requests for clarification of evidentiary material. Said Officer shall file with the Commission a monthly report briefly describing any ex parte communication received pursuant to this exception, and this report, which shall be a public record of the Commission, shall identify the individuals involved and the nature of the subject matter discussed.*

(c) **Applicability.** (1) The prohibitions of paragraph *(a)* [(b)] of this section shall apply beginning at the time at which a proceeding is noticed for hearing or appeal unless the person responsible for the communication has knowledge that it will be noticed, in which case the prohibitions shall apply beginning at the time of his acquisition of such knowledge.

(2) Paragraph *(a)* [(b)] of this section does not constitute authority to withhold information from Congress.

(d) Violations of ex parte rules. (1) Upon *receipt* [notice] of a communication knowingly made or knowingly caused to be made by a party in violation of paragraph (a) [(b)] of this section, the Commission, administrative law judge, or other employee presiding at the hearing may, to the extent consistent with the interests of justice and the policy of the underlying statutes, require the party to show cause why his claim or interest in the proceeding should not be dismissed, denied, disregarded, or otherwise adversely affected on account of such violation.

(2) The Commission may, to the extent consistent with the interests of justice and the policy of the underlying statutes administered by the Commission, consider a violation of paragraph *(a)* [(b)] of this section sufficient grounds for a decision adverse to a party who has knowingly committed such violation or knowingly caused such violation to occur.

We further contemplate changing 39 CFR 3000.735–501 to comport with the proposed changes to Rule 7. The amendment to § 3000.735–501 would be as follows:

Subpart E—Ex Parte Communications

§ 3000.735–501 Ex parte communications prohibited.

(a) An employee [Decision-making Commission personnel, as defined in § 3001.7(a),] shall not, either in an official or unofficial capacity, participate in any ex parte communication—either oral or written—with any person regarding (1) a particular matter (substantive or procedural) at issue in contested proceedings before the Commission or (2) the substantive merits of a matter that is likely to become a particular matter at issue in contested proceedings before the Commission. A particular matter is at issue in contested proceedings before the Commission when it is a subject of controversy in a hearing held under 39 U.S.C. 3624 or 3661(c). However, this section does not prohibit participation in off-the-record proceedings conducted under regulations adopted by the Commission for hearings held under 39 U.S.C. 3624 or 3661(c).

(b) The prohibitions of this section do not apply to a communication between a participant or a limited participator and the Officer of the Commission designated to represent the interest of the general public (or his staff, or the technical staff designated to supported him), if such communication relates to matters of procedure only, including matters arising in the course of requests for interrogatories or discovery and informal requests for clarification of evidentiary material. Said Officer shall file with the Commission a monthly report briefly describing any ex parte communication received pursuant to this exception, and this report, which shall be a public record of the Commission, shall identify the individuals involved and the nature of the subject matter discussed.

The proposed amendments would rewrite the Commission's *ex parte* rule, taking into account the difference between decision-making and non-decision-making personnel. Currently, the Commission's *ex parte* prohibitions extend to all personnel, including the Officer of the Commission (OOC) designated to represent the interests of

the general public in Commission proceedings.

In the formulation of policy guidelines for the representation of the interest of the general public in Commission proceedings the Commission has reevaluated its application of the *ex parte* rule to the OOC, and has concluded that the importance of permitting contacts between the OOC and members of the general public outweighs the need for applying the rule to the OOC. The key consideration underlying this decision is the fact that Commission personnel assigned to the Officer of the Commission are precluded from participating in any part of the Commission decision-making process (*see* § 3001.8), and are themselves precluded by the *ex parte* rule from communications with decision-making Commission personnel. Procedural fairness does not, therefore, require any limitations on contacts between the Officer of the Commission and the general public which he/she represents.

In the formulation of these amendments, the Commission has examined the *ex parte* rules of several other independent federal regulatory agencies and found that, without exception, they all restrict application of thier rules to decision-making personnel. *See* 47 CFR §§ 1.1209–1.1251 (Federal Communications Commision); 49 CFR § 1100, Appendix C (Interstate Commerce Commission); 18 CFR § 1.4 (D) Federal Energy Regulatory Commission); 17 CFR §§ 200.110–200.114 (Securities and Exchange Commission); 16 CFR § 4.7 (Federal Trade Commission); 29 CFR §§ 102.126–102.133 (National Relations Board); 14 CFR § 3000.2 (Civil Aeronautics Board); 17 CFR § 10.10 (Commodity Futures Trading Commission); 46 CFR § 502.20(b) (Federal Maritime Commission); 16 CFR § 1025.68 (Consumer Product Safety Commission); 40 CFR § 22.08 (Environmental Protection Agency); and 10 CFR § 2.780 (Nuclear Regulatory Commission).

Finally, the proposed changes to the Commission's rules would extend the *ex parte* rule to communications between non-decision-making and decision-making Commission personnel. While the Commission's past practice has been to apply the restriction to decision-making personnel who are not participating in the decisional process with respect to a given case owing to 39 CFR § 3001.8 or 39 CFR § 3000.735, Subpart C, the prohibition has not been explicitly stated in Commission's rules.

David F. Harris,

Secretary.

[FR Doc. 80-15667 Filed 5-21-80; 8:45 am]

BILLING CODE 7715-01-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 61

[FRL 1498-2; Docket No. OAQPS 79-3]

National Emission Standards for Hazardous Air Pollutants; Benzene Emissions From Maleic Anhydride Plants

AGENCY: Environmental Protection Agency (EPA).

ACTION: Amended Notice of Public Hearing and Extension of Public Comment Period.

SUMMARY: On April 18, 1980, EPA proposed in the **Federal Register** (45 FR 26660) a national emission standard for benzene emissions from maleic anhydride plants.

In that notice, EPA announced the date ending the public comment period and the date and location of the public hearing to receive public comment on the proposed standards, the health effects of benzene, and the listing of benzene as a hazardous air pollutant. This notice amends the date and location of the public hearing and extends the public comment period.

DATES: Written comments to be included in the record should be postmarked no later than August 21, 1980. Notice of intent to present oral testimony at the public hearing should be postmarked no later than July 15, 1980. The hearing will be held in Washington, D.C., on July 22, 1980. Written comments responding to, supplementing, or rebutting written or oral comments received at the public hearing must be submitted no later than August 21, 1980.

ADDRESSES: Comments on the health effects of benzene and the listing of benzene as a hazardous air pollutant should be submitted (in duplicate if possible) to: Central Docket Section (A–130), Attention: Docket Number OAQPS 79–3, Part I, U.S. Environmental Protection Agency, 401 M Street S.W., Washington, D.C. 20460. Comments on the proposed maleic anhydride standard should be submitted to: Central Docket Section (A–130), Attention: Docket No. OAQPS 79–3, Part II, same address.

The public hearing will be held at the General Services Administration Auditorium; 7th and D Streets, S.W., Washington, D.C. beginning at 9:00 a.m.

Persons wishing to present oral testimony should notify Deanna Tilley, Standards Development Branch (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–5477.

FOR FURTHER INFORMATION CONTACT: Susan R. Wyatt, Standards Development Branch (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–5477.

SUPPLEMENTARY INFORMATION: The public hearing has been postponed and the public comment period has been extended in response to requests from the American Petroleum Institute and Dow Chemical USA. These requests expressed the need to review more completely the large amount of information that has been and is being developed on benzene health effects, to inspect the docket before the public hearing, and to prepare testimony and written comments on the associated technological and policy related issues.

Dated: May 16, 1980.

David G. Hawkins,

Assistant Administrator for Air, Noise, and Radiation.

[FR Doc. 80-15717 Filed 5-21-80; 8:45 am]

BILLING CODE 6560-01-M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 67

[Docket No. 21263]

Integration of Rates and Services for the Provision of Communications by Authorized Common Carriers Between the United States Mainland, and Hawaii, Alaska and Puerto Rico/Virgin Islands; Order Deferring Requirement To File Comments and Replies To Supplemental Information Request

AGENCY: Federal Communications Commission.

ACTION: Proposed rule; deferral of requested information.

SUMMARY: The Federal-State Joint Board, convened in the proceeding relating to the integration of communication rates and services by authorized common carriers between the United States Mainland, and Hawaii, Alaska and Puerto Rico/Virgin Islands, published a request for supplemental information at 45 FR 24212, April 9, 1980. Because of the filing and possible favorable action on certain

proposed settlement agreements in the proceeding, it has been determined to defer the submission of the requested information pending further action by the Joint Board.

DATES: Comments and replies deferred indefinitely.

ADDRESSES: Federal Communications Commission, Washington, D.C. 20554.

FOR FURTHER INFORMATION CONTACT: Francis L. Young, Common Carrier Bureau (202) 632-3772.

IN the matter of Integration of Rates and Services for the Provision of Communications by Authorized Common Carriers Between the United States Mainland, and Hawaii, Alaska and Puerto Rico/Virgin Islands, Docket No. 21263.

Order

Adopted: April 29, 1980.
Released: May 5, 1980.

1. A *Supplemental Information Request* 45 FR 24212, April 9, 1980, ordered the parties to submit a memorandum of law and responses to detailed data requests no later than thrity days after publication of the Request in the Federal Register. On April 25, 1980, American Telephone and Telegraph Company (AT&T) and Alascom, Inc. (Alascom) filed a proposed agreement looking to a settlement of the outstanding issues between them and also of the issues in this proceeding relating to Alaska. AT&T and Alascom further requested withdrawal or deferral pending action on their propsed agreement of the Request.

2. It appearing, that favorable action on the AT&T and Alascom agreement by the Federal-State Joint Board would moot the requested Supplemental Information Request;

3. It further appearing, that deferral of the submission of the requested information pending Joint Board action would alleviate a burden on all parties and would not unduly delay expeditious resolution of this proceeding;

4. It is ordered, pursuant to delegated authority, that the requirement to file comments and replies to Supplemental Information Request, 45 FR 24212, is deferred pending further action by the Federal-State Joint Board.

Federal Communications Commission.

Philip L. Verveer,

Chief, Common Carrier Bureau.

[FR Doc. 80-15870 Filed 5-21-80; 8:45 am]

BILLING CODE 6712-01-M

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Parts 173 and 177

[Docket HM-164; Notice No. 80-1]

Highway Routing of Radioactive Materials; Additional Public Hearings; Extension of Time for Public Comment

Correction

In FR Doc. 80-14870 appearing on page 32030 in the issue for Thursday, May 15, 1980, in the third column, the sixth line from the bottom reads "Police Headquarters Auditorium." but should be corrected to read "Police Headquarters Auditorium, 1 Police Plaza."

BILLING CODE: 1505-01-M

INTERSTATE COMMERCE COMMISSION

49 CFR Part 1048

[Ex Parte No. MC-37 (Sub-No. 31)]

Commercial Zones and Terminal Areas; Tacoma, Wash., Commercial Zone

AGENCY: Interstate Commerce Commission.

ACTION: Notice of Proposed Rulemaking.

SUMMARY: The Commission has been requested to consider whether to amend its existing regulations set forth in 49 CFR 1048, et seq., to expand the Tacoma, WA, commercial zone to include a specified area adjacent to the present zone. The proposed special determination of the Tacoma commercial zone (now defined by application of the population-mileage formula set forth in 49 CFR 1048.101) would expand the zone within which interstate motor carrier operations would be exempt from Federal economic regulation.

DATES: Comments must be filed with the Commission on or before June 23, 1980.

ADDRESS: Send comments (an original and 15 copies where possible) to: Ex Parte No. MC-37 (Sub-No. 31), Room 5416, Office of Proceedings, Interstate Commerce Commission, Washington, DC 20423.

FOR FURTHER INFORMATION CONTACT: Barbara Reideler, 202-275-5682, or Donald J. Shaw, Jr., 202-275-7292.

SUPPLEMENTARY INFORMATION: The commercial zone of Tacoma, WA as defined by application of the population-mileage formula set forth in 49 CFR 1048.101, includes all points within 8 miles of the municipal limits of Tacoma. The Square D Company, which operates a facility near Orting, WA, known as the Nelco Plant, requests that the limits of the Tacoma commercial zone be individually determined to include a specified area adjacent to the boundary of the present zone. Petitioner proposes that 49 CFR 1048 be supplemented by addition of the following:

§ 1048.18 Tacoma, Washington.

The zone adjacent to, and commercially a part of Tacoma, WA, within which transportation by motor vehicle, in interstate or foreign commerce, not under control, management, or arrangement for shipment to or from points beyond such zone, is partially exempt from regulation under section 49 U.S.C. 10526(b)(1) of the Interstate Commerce Act includes and is comprised of all points as follows:

(a) The municipality of Tacoma, WA, itself;

(b) All points within a line drawn 8 miles beyond the municipal limits of Tacoma;

(c) Those points within that area more than 8 miles beyond the municipal limits of Tacoma, bounded by a line as follows: From the intersection of WA Hwy 162 and 128th St., East, extending along 128th St., East, to the Puyallup River, then south along the Puyallup River .8 miles to the fork of the Carbon River, then south along the Carbon River 3.8 miles to its intersection with Wade Creek, then southeast along Wade Creek 2.3 miles to the Bonneville Power Line, then southwest along the Bonneville Power Line 3 miles to the Puyallup River, then north along the Puyallup River 7 miles to its intersection with WA Hwy 162, then along WA Hwy 162.7 miles to its intersection with 128th St., East.

Petitioner is essentially seeking the redefinition of the limits of the Tacoma commercial zone to include wholly the city of Orting, WA, which has a population of 1,680 persons and is located 4 miles outside the limits of the present zone, and the Nelco Plant of the Square D Company, which is situated approximately 2 miles south of Orting.

It is Commission policy to describe specifically defined zones along readily identifiable boundaries. The use of such designations as streets, rights-of-way, and small waterways is to be avoided. We, therefore, suggest that interested persons submit comments suggesting a more feasible way to describe the

proposed area as set forth by petitioner, using in part such identifiable boundaries as State or county lines and State or Federal highways.

Square D presents various geographic, demographic, and economic information regarding the proposed area in support of its position that the area should be considered adjacent to and commercially a part of Tacoma. Specifically, petitioner states that the area is within a valley the southern tip of which is otherwise included in the commercial zone of Tacoma. It urges that the proposal is a natural extension of the Tacoma commercial zone. Also, attached to the petition are seven letters from representatives of government agencies, commercial groups, and individual businesses which favor expansion of the Tacoma commercial zone to include Orting and the Nelco Plant of Square D Company.

Comments and Procedural Matters

No oral hearing in this proceeding is contemplated. Any person (including petitioner) wishing to participate in the proceeding, in support of or in opposition to the proposal, is invited to submit written representations, views, and arguments. Comments suggesting modifications to the description of the proposed extension of the zone are encouraged. We do not believe that the action proposed will have an adverse effect on either the quality of the human environment or conservation of energy resources. However, anyone may comment on these aspects of the proposal. Written material or suggestions submitted will be available for public inspection at the Office of the Secretary of the Interstate Commerce Commission, 12th and Constitution Avenues, N.W., Washington, D.C., during regular business hours.

Notice to the general public of the matters under consideraton will be given by depositing a copy of this notice in the Office of the Secretary of the Commission for public inspection and by filing a copy with the Director, Office of the Federal Register.

This notice of proposed rules is issued under authority of 49 U.S.C. 10321, 49 U.S.C. 105 and 5 U.S.C. 553.

Decided: May 13, 1980.

By the Commission, Division 1, Commissioners Clapp, Gesham, and Trantum.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 80-15679 Filed 5-21-80; 8:45 am]

BILLING CODE 7035-01-M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 23

Proposed Addition of Three Primates and Seven Cacti to Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora

AGENCY: U.S. Fish and Wildlife Service, Interior.

ACTION: Notice of proposal submitted by the United States.

SUMMARY: The Convention is a 59-nation treaty controlling import and export of species listed in three appendices, for the purpose of protecting those species against over exploitation through international trade. The Service has obtained information on the Diana monkey, mandrill, yellow-tailed woolly monkey and seven species of Mexican cactus plants indicating that they are threatened with extinction and therefore should be transferred from Appendix II to Appendix I. This would help insure that trade in them is subject to strict regulation. The present notice announces that the Service is communicating these proposals to the Secretariat for the Convention, so that they may be considered by the Party nations through a postal procedure provided in the Convention.

DATE: These proposals will be sent to the Secretariat immediately after publication of this notice in the **Federal Register.**

ADDRESS: Please send correspondence to the Office of the Scientific Authority, U.S. Fish and Wildlife Service, Washington, DC 20240. Materials concerning this notice are available for public inspection from 7:45 a.m. to 4:15 p.m., Monday through Friday, in room 536, 1717 H Street, NW, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Dr. Richard L. Jachowski, Office of the Scientific Authority, U.S. Fish and Wildlife Service, Washington, DC, telephone (202) 653-5948.

SUPPLEMENTARY INFORMATION: On January 4, 1980, the Service published a notice in the **Federal Register** (45 FR 1110) requesting information on certain species that were being considered for transfer from Appendix II to Appendix I of the Convention (TIAS 8249). There was evidence that each of these species is threatened with extinction, and the Service was considering inclusion in Appendix I as a means of more strictly controlling any international trade in them.

The notice published on January 4, 1980, briefly described the status of each species. Copies of the notice were sent to conservation officials in the nations where the species occur. Information and comments received from those officials and from other persons are as follows.

General expressions of support for the proposals concerning species of cactus plants native to Mexico were received from the Houston Cactus and Succulent Society, the Michigan Department of Natural Resources, and those officials of African nations who were commenting primarily on the primate species discussed below.

Dr. Frank G. Schlicht of Missouri City, Texas, provided information on four of the cactus species in question. He reported that *Ariocarpus agavoides* seems to be more widely distributed than previously indicated, being found on more than one hill at the type locality and, from accounts by local residents, occuring on similar hills near Tula, Mexico. He stated that his efforts to find this plant at another reported site at San Robert Junction, Nuevo Leon, have been fruitless.

Concerning *Ariocarpus scapharostrus*, Dr. Schlicht wrote that it also is more widely distributed than previously indicated, occuring on several hills at Los Rayones and being reported approximately 30 miles north at Cosillas and Santa Rosa, Nuevo Leon. He reported that it is not abundant and thus it is extremely vulnerable to overcollection. There was limited local exploitation of this plant in Los Rayones for what seems to have been medicinal use.

Dr. Schlicht reported that he found *Aztekium ritteri* in the same location as *Ariocarpus scapharostrus*, near Los Rayones. He noted that it was abundant on a canyon wall where it was relatively inaccessible. The plants have been used locally as ornaments during the Christmas season. A former commercial collector told Dr. Schlicht that the species also occurs near Cadereyta in the State of Queretaro, where the population was severely damaged by fire in the early 1970's. Dr. Schlicht noted that this species has been highly prized by collectors in his area, and trade is apparently substantial. A colleague told him of seeing 2,000-3,000 freshly collected plants of this species in January 1980, at a nursery in Brownsville, Texas.

Dr. Schlicht was unable to find *Obregonia denegrii* at any of the previously reported sites in the Jaumave Valley, but he did find an abundant population of this plant west of San Antonio that was apparently

unexploited. He noted that the species is very easy to collect due to the type of substrate it grows in, making it vulnerable to exploitation.

In summary, Dr. Schlicht remarked that he has not visited any of the above locations in the last four years, and that since then substantial changes could have occurred. He observed that there seems to be no local protection for these four species and all are highly prized by collectors. They occur in very localized areas that make them vulnerable to extirpation. Because they grow slowly from seed, they are unlikely to be propagated in nurseries. He recommended that they be transferred to Appendix I.

The Director General of the Direccion General de la Fauna Silvestre in Mexico referred the Service's request for information on cacti to the Director General de Aprovechamientos Forestales, who has not responded. However, the delegate for Mexico at the Special Working Session of Parties to the Convention in 1977 endorsed these proposals. The Service received no further information on the other cactus species considered for proposal: *Echinocereus lindsayi, Pelecyphora aselliformis* and *Pelecyphora strobiliformis.*

The governments of Senegal and Peru wrote in support of the proposals concerning *Cercopithecus diana* (Diana monkey) and *Lagothrix flavicauda* (yellow-tailed woolly monkey) respectively.

General statements of support for transferring these species and *Papio sphinx* (mandrill) to Appendix I were made by officials of Ghana, Togo and the Gambia, and by the Executive Director of the American Association of Zoological Parks and Aquariums. However, the latter organization and directors of the Fort Worth Zoological Park and Philadelphia Zoological Garden expressed concern that statements in the **Federal Register** notice of January 4, 1980, about trade in *Cercopithecus diana* and *Papio sphinx* for zoological exhibition purposes were unsubstantiated.

In response, the Service notes that remarks on the use of these species for zoological exhibition were not intended to imply that actions of zoos in the United States are a threat to their survival. Most specimens now in U.S. zoos have been born in captivity. Since October 19, 1976, imports of these species have been regulated under the Endangered Species Act of 1973. The January 4 **Federal Register** notice made it clear that habitat loss and hunting are the main threats. Reasons for such worldwide trade as occurs are likely to be zoological exhibition and biomedical research.

In conclusion, because evidence indicates that the following species are threatened with extinction and are or may be affected by trade, the Service has decided to submit proposals to transfer them from Appendix II to Appendix I under the postal procedure provided by the Convention:

1. *Ariocarpus agavoides* (living rock cactus)
2. *Ariocarpus scapharostrus* (living rock cactus)
3. *Aztekium ritteri* (Aztec cactus)
4. *Echinocereus lindsayi* (cactus)
5. *Obregonia denegrii* (cactus)
6. *Pelecyphora aselliformis* (hatchet cactus)
7. *Pelecyphora strobiliformis* (cactus)
8. *Cercopithecus diana* (Diana monkey)
9. *Papio* (=*Mandrillus*) *spinx* (mandrill)
10. *Lagothrix flavicauda* (yellow-tailed woolly monkey).

The effect of this transfer, if adopted, would be to control more strictly international trade in these species by requiring both import and export permits and by prohibiting such trade for primarily commercial purposes.

The Service will publish subsequent notices in the **Federal Register** about comments and recommendations from the Party nations and from the Convention Secretariat, and about further international action on these proposals.

This notice was prepared by Dr. Richard L. Jachowski, Office of the Scientific Authority.

Dated: May 15, 1980.

Lynn A. Greenwalt,

Director, Fish and Wildlife Service.

[FR Doc. 80-15746 Filed 5-21-80; 8:45 am]

BILLING CODE 4310-55-M

Notices

Federal Register
Vol. 45, No. 101
Thursday, May 22, 1980

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.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

Public Information Meeting

Notice is hereby given pursuant to Section 800.6(b)(3) of the Council's regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800), that on June 26, 1980, at 7:30 p.m., a public information meeting will be held at the Main Courtroom, Cheraw Town Hall, at the corner of Market and Second Streets, Cheraw, South Caroliana.

The meeting is being called by the Executive Director of the Council in accordance with Section 800.6(b)(3) of the Council's regulations. The purpose of the meeting is to provide an opportunity for representatives of national, State, and local units of government, representatives of public and private organizations, and interested citizens to receive information and express their views concerning the proposed construction of a 16-unit housing project on Huger Street in Cheraw, South Carolina, and undertaking assisted by the Farmers Home Administration, Department of Agriculture, that will adversely affect the Cheraw Historic District, a property included in the National Register of Historic Places. Consideration will be given to the undertaking, its effects on the Cheraw Historic District and alternate courses of action that would avoid, mitigate, or minimize any adverse effects on the Historic District.

The following is a summary of the agenda of the meeting.

I. An explanation of the procedures and purpose of the meeting by a representative of the Executive Director of the Council.

II. A description of the undertaking and an evaluation of its effects on the Cheraw Historic District by the Farmers Home Administration.

III. A statement by the South Carolina State Historic Preservation Officer.

IV. Statements from local officials, private organizations and the public on the effects of the undertaking on the Cheraw Historic District.

V. A general question period.

Speakers should limit their statement to 5 minutes. Written statements in furtherance of oral remarks will be accepted by the Council at the time of the meeting. Additional information regarding the meeting is available from the Executive Director, Advisory Council on Historic Preservation, 1522 K Street NW., Washington, D.C. 20005; 202–254–3967.

Dated: May 16, 1980.

Robert R. Garvey, Jr.,

Executive Director.

[FR Doc. 80–15627 Filed 5–21–80; 8:45 a.m.]

BILLING CODE 4310–10–M

DEPARTMENT OF AGRICULTURE

Forest Service

Vegetative Management of Roadway Corridors USDA-Forest Service Gifford Pinchot National Forest; Finding of No Significant Impact

An Environmental Assessment discussing Vegetative Management of Roadway Corridors, including the use of chemicals, is available for public review in the Supervisor's Office of the Gifford Pinchot National Forest in Vancouver, Washington.

The Environmental Assessment covers all roads in the Gifford Pinchot National Forest. Of the 2500 miles that will be brush controlled approximately 25% will be treated with chemicals. This would be approximately 625 miles and 750 acres to be chemically treated. The chemicals will be applied using hand held spray wands. The principle chemicals used will be 2, 4–D and 2, 4–DP.

The Environmental Assessment does not indicate there is a major Federal action significantly affecting the quality of the human environment.

Therefore, it has been determined that an environmental impact statement is not needed.

This determination was based upon consideration of the following factors, which are discussed in detail in the Environmental Assessment:

A. The alternative chosen will have no long-term adverse effect on the local short-term uses of the environment;

B. There are no irreversible or irretrievable commitments of resources;

C. No adverse cumulative or secondary effects;

D. Physical and biological effects limited to the area of use;

E. No known threatened or endangered plants or animals are within the affected area.

Some public concern exists over the use of any chemical and the effects it has on water quality. The proposed project includes application measures designed to protect nontarget areas and water quality. State and Federal water quality standards will be met.

No action will be taken prior to thirty (30) days from the date this Finding is published in the **Federal Register**.

The responsible official is Robert Tokarczyk, Forest Supervisor, Gifford Pinchot National Forest, 500 West 12th Street, Vancouver, WA 98660.

Dated: May 13, 1980.

Duane G. Tucker,

Deputy Forest Supervisor.

[FR Doc. 80–15628 Filed 5–21–80; 8:45 am]

BILLING CODE 3410–11–M

CIVIL AERONAUTICS BOARD

[Order 80–5–99; Docket 38153]

Sun International Airways, Inc.; Petition for Advance Compensation for Losses

Order

Adopted by the Civil Aeronautics Board at its office in Washington, D.C. on the 14th day of May 1980.

On February 22, 1980, Sun International Airways, Inc. filed a 30-day notice under section 419(a)(3)(B) of the Act announcing its intent to suspend service at Aguadilla, Puerto Rico, effective March 23, 1980. By Order 80–3–130, March 20, 1980, we prohibited Sun International's suspension for 30 days, or until a fit, willing, and able replacement carrier is found by us to be capable of inaugurating and maintaining essential service at Aguadilla.[1]

On May 8, 1980, Sun International petitioned for advance compensation for losses pursuant to section 419 of the Act

[1] We have since extended Sun International's obligation.

and Part 324 of our Procedural Regulations. The carrier provided a detailed explanation of its estimated traffic, revenue, and cost, and seeks a monthly rate of compensation of $48,132.87. It alleges that advance compensation is required because it has suffered substantial losses in providing the forced service, and that it lacks sufficient funds to survive subsequent compulsory periods.

We have reviewed Sun International's petition and find that it reasonably supports compensation on an interim basis, but at a somewhat lower level than requested. We have reduced revenue aircraft block hours used in calculating direct expenses from 240.8 to 205.7, consistent with the carrier's scheduled block time. Although it alleges actual block time is greater, no evidence was submitted to support this claim. This adjustment reduces its direct aircraft operating expenses by $4,115, and its compensation requirement from $48,113 to $44,018 per 30-day period.

Finally, we will not make the payment in advance as requested by Sun International. As we stated in the preamble to our interim rate governing compensation for losses sustained in providing forced service (Regulation PR–209, page 4), advance compensation will be made in instances where a carrier shows that without the advance its financial difficulties in continuing service are of a magnitude that it might not survive the 30-day period. While the carrier claims that it lacks sufficient funds to survive subsequent compulsory periods, it provides no support for this claim. Further, we note that the first compulsory period is past, for which the carrier will be paid upon issuance of this order. There is no indication that the carrier has taken into account the financial relief that will be provided by such funds. Sun International simply has not made a compelling showing that its ability to continue to provide service is in jeopardy in the absence of advance compensation.

Accordingly, pursuant to the Federal Aviation Act of 1958, as amended, particularly sections 102, 204, 419, and 1002(b), and the regulations promulgated in 14 CFR Parts 302 and 324:

1. We set the interim level of compensation for losses sustained by Sun International Airways, Inc., by virtue of its provision of essential air service between Aguadilla and San Juan, Puerto Rico at $107.00 for each scheduled flight completed, subject to a maximum payment of $44,018 for each 30-day period beginning March 24, 1980;

2. This proceeding shall remain open pending entry of an order fixing the final rate of compensation, and the amount of such rate of compensation may be the same as, lower than, or higher than the interim rate set here; and

3. We shall serve this order upon all parties to this proceeding.

We shall publish this order in the **Federal Register.**

By the Civil Aeronautics Board.[2]

Phyllis T. Kaylor,

Secretary.

[FR Doc. 80–15755 Filed 5–21–80; 8:45 am]

BILLING CODE 6320–01–M

COMMISSION ON CIVIL RIGHTS

New York Advisory Committee; Change in Meeting Date

Notice is hereby given, pursuant to the provisions of the Rules and Regulations of the U. S. Commission on Civil Rights that a planning meeting of the New York Advisory Committee of the Commission originally scheduled for May 22, 1980, at New York, New York, (FR Doc. 80–14435 on page 31148) has been changed.

The meeting will be held on June 19, 1980. The time and place of the meeting will remain the same.

Dated at Washington, D.C. May 19, 1980.

Thomas L. Newmann,

Advisory Committee Management Officer.

[FR Doc. 80–15686 Filed 5–21–80; 8:45 am]

BILLING CODE 6335–01–M

DEPARTMENT OF COMMERCE

International Trade Administration

Certain Fasteners From India; Hearing

AGENCY: U.S. Department of Commerce.

ACTION: Notice of Hearing.

SUMMARY: This notice is to advise the public that an oral hearing is being scheduled concerning the above-captioned investigation. The date for this hearing, as published in the notice of "Preliminary Countervailing Duty Determination" (45 FR 28786), is being changed to Monday, June 16, 1980 at the U.S. Department of Commerce, Rm. 3817, 14th & Constitution Avenue, NW., Washington, D.C. 20230, beginning at 10:00 a.m.

EFFECTIVE DATE: May 22, 1980.

FOR FURTHER INFORMATION CONTACT: Mary S. Clapp, Import Administration Specialist, Office of Investigations, International Trade Administration, Department of Commerce, Washington, D.C. 20230 (202–377–5496).

SUPPLEMENTARY INFORMATION: A proper request for an oral hearing concerning the above-captioned investigation has been received in and approved by the office of the Deputy Assistant Secretary for Import Administration. In accordance with section 355.35, Commerce Regulations (19 CFR 355.35, 45 FR 4946), interested parties will have an opportunity to present oral views on the matter. The time and place for this hearing, as published in the notice of "Preliminary Countervailing Duty Determination" (45 FR 28786), is being changed. The hearing will be held at the U.S. Department of Commerce, Rm. 3817, 14th & Constitution Avenue, NW., Washington, D.C. 20030 beginning at 10:00 a.m. on Monday, June 16, 1980.

Interested parties must submit pre-hearing briefs no later than Monday, June 9, 1980 to the office of the Deputy Assistant Secretary for Import Administration, Rm. 2800A at the address shown above. Oral presentations by persons submitting pre-hearing briefs will be limited to those issues raised in the briefs. This notice is published in accordance with section 355.35 Commerce Regulations (19 CFR 355.35, 45 FR 4946).

John D. Greenwald,

Deputy Assistant Secretary for Import Adminstration.

May 16, 1980.

[FR Doc. 80–15680 Filed 5–21–80; 8:45 am]

BILLING CODE 3510–25–M

Certain Steel Pipe and Tube From Japan; Amendment to Notice of Initiation of Antidumping Investigation

AGENCY: U.S. Department of Commerce.

ACTION: Amendment of Notice of Initiation of Antidumping Investigation.

SUMMARY: This notice is to advise the public that the Department of Commerce is amending its "Notice of Initiation of Antidumping Investigation" with regard to certain steel pipes and tubes from Japan. This action corrects an error in the description of the subject merchandise. In addition, the public is advised that, as a result of a preliminary determination of material injury announced by the United States International Trade Commission on April 9, 1980, the investigation with regard to a portion of the subject merchandise is terminated.

EFFECTIVE DATE: May 22, 1980.

FOR FURTHER INFORMATION CONTACT: Steve Garment, Office of Investigations, International Trade Administration, U.S. Department of Commerce, Washington, D.C. 20230 (202–377–1756).

SUPPLEMENTARY INFORMATION: On March 25, 1980, a "Notice of Initiation of Antidumping Investigation" with regard

[2] All Members concurred.

to certain steel pipe and tubing from Japan was published in the **Federal Register** (45 FR 19285). That notice stated, "For the purposes of this investigation, the term 'certain steel pipe and tubing' means welded pipes of steel provided for in item number 610.3205 of the Tariff Schedules of the United States Annotated (TSUSA) and seamless pipes and tubes of steel, of circular cross section, provided for in TSUSA items 610.4920, 610.5210, 610.5215, or 610.5270". The description of merchandise provided for in item 610.3205 was in error. Therefore, the notice is hereby amended by the deletion of the above quoted paragraph, and the insertion of the following paragraph:

"For the purposes of this investigation, the term 'certain steel pipe and tubing' means welded pipes and tubes of steel, suitable for boiler applications, provided for in item number 610.3205, Tariff Schedules of the United States Annotated (TSUSA) and seamless pipes and tubes of steel, of circular cross section, provided for in TSUSA items 610.4920, 610.5210, 610.5215 or 610.5270."

In addition, as a result of a preliminary determination of material injury with respect to the subject merchandise announced by the United States International Trade Commission on April 9, 1980, this investigation is being terminated with respect to merchandise provided for in TSUSA items 610.4920, 610.5210, 610.5215 or 610.5270. The antidumping investigation will continue with respect to welded pipes and tubes of steel, suitable for boiler applications, provided for in TSUSA item 610.3205.

John D. Greenwald,

Deputy Assistant Secretary for Import Administration.

May 16, 1980.

[FR Doc. 80-15681 Filed 5-21-80; 8:45 am]

BILLING CODE 3510-25-M

President's Export Council, Subcommittee on GATT and Multilateral Trade Agreements; Open Meeting

Pursuant to Section 10(a)(2) of the Federal Advisory Committee Act, as amended, 5 U.S.C. App. (1976), notice is hereby given that a meeting of the Subcommittee on GATT and Multilateral Trade Agreements of the President's Export Council will be held on Tuesday, June 10 at 9:00 a.m. in Room 457, Russell Office Building, Delaware and Constitution Ave., Washington, D.C. The Council was initially established by Executive Order 11753 of December 20, 1973, subsequently extended by Executive Order 11827 of January 4, 1975, Executive Order 11948 of December 20, 1976, and Executive Order 12100 of December 28, 1978. The Council was reconstituted by Executive Order 12131 of May 4, 1979, to advise the President on matters relating to United States export trade, including implementation of the President's National Export Policy.

The Subcommittee has been formed to give information and recommendations to the Council regarding matters relating to the General Agreement on Tariffs and Trade (GATT) and implementation of the Multilateral Trade Negotiations (MTN). It is composed solely of members from the Council.

The agenda for the meeting will be as follows:

1. Discussion of National Governors' Association initiatives on antitrust legislation, the Regional Trade Representative, and North American Cooperation.
2. Reorganization progress reports from the Departments of Commerce, Agriculture, State and Labor and the Office of the U.S. Trade Representative.
3. Report on MTN Implementation including the international codes, continuing negotiations, education of businesses and use of the Commerce/USTR advisory committees.
4. Briefing on memorandums of understanding and memorandums of agreement.

A limited number of seats at the meeting will be available to the public on a first-come basis. The public may file written statements with the Subcommittee before or after each meeting. Oral statements may be presented at the end of the meeting to the extent that time is available.

Copies of the minutes of the meeting and further information concerning the President's Export Council may be obtained from Ms. Wendy Haimes or Ms. Elizabeth Ruskin, Room 4015b, U.S. Department of Commerce, Washington, D.C. 20230, telephone (202) 377-5719.

Abraham Katz,

Assistant Secretary for International Economic Policy.

May 16, 1980

[FR Doc. 80-15646 Filed 5-21-80; 8:45 am]

BILLING CODE 3510-25-M

Office of the Secretary

Commerce Technical Advisory Board; Meeting

Pursuant to section 10(a)(2) of the Federal Advisory Committee Act, as amended, 5 U.S.C. App. (1976) notice is hereby given that the Commerce Technical Advisory Board will hold a meeting on Wednesday, May 28, 1980 from 9:00 a.m. until 5:00 p.m. at the IBM Fishkill Plant, Route 52, Hopewell Junction, New York and on Thursday, May 29, 1980 from 9:00 a.m. until 12 o'clock Noon at the IBM Homestead Facility, Boardman Road, Poughkeepsie, New York.

The Board was established to study and evaluate the technical activities of the Department of Commerce and recommend measures to increase their value to the business community.

The agenda will consist of ongoing Commerce Technical Advisory Board issues.

The meeting will be open to public observation. The public may submit written statements or inquiries to the Chairman before or after the meeting. A limited number of seats will be available to the public and to the press on a first-come, first-served basis.

Copies of minutes and materials distributed will be made available for reproduction following certification by the Chairman, in accordance with the Federal Advisory Committee Act, in Room 3867, U.S. Department of Commerce, Washington, D.C. 20230.

Further information may be obtained from Mrs. Florence S. Feinberg, Administrator, Room 3867, U.S. Department of Commerce, Washington, D.C. 20230. Telephone (202) 377-5065.

Dated: May 2, 1980.

Jordan J. Baruch,

Assistant Secretary for Productivity, Technology and Innovation.

[FR Doc. 80-15629 Filed 5-21-80; 8:45 am]

BILLING CODE 3510-17-M

National Oceanic and Atmospheric Administration

Modification of Marine Mammal Permit

Notice is hereby given that pursuant to the provisions of § 216.33 (d) and (e) of the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR Part 216) and § 222.25 of the regulations governing endangered species permits (50 CFR Parts 217-222), Scientific Research Permit No. 136 issued to Northwest and Alaska Fisheries Center, National Marine Fisheries Service, 2725 Montlake Boulevard East, Seattle, Washington 98112 on June 15, 1976 (41 FR 25920), as modified on June 27, 1977 (42 FR 35876), is further modified by deleting Section B-11 and substituting therefore the following:

"This Permit is valid with respect to the taking authorized herein until December 31, 1985."

This modification is effective May 22, 1980.

The Permit is modified, and documentation pertaining to the modification are available for review in the following offices:

Assistant Administrator for Fisheries, National Marine Fisheries Service, 3300 Whitehaven Street, N.W., Washington, D.C.;

Regional Director, National Marine Fisheries Service, Northeast Region, Federal Building, 14 Elm Street, Gloucester, Massachusetts 01930;

Regional Director, National Marine Fisheries Service, Southeast Region, 9450 Koger Boulevard, St. Petersburg, Florida 33702;

Regional Director, National Marine Fisheries Service, Southwest Region, 300 South Ferry Street, Terminal Island, California 90731;

Regional Director, National Marine Fisheries Service, Northwest Region, 1700 Westlake Avenue, North, Seattle, Washington 98109; and

Regional Director, National Marine Fisheries Service, Alaska Region, P.O. Box 1668, Juneau, Alaska 99802.

Dated: May 16, 1980.

Winfred H. Meibohm,

Executive Director, National Marine Fisheries Service.

[FR Doc. 80-15764 Filed 5-21-80; 8:45 am]

BILLING CODE 3510-22-M

Modification of Marine Mammal Permit

Notice is hereby given that pursuant to the provisions of § 216.33 (d) and (e) of the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR 216), Public Display Permit No. 235 issued to Gulfarium, Gulf Exhibition Corporation, Fort Walton Beach, Florida 32548 on June 6, 1978, is modified by deleting Section B-3 and substituting therefore the following:

"This Permit is valid with respect to the taking authorized herein until December 31, 1980."

This modification is effective May 22, 1980.

The Permit as modified and documentation pertaining to this modification are available for review in the following offices:

Assistant Administrator for Fisheries, National Marine Fisheries Service, 3300 Whitehaven Street, N.W., Washington, D.C.; and

Regional Director, National Marine Fisheries Service, Southeast Region, 9450 Koger Boulevard, Duval Building, St. Petersburg, Florida 33702.

Dated: May 16, 1980.

Winfred H. Meibohm,

Executive Director, National Marine Fisheries Service.

[FR Doc. 80-15765 Filed 5-21-80; 8:45 am]

BILLING CODE 3510-22-M

National Bureau of Standards

Proposed Federal Information Processing Standard; DES Modes of Operation

Under the provisions of Public Law 89-306 and Executive Order 11717, the Secretary of Commerce is authorized to establish uniform Federal automatic data processing (ADP) standards. Federal Information Processing Standards Publication (FIPS PUB) 46, entitled Data Encryption Standard (DES), specifies a mathematical algorithm to be used by Federal departments and agencies for the cryptographic protection of sensitive, but unclassified, computer data. A number of techniques for incorporating this algorithm into a cryptographic system have been identified by both Federal and private organizations. These techniques, external to the DES algorithm, have come to be called the "modes of operation."

The National Bureau of Standards (NBS) is herein proposing a FIPS to describe the DES Modes of Operation. This standard is needed for assuring the compatibility of systems which cryptographically protect data using the DES.

In order to ensure that all parties have a full opportunity to present their views, NBS is soliciting comments on the following DES Modes of Operation Standard. Four DES modes of operation are described in this proposed FIPS; they are: the electronic codebook (ECB) mode, the cipher block chaining (CBC) mode, the cipher feedback (CFB) mode, and the authentication-only mode.

The proposed FIPS (see document A accompanying this notice) contains two basic sections: (1) an announcement section, which provides information concerning the applicability and implementation of the standard, and (2) a specifications section defining the technical parameters of the standard.

Document B accompanying this notice contains a description of a fifth mode of operation, the output-block feedback (OFB) mode. The OFB mode is not part of the proposed standard, but is being considered for inclusion as an integral part of the final standard. It is presented here in order to solicit comments on its technical content and suitability for inclusion in the final standard.

Interested parties may submit comments in writing to the Office of Standards Administration, Institute for Computer Sciences and Technology, Washington, D.C. 20234. To be considered, comments on this proposed standard must be received on or before July 7, 1980.

Written comments received in response to this notice plus written comments obtained from Federal departments and independent agencies will be made part of the public record and will be made available for inspection and copying in the Central Reference and Records Inspection Facility, Room 5317, Main Commerce Building, 14th Street between Constitution Avenue and E Street, N.W., Washington, D.C. 20230.

Dated: May 18, 1980.

Thomas A. Dillon,

Acting Director.

BILLING CODE 3510-13-M

A. FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATION

(Date)

Announcing the Standard for
DES MODES OF OPERATION

Federal Information Processing Standards Publications are issued by the National Bureau of Standards pursuant to the Federal Property and Administrative Services Act of 1949, as amended, Public Law 89-306 (79 Stat. 1127), Executive Order 11717 (38 FR 12315, dated May 11, 1973), and Part 6 of Title 15 Code of Federal Regulations (CFR).

1. NAME OF STANDARD

DES Modes of Operation Standard.

2. CATEGORY OF STANDARD

Operations, computer security.

3. EXPLANATION

The Federal Data Encryption Standard (DES) (FIPS PUB 46) specifies an algorithm to be implemented in electronic hardware devices and used for the cryptographic protection of sensitive, but unclassified, computer data.

There are two basic techniques for utilizing the DES: a block cipher and a stream cipher. In a block cipher, the DES output block is used directly as the cipher text. In a stream cipher, the DES output block forms a pseudorandom binary stream which is then combined with to the plain text in order to form the cipher text.

Since there are many ways for realizing these two basic cipher classes, this FIPS PUB defines specific modes of operation in order to foster interoperability among DES equipment purchased or leased by the Federal Government. In particular, the electronic codebook (ECB) and the cipher block chaining (CBC) modes of DES block ciphers are defined. The cipher feedback (CFB) mode represents the class of additive stream ciphers. An authentication-only mode using the DES is also specified. It is not the purpose of this standard to define a set of necessary and sufficient conditions for the secure operation of DES devices. The primary objective is to provide specifications in sufficient detail so that a DES device will be able to interoperate with other DES devices using one or more of these specified modes of operation. This standard is part of a continuing program to provide compatibility in DES equipment for users within the Federal Government.

4. APPROVING AUTHORITY

Secretary of Commerce.

5. MAINTENANCE AGENCY

Department of Commerce, National Bureau of Standards (Institute for Computer Sciences and Technology).

6. RELATED DOCUMENTS

FIPS PUB 46, "Data Encryption Standard."

FIPS PUB 31, "Guidelines to ADP Physical Security and Risk Management".

FIPS PUB 39, "Glossary for Computer Systems Security".

FIPS PUB 41, "Computer Security Guidelines for Implementing the Privacy Act of 1974".

NBS Internal Report 80-2019, "Technical Specifications of a Proposed Federal Information Processing Standard on the Modes of Operation for the Data Encryption Standard," April 1980.

A list of currently approved FIPS may be obtained from the Standards Administration Office, Institute for Computer Sciences and Technology, National Bureau of Standards, Washington, D.C. 20234. Telephone (301) 921-3157.

7. APPLICABILITY

This standard will be used by Federal departments and agencies implementing FIPS PUB 46, which addresses the cryptographic protection of sensitive, but unclassified, non-national-security-related computer data.

The selection of one of the specified modes of operation will be heavily weighted by the particular application being considered.

The ECB mode is characterized by a potential security problem in that the same plain text always maps to the same cipher text under a fixed cryptographic key. The CBC and the CFB modes may be used for general data encryption applications. CBC permits minimal overhead for the management of initialization vectors (IVs).

CFB offers the flexibility of the parsimonious encryption of one to sixty-four binary digits whereas block implementations such as ECB and CBC must process sixty-four bits of data at a time. Also, bit identification is maintained after encryption in CFB since it is an additive stream cipher. Hence, encrypted parity bits may be replaced with a parity computed on the cipher text so long as the information which is fed back at the encrypting and decrypting devices is the same. Thus, compatibility can be maintained within communication networks which are sensitive to parity information. The authentication-only technique protects data integrity but does not guard against disclosure of the plain text. This is useful in systems where one wishes to check the integrity of the data aperiodically, but does not want to have to decrypt the data for each use.

8. SPECIFICATIONS

Federal Information Processing Standard __ (FIPS __) DES Modes of Operation (affixed).

9. QUALIFICATIONS

The DES modes of operation described in this standard are based upon information provided by many sources within the Federal Government and private industry.

These techniques are in concert with equipment containing DES devices which have been validated by the National Bureau of Standards and are currently being marketed. However, any cryptographic standard must, of necessity, remain flexible enough to adapt to advancements or innovations in science and technology. As such, this standard should not be construed to be either exhaustive or static, but rather the National Bureau of Standards will be

receptive to new implementations whose technical or economic merit would justify the issuance of a revised standard.

The Federal DES (FIPS PUB 46) requires implementation in electronic hardware devices for use by Federal departments and agencies. However, the modes of operation as provided in this standard may be implemented in software, hardware, or firmware.

10. EXPORT CONTROL

Cryptographic devices and technical data regarding them are subject to Federal Government export controls as specified in Title 22, Code of Federal Regulations, Parts 121 through 128. Cryptographic devices implementing this standard and technical data regarding them must comply with these Federal regulations.

11. PATENTS

Cryptographic equipment implementing this standard may be covered by U.S. or foreign patents.

12. IMPLEMENTATION SCHEDULE

This standard becomes effective six months after the date of this FIPS PUB. It applies to all Federal ADP systems and associated telecommunications networks under development as well as to installed systems when it is determined that cryptographic protection of sensitive, but unclassified, data is required. Each Federal department or agency will issue internal directives for the use of this standard by their operating units based on their data security requirement determinations.

Instructions and regulations for procuring data processing equipment utilizing this standard will be provided by the General Services Administration.

13. WAIVERS

Heads of agencies may request that the requirements of this standard be waived in instances where it can be clearly demonstrated that there are appreciable performance or cost advantages to be gained and that the overall interests of the Federal Government are best served by granting the requested waiver. Such waiver requests will be reviewed by and are subject to the approval of the Secretary of Commerce. The waiver request must address the criteria stated above as the justification for the waiver.

Forty-five days should be allowed for review and response by the Secretary of Commerce. Waiver requests shall be submitted to the Secretary of Commerce, Washington, D.C. 20230, and labeled as a Request for a Waiver to a Federal Information Processing Standard. No agency shall take any action to deviate from the standard prior to the receipt of a waiver approval from the Secretary of Commerce. No agency shall begin any process of implementation or acquisition of a nonconforming DES mode of operation nor shall it make use of any nonstandard mode of operation for the DES unless it has already obtained such approval.

14. WHERE TO OBTAIN COPIES

Copies of this publication are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. When ordering, refer to Federal Information Processing Standards Publication __ (FIPS-PUB-__), and title. When microfiche is desired, this should be specified. Payment may be made by check, money order or deposit account.

FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATION

(Date)

Specifications for the

DES MODES OF OPERATION

INTRODUCTION.

Data to be cryptographically protected is called plain text. Encryption is the process of transforming plain text into cipher text; decryption is the inverse mapping of cipher text to plain text. The encryption (E) of plain text (P) under a key (K) into cipher text (C) is denoted by E(K, P) = C. The letter D will represent the inverse transformation, so that decryption under K may be written as D(K, C) = D(K, E(K, P)) = P.

Binary data may be cryptographically protected using the Data Encryption Standard (DES) [FIPS 46] in conjunction with a cryptographic variable. A cryptographic variable for the DES consists of sixty-four binary digits of which fifty-six bits are used directly as a key governing the algorithm. The remaining eight bits are employed as an odd parity check. A cryptographic period (or key period) is that interval of DES operation during which the same key is used between two or more cryptographic entities. Since the DES has been publicly defined, cryptographic security depends upon the security provided for the cryptographic variable -- both the key and its parity bits. Given the cipher text and the key, the plain text can be recovered easily.

Mathematically, the DES maps a 64-dimensional input space over the field {0,1} onto itself. The number of elements in this space is two raised to the 64th power (2**64), i.e., it consists of all possible 64-bit vectors. The cryptographic key space provides the user a choice of any one of 2**56 invertible (one-to-one and onto) mappings. A specific DES input value can be mapped to one of 2**56 output values — the specific value depends upon the particular 56-bit key chosen. The DES mapping has a complementary effect in that if E(K, P) = C then E(K', P') = C' or equivalently E(K, P) = {E(K', P')}' where the apostrophe represents binary complementation.

FIGURE 1:

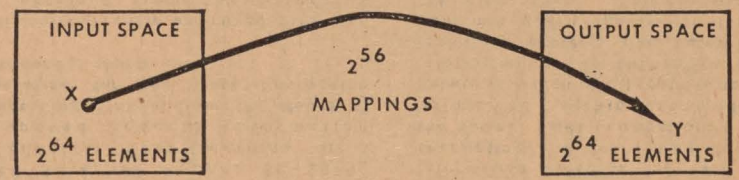
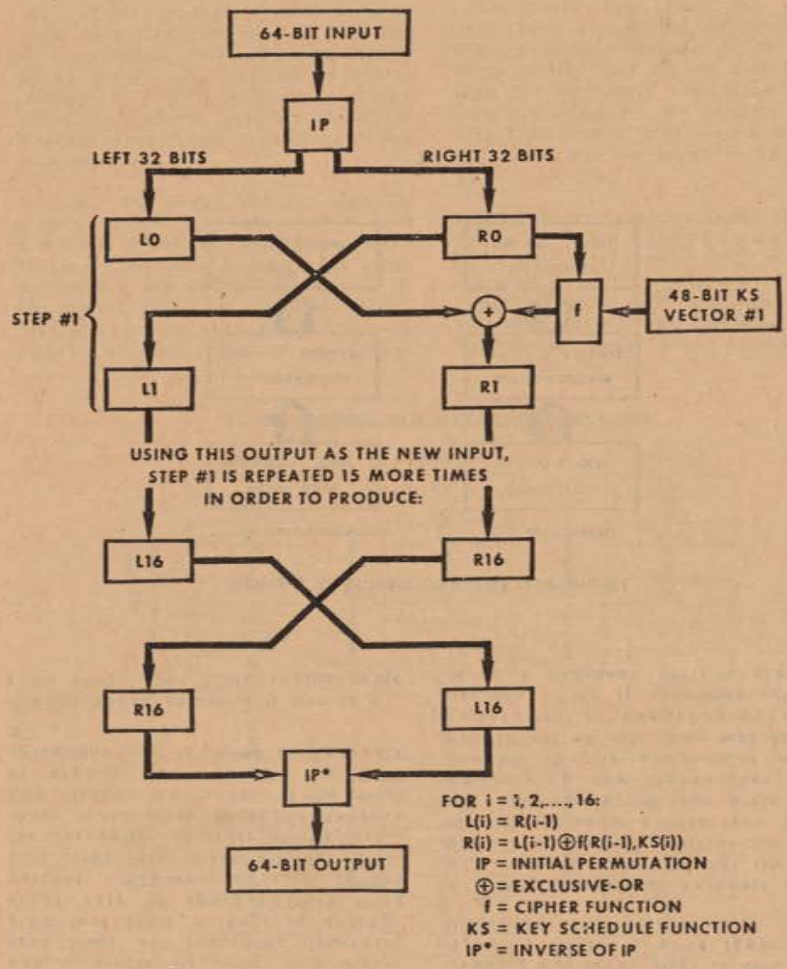


FIGURE 2: THE DES TRANSFORMATION



The DES is a nonlinear, iterative, block, product cipher. This product cipher mixes transposition and substitution operations in an alternating manner in order to be most effective. Because this algorithm maps a 64-bit input block into sixty-four output bits, the DES is classified as a block cipher. Iterative refers to the use of the output of an operation as the input for another iteration or round of the same procedure. Nonlinearity is introduced into the algorithm through eight S (substitution) boxes, each of which maps six input bits into four output bits. A block diagram of the encryption operation is illustrated in figure #2. The cipher function, f, and the key schedule function are described in detail in FIPS 46.

The DES input and output (I/O) blocks are sixty-four bit vectors with the least significant bit (LSB = 2**0) defined to be on the right and the most significant bit (MSB = 2**63) on the left. The bits of a DES I/O block are numbered from left to right: (1, 2, . . . , 64). When a 64-bit cryptographic variable is entered into the DES key schedule, its format is: (1,2,...,7,P1,8,9,...,14,P2,15,...,49,P7,50,51,...,56,P8), where {Pi | i=1, 2,...,8} are odd parity bits computed on the preceding seven key bits.

There are two general techniques for incorporating the DES into a cryptographic system: a block cipher and an additive stream cipher. In both modes each bit of cipher text is a function of every bit of the cryptographic key. In a block cipher, the DES input block is a function of the plain text to be encrypted and the DES output block defines the cipher text. In an additive stream cipher, a pseudorandom binary sequence is generated using DES output blocks. The binary exclusive-OR operation, represented by a circled plus sign, combines this pseudorandom sequence with the plain text to define the cipher text. This operation is equivalent to bit-by-bit, modulo-2 addition (without carry). Since the exclusive-OR operator is its own inverse over {0,1}, the same pseudorandom binary stream, say O, is used for both the encryption of plain text, P, and the decryption of cipher text, C; i.e., P ⊕ O = C and C ⊕ O = P.

ELECTRONIC CODEBOOK (ECB) MODE

The most basic mode of operation for the DES is the electronic codebook (ECB). The analogy to a codebook arises because the same plain text block always produces the same cipher text block for a given cryptographic key. Thus, assuming that a manageable subset of the DES input space is used, a list (or codebook) of corresponding plain and cipher text pairs could be constructed.

In ECB encryption, the plain text data block (D1,D2,.., D64) directly defines the DES input block (I1,I2,...,I64). The input block is processed through a DES device in the encrypt state which has been loaded with the appropriate cryptographic variable. The resultant output block (O1,O2,...,O64) is used directly as cipher text (C1,C2,...,C64).

The ECB decryption process is the same as ECB encryption except that the DES key schedule selection is reversed. In general, the DES key schedule function generates a new 48-bit vector from the 56-bit cryptographic key for each of the

sixteen rounds of the DES algorithm. For a given cryptographic variable, let the sixteen key schedule encryption vectors be denoted by {KS1,KS2, . . . , KS16}. Then, the corresponding decryption process will use the same basic operation as encryption (figure #2), but now {KS16, KS15, . . . , KS1} will be successively invoked. An example of ECB encryption and decryption may be found in Appendix A.

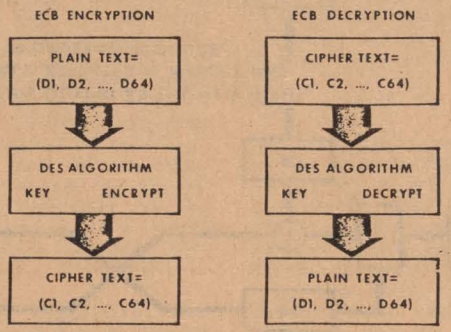
Since each bit of an ECB output block is a complex function of every bit in the input block and the cryptographic key, a single bit error in a cipher text block will cause the decrypted plain text block to have an average error rate of approximately fifty percent. However, an error in one ECB cipher text block will not affect the decryption of other blocks, i.e., there is no error extension between ECB blocks. An example of the effect of cipher text errors on ECB operations may be found in Appendix B.

If block synchronization is lost (e.g., a bit slip), then ECB cryptographic synchronization will also be lost until correct block boundaries are reestablished.

Since the ECB mode is a 64-bit block cipher, an ECB device must encrypt information in integral multiples of sixty-four bits. If a user has less than sixty-four bits to encrypt, then the least significant bits of the unused portion of the input data block should be padded with random or pseudorandom binary digits prior to ECB encryption. The corresponding decrypting device will have to know when and to what extent padding has taken place so that these padding digits can be ignored or discarded after decryption.

A potentially critical weakness of the ECB mode is the fact that the same plain text always produces the same cipher text under a fixed key. Thus, the compromise of the plain text underlying any cipher text block results in the compromise of all repetitions of this same text for the remainder of the cryptographic period. This is sometimes referred to as a codebook analysis problem.

FIGURE 3: ELECTRONIC CODEBOOK (ECB) MODE



CIPHER BLOCK CHAINING (CBC) MODE

CBC is a block cipher in which the plain text is exclusive-ORed with a block of pseudorandom data prior to being processed through a DES device (see figure #4). This technique greatly reduces the codebook analysis problem associated with the ECB mode, and also provides an error extension characteristic which is valuable in protecting against fraudulent data alteration.

In order to commence CBC encryption, the first DES input block is formed by exclusive-ORing the first data block with a 64-bit initialization vector (IV), i.e., (I1,I2,..., I64) = (IV1 ⊕ D1, IV2 ⊕ D2, . . . , IV64 ⊕ D64). This initial CBC input block is processed through a DES device producing a 64-bit DES output block which defines the cipher text, (O1,O2,...,O64) = (C1,C2,...,C64). Then these first 64 bits of cipher text are exclusive-ORed with the second plain text data block in order to construct the second DES input block. The next DES operation produces the second cipher text block. This encryption process continues to "chain" successive cipher and plain text blocks together until the last plain text block in the message is encrypted. The DES input block at time t is the bit-by-bit, mod-2 sum of the plain text at time t and the cipher text at time t-1 for t>1 or the IV at t=1. Appendix A contains an example of the CBC encryption and decryption of ASCII characters and Appendix C has a flow chart illustrating the basic CBC logic.

For CBC decryption, the first cipher text block is processed through a DES device using the decrypt operation, i.e., the key schedule vectors are invoked in the reverse order from the encryption process. The first output block is exclusive-ORed with the CBC IV producing the first plain text block. The second cipher text block is then entered into the DES and the resultant output block is exclusive-ORed with the first cipher text block in order to produce the second plain text block. The CBC decryption process continues to exclusive-OR the cipher text block at time t-1 for t>1 with the DES output block at time t until the end of the message.

The security of a CBC implementation depends, among other things, upon the management of CBC initialization vectors. Some recommendations in this area are provided in Appendix E.

The CBC mode reproduces the same cipher text whenever the same plain text is encrypted under a fixed key and IV. In the ECB mode, the cipher text repetition characteristic occurs at the block level; in the CBC mode, cipher text repetition is at the message level. If CBC users are concerned about this potential security problem, then their CBC systems should incorporate a unique identifier (e.g., a one-up counter) at the beginning of each CBC message in order to insure unique cipher text within a cryptographic period.

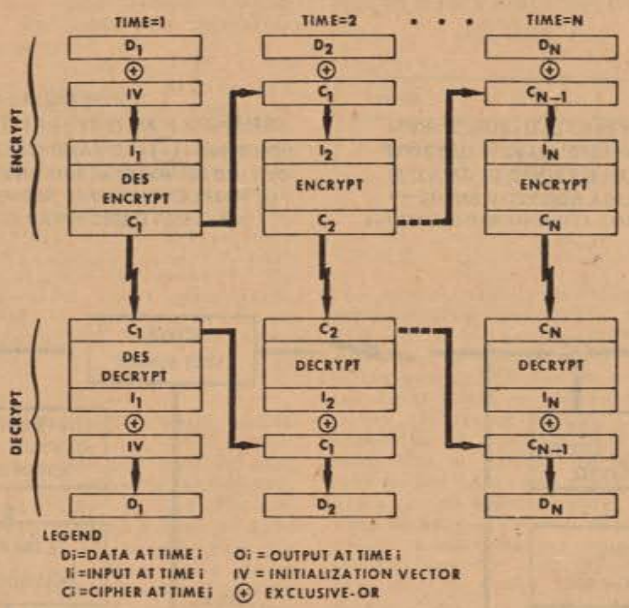
Since the CBC mode is a 64-bit block cipher, it must operate on a 64-bit input block with each CBC operation. Thus, partial data blocks (< 64 bits) will require special handling. For example, a partial data block may be padded in its least significant bit positions with arbitrary binary digits whenever the application environment can tolerate the overhead. The decrypting CBC device will have to know when and to what extent padding has occurred. This can be accomplished explicitly, e.g., using a control indicator, or implicitly, e.g., using constant length transactions.

Another suggestion for handling partial data blocks is to switch to a 1-bit cipher feedback (CFB) mode in order to process the final k < 64 bits of a message. The last CBC cipher block would be used as an IV to initiate this CFB process. When using this scheme, the last bit of the message should not contain sensitive information.

In the CBC mode, one or more bit errors within a single cipher text block will affect the decryption of two blocks — the block in which the error occurs and the succeeding block. If the errors occur in the n-th cipher text block, then each bit of the n-th plain text block will have an average error rate of about fifty percent. The (n+1)st plain text block will have only those bits in error which correspond directly to the cipher text bits in error. Of course, if errors occur in the last cipher text block, then the last plain text block is the only one affected. An example of the effect of cipher text errors in CBC operations may be found in Appendix B.

If CBC block synchronization is lost, then CBC cryptographic synchronization will also be lost. However, cryptographic synchronization will automatically be reacquired sixty-four bits after block boundaries have been established.

FIGURE 4: CIPHER BLOCK CHAINING (CBC) MODE



CIPHER FEEDBACK (CFB) MODE

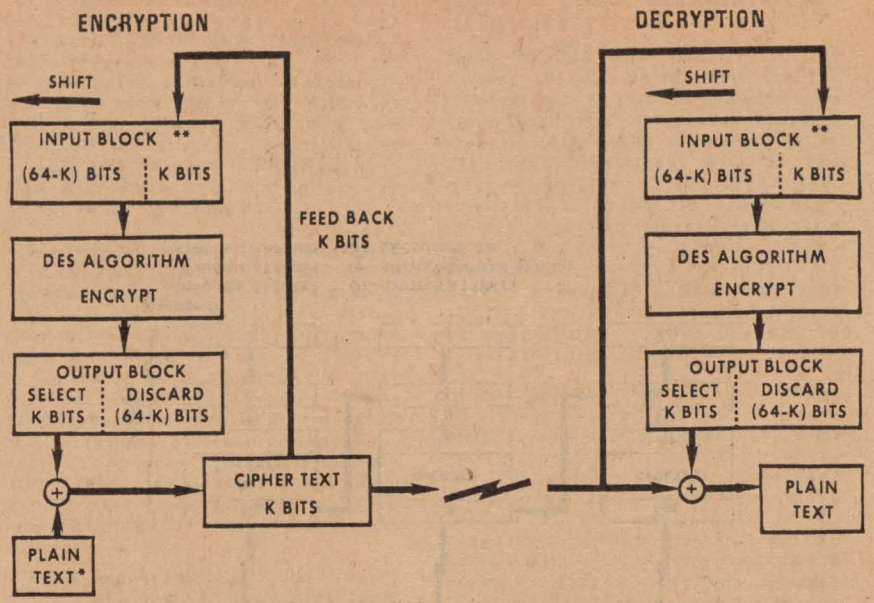
The CFB mode is an additive cipher technique in which the DES is used to generate a pseudorandom binary stream. This stream is exclusive-ORed with the binary plain text to form the cipher text. The cipher text is fed back to form the next DES input block. The pseudorandom binary stream is sometimes referred to as a key stream, and the DES is then called a key generator or KG. However, this terminology will not be used in order to avoid confusion with the cryptographic key.

One through sixty-four bit CFB operation may be used. A 64-bit initialization vector (IV) or starter input block is used to begin CFB operations. A CFB IV is placed in the DES input block so that any zero fill is left-justified. This 64-bit input block is encrypted through a DES device producing a 64-bit, pseudorandom output block. The DES device is operated once for each new k-bit (0 < k < 65) character to be encrypted. In all CFB implementations, the leftmost or most significant k bits of the DES output block are used in the exclusive-OR operation. These output block bits, (O1,O2,...,Ok), are exclusive-ORed with the corresponding k bits of data, (D1,D2,...,Dk), to form the cipher text: (C1,C2,...,Ck) = (D1 ⊕ O1,D2 ⊕ O2,...,Dk ⊕ Ok). In order to define this operation when the length of the plain text character to be encrypted is less than k bits, zeros are concatenated to the left hand side or most significant bits of the plain text. Obviously, users must agree on the representation of a plain text "character." Bits (Ok+1, Ok+2, . . . , O64) of the DES output block are discarded. The k bits of cipher text are fed back to the least significant bit positions of the DES input (I) block according to Table 1.

TABLE 1

Bits at time t	--->	Bits at (t+1)
I[k+1]	--->	I1
I[k+2]	--->	I2
.	.	.
.	.	.
.	.	.
I64	--->	I[64-k]
C1	--->	I[64-(k-1)]
C2	--->	I[64-(k-2)]
.	.	.
.	.	.
.	.	.
Ck	--->	I64

FIGURE 5: K-BITS CIPHER FEEDBACK (CFB) MODE



* IF PLAIN TEXT CHARACTER IS LESS THAN K BITS IN LENGTH, THEN APPEND ZEROS TO THE LEFT HAND SIDE (MSB) OF THE DATA TO DEFINE THE EXCLUSIVE-OR (⊕) OPERATION. ONLY ONE K-BIT CHARACTER IS PROCESSED WITH EACH OUTPUT BLOCK.

** INPUT BLOCK INITIALLY CONTAINS 64-BIT INITIALIZATION VECTOR (IV). THIS IV IS USED TO GENERATE FIRST OUTPUT BLOCK TO ENCRYPT (DECRYPT) THE FIRST PLAIN (CIPHER) TEXT CHARACTER.

As an example, consider an 8-bit CFB implementation and an IV with forty-eight pseudorandom bits. After each encryption, the eight cipher bits are fed back into the DES input block according to Table 2.

TABLE 2

AFTER ENCRYPTION #	THE DES INPUT BLOCK CONTAINS:
0	(0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,2,.....,47,48)
1	(0,0,0,0,0,0,0,0,1,2,.....,47,48,C1,C2,.....,C8)
2	(1,2,.....,47,48,C1,C2,.....,C8,C9,C10,.....,C16)

After the eighth encryption the entire 64-bit IV will have been shifted out of the DES input block. Let the first character be a seven-bit ASCII character plus parity denoted by (P,b7,b6,...,b1). If the first DES output block is (O1,O2,...,O64), then the first cipher text character will be (C1,C2,...,C7,C8) = (P ⊕ O1,b7 ⊕ O2,...,b2 ⊕ O7,b1 ⊕ O8). Appendix A contains a detailed example of 8-bit CFB operations and Appendix C has a flow chart diagramming the basic CFB procedures.

The security of a CFB system depends, among other things, upon the management of CFB IVs. Some recommendations in this area are provided in Appendix E.

To protect against undetected bit manipulation of the last k-bit cipher text character using k-bit CFB, the last character to be encrypted must consist of error detection, terminal flag, or permanently fixed data.

In CFB, each cipher bit is a function of one bit of the DES output block and one bit of plain text. Therefore, any bits of a CFB cipher text character may be changed without affecting the decryption of other bits within the same character, so long as the bits which are fed back at the encrypting and decrypting stations are the same. An application of this characteristic would be the deletion of encrypted parity bits and their replacement with a new parity computed on the cipher text. This feature is useful in networks which are sensitive to parity checks.

Bit errors within one CFB cipher text character will affect not only the decryption of the garbled cipher text but also the decryption of succeeding characters until the bit errors are flushed out of the CFB input block. The first affected plain text character will be garbled in exactly those places where the cipher text character is in error. Succeeding plain text characters will experience an average error rate of about fifty percent until all errors have been shifted out of the DES input block. Assuming no additional errors are encountered during this time, the CFB decryption device will then automatically regain

cryptographic synchronization. This characteristic is sometimes referred to as a limited error extension or a self-synchronizing capability — depending upon the point of view. In the previous 8-bit CFB example, errors in one cipher text character affect the decryption of nine characters. A detailed example of cipher text errors in CFB operations may be found in Appendix B.

If k-bit character boundaries are lost during decryption, then cryptographic synchronization will be lost until a cryptographic restart (new IV) is initiated or until after character boundaries have been reestablished. In the latter case, if 64 (mod k) = 0, then resynchronization will occur automatically after 64/k characters with proper boundary definition have entered the DES input block; otherwise, one additional character will be required.

The encryption and decryption processes in the CFB mode invoke the DES key schedule vectors in the same order, i.e., both processes will use {KS1, KS2, . . . , KS16}. This produces a partial involution under the same IV and key; i.e., if E[K, (P1,P2,...,Pn)] = (C1,C2,...,Cn), then E[K, (C1,C2,...,Cn)] = (P1,N1,N2,...,N(n-1)) where P, C, and N represent k-bit plain text, cipher text, and nonsense (pseudorandom) characters, respectively.

DES AUTHENICATION-ONLY MODE

The DES algorithm may also be used for the authentication of plain text. This technique is useful in applications which require data integrity but do not require that the plain text be protected from disclosure. The authentication-only mode protects against bit manipulation within the data as well as the insertion and deletion of messages, and the replay of a previously valid message. In the authentication-only mode, two message authentication codes (MACs) are independently computed on the same data — one at the data source and one at the data destination. The MAC must be generated using either the CFB or the CBC mode. A unique message identifier (MID) is used to initiate these modes. If the data source MAC and the data destination MAC are in agreement and if the MID agrees with its expected value, then the plain text is accepted as authentic at the data destination. The authentication-only format is depicted in figure #6.

AUTHENTICATION-ONLY FORMAT FIGURE 6:

FIELD 1	FIELD 2	FIELD 3
MID	PLAIN TEXT	MAC

In order to commence CFB authentication operations, a unique MID is used as an initialization vector. The user's text is encrypted in the normal CFB manner except that the cipher text is not communicated to the decrypting device. After the encryption of the final plain text unit (character or block), the last cipher text is fed back into the DES input block as if another plain text unit were to be encrypted. Then the DES device is operated one more time and the left-most or most significant k bits (0 < k < 65) in the next DES output block are used as the MAC.

To begin CBC authentication operations, the MID is again used as an initialization vector. However, for this application the first plain text block to be encrpyted is the all zero block, i.e., the MID alone defines the first DES input block. Thereafter, the user's text is encrypted in the normal CBC manner. The CBC MAC is defined to be the left-most or most significant k bits of the DES output block resulting from encrypting the final plain text block. Messages which terminate in partial data blocks are to be padded on the right (LSB) with zeros.

The MID, plain text, and the MAC are conveyed to the data destination; the intermediate cipher text is not transmitted. The probability that one could randomly select a correct k-bit MAC is 1/(2**k). For most applications, MACs of at least 24 bits are strongly recommended. Two examples of the authentication-only mode may be found in Appendix D.

In general, the MID is a unique and deterministic message identifier within a cryptographic period; the MID should also be varied across cryptographic periods. The value of the MID will be checked by the recipient of an authentication-only message to verify that messages have not been deleted, inserted, or replayed. The uniqueness within a cryptographic period may be achieved through the use of a one-up binary counter. MID values are not to be repeated within the same cryptographic period; this constraint also applies to multiuser environments under control of a common cryptographic key. The MID variation across cryptographic periods may be satisfied by selecting a random or pseudorandom starting value from the total range of a "within" counter. In using this approach it is recommended that only a small (say << 5%) segment of the MID's total range be used within any key period. Another acceptable technique would be to form the MID by concatenating a unique message identifier together with a unique identifier for each cryptographic period, e.g., a second one-up binary counter could be used for this purpose.

A MID is not encrypted. However, whenever MID values are exchanged through an unsecured channel to establish or reestablish MID synchronization, then these values must be protected. This protection includes the detection of bit alteration, the insertion of bogus messages, and the replay or deletion of valid messages.

REFERENCES

[FIPS PUB 46] Federal Information Processing Standards Publication 46, Data Encryption Standard. 1977 January 15; FIPS PUB 46: 18 pages. Available from: National Technical Information Service; U.S. Department of Commerce; Springfield, Virginia 22161; FIPS-PUB-46.

DEFINITIONS, ABBREVIATIONS, AND CONVENTIONS

AUTHENTICATION-ONLY: A DES technique for protecting the integrity of plain text which does not have to be protected from disclosure.

BLOCK: A binary vector consisting of sixty-four bits numbered from the left as 1, 2, . . . , 64.

CBC: Cipher block chaining mode.

CFB: Cipher feedback mode.

CIPHER TEXT: Encrypted data.

CRYPTOGRAPHIC KEY: The 56 random bits of the cryptographic variable which are used to govern the DES device. Also simply called KEY.

CRYPTOGRAPHIC PERIOD: That period of DES operation during which a unique cryptographic key is used between two or more cryptographic facilities. Keys from different cryptographic periods are independent. Synonym: Key period.

CRYPTOGRAPHIC VARIABLE: The 64 bit vector containing the 56-bit DES key and its eight associated parity bits. Synonym: Key Variable.

DECRYPTION: The process of changing cipher text into plain text. Verb: DECRYPT.

DES: Data Encryption Standard; specified in FIPS 46.

DES DEVICE: The hardware used to implement the DES algorithm. This is usually an integrated circuit chip which is sometimes referred to as a "crypto-engine."

DES INPUT BLOCK: A 64-bit data vector that is entered into the DES device.

DES OUTPUT BLOCK: A 64-bit vector that is the final result of a DES device.

ECB: Electronic codebook mode.

ENCRYPTION: A process of changing plain text into cipher text. Verb: ENCRYPT.

EXCLUSIVE-OR OPERATION: the bit-by-bit modulo-2 addition (without carry) of binary numbers. This operation is represented by a circled + .

INITIALIZATION VECTOR (IV): A 64-bit vector used to help form the initial DES input block for all modes of operation except ECB; a 64-bit cryptographic synchronization vector.

KEY: Cryptographic key; the 56 random bits of the cryptographic variable.

KEY SCHEDULE FUNCTION: A logical unit within the DES algorithm which generates a different 48-bit vector from the 64-bit cryptographic variable for each of the sixteen rounds of the DES process.

LEAST SIGNIFICANT BIT (LSB): The right-most bit of a binary row vector. Synonym: Low order bit.

MAC: Message authentication code.

MESSAGE (MSG): A generic term used to describe a logical data entity. In general it is an ambiguous term; therefore, for specific applications it should be precisely defined.

MID: A message identifier used with the authentication-only mode.

MOST SIGNIFICANT BIT (MSB): The left-most bit of a binary row vector. Synonym: High order bit.

OCTET: A group of eight binary digits numbered from left to right: 1,2,...,8.

PLAIN TEXT: Decrypted data or data to be encrypted.

PSEUDORANDOM BINARY PROCESS: A deterministic technique for producing a sequence of binary digits which satisfy the statistical properties of a random bit stream.

APPENDIX A

SAMPLE DES ENCRYPTIONS AND DECRYPTIONS

DES MODES OF OPERATION

AN EXAMPLE OF THE ELECTRONIC CODEBOOK (ECB) MODE

The ECB mode in the encrypt state has been selected.

Cryptographic Key = 0123456789abcdef

The plain text is the ASCII code for "Now is the time for all ." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1).

TIME	PLAIN TEXT	DES INPUT BLOCK	DES OUTPUT BLOCK	CIPHER TEXT
1	4e6f772069732074	4e6f772069732074	3d10fae4418fb83d	3d10fae4418fb83d
2	686520746966d6520	686520746966d6520	73b5bc13ffcd86fd	73b5bc13ffcd86fd
3	666f7220616c6c20	666f7220616c6c20	ff8f8fe4583a5a0f	ff8f8fe4583a5a0f

The ECB mode in the decrypt state has been selected.

Cryptographic Key = 0123456789abcdef

TIME	CIPHER TEXT	DES INPUT BLOCK	DES OUTPUT BLOCK	PLAIN TEXT
1	3d10fae4418fb83d	3d10fae4418fb83d	4e6f772069732074	4e6f772069732074
2	73b5bc13ffcd86fd	73b5bc13ffcd86fd	68652074696d6520	68652074696d6520
3	ff8f8fe4583a5a0f	ff8f8fe4583a5a0f	666f7220616c6c20	666f7220616c6c20

DES MODES OF OPERATION

AN EXAMPLE OF THE CIPHER BLOCK CHAINING (CBC) MODE

The CBC mode in the encrypt state has been selected.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

The plain text is the ASCII code for "Now is the time for all ." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1).

TIME	PLAIN TEXT	DES INPUT BLOCK	DES OUTPUT BLOCK	CIPHER TEXT
1	4e6f772069732074	5c5b2158f9d8ed9b	c785361299fdf8c5	c785361299fdf8c5
2	686520746966d6520	afe01666f0909de5	9bebded075e1096a	9bebded075e1096a
3	666f7220616c6c20	fd84acf0148d654a	d0745b3dd304f9e1	d0745b3dd304f9e1

The CBC mode in the decrypt state has been selected.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

TIME	CIPHER TEXT	DES INPUT BLOCK	DES OUTPUT BLOCK	PLAIN TEXT
1	c785361299fdf8c5	c785361299fdf8c5	5c5b2158f9d8ed9b	4e6f772069732074
2	9bebded075e1096a	9bebded075e1096a	afe01666f0909de5	686520746966d6520
3	d0745b3dd304f9e1	d0745b3dd304f9e1	fd84acf0148d654a	666f7220616c6c20

AN EXAMPLE OF THE EIGHT-BIT CIPHER-TEXT FEEDBACK (CFB) MODE

The 8-bit CFB mode in the encrypt state has been selected.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

The plain text is the ASCII code for "Now is the." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1). The ⊕ represents bit-by-bit, modulo-2 addition.

TIME	DES INPUT BLOCK	DES OUTPUT BLOCK	P	⊕	O	= C
1	1234567890abcdef	3494ccf2bda243a6	4e	⊕	34	= 7a
2	34567890abcdef7a	bd914d9386658541	6f	⊕	bd	= d2
3	567890abcdef7ad2	adaf8c45c53f1f92	77	⊕	ad	= da
4	7890abcdef7ad2da	e3a3acc86c429d97	20	⊕	e3	= c3
5	90abcdef7ad2dac3	5cb1ebb51b70388d	69	⊕	5c	= 35
6	abcdef7ad2dac335	f3af29ce4cb9661f	73	⊕	f3	= 80
7	cdef7ad2dac33580	aa22a74f73723ad1	20	⊕	aa	= 8a
8	ef7ad2dac335808a	92d94cce188f15af	74	⊕	92	= e6
9	7ad2dac335808ae6	4fbbea151d3cfc54	68	⊕	4f	= 27
10	d2dac335808ae627	6dabad1fdba8bc3b	65	⊕	6d	= 08

The 8-bit CFB mode in the decrypt state has been selected.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

TIME	DES INPUT BLOCK	DES OUTPUT BLOCK	C	⊕	O	= P
1	1234567890abcdef	3494ccf2bda243a6	7a	⊕	34	= 4e
2	34567890abcdef7a	bd914d9386658541	d2	⊕	bd	= 6f
3	567890abcdef7ad2	adaf8c45c53f1f92	da	⊕	ad	= 77
4	7890abcdef7ad2da	e3a3acc86c429d97	c3	⊕	e3	= 20
5	90abcdef7ad2dac3	5cb1ebb51b70388d	35	⊕	5c	= 69
6	abcdef7ad2dac335	f3af29ce4cb9661f	80	⊕	f3	= 73
7	cdef7ad2dac33580	aa22a74f73723ad1	8a	⊕	aa	= 20
8	ef7ad2dac335808a	92d94cce188f15af	e6	⊕	92	= 74
9	7ad2dac335808ae6	4fbbea151d3cfc54	27	⊕	4f	= 68
10	d2dac335808ae627	6dabad1fdba8bc3b	08	⊕	6d	= 65

AN EXAMPLE OF THE ONE-BIT CIPHER-TEXT FEEDBACK (CFB) MODE

The 1-bit CFB mode in the encrypt state has been selected.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

The plain text is the ASCII code for "Now." These seven-bit characters are written in binary as (0,b7,b6,...,b1). The DES input and output blocks are written in hexadecimal notation. The ⊕ represents bit-by-bit, modulo-2 addition. Note: A draft, ANSI X3S3.8, link encryption standard requires that the bits of an ASCII character be processed in the reverse order of this example for 1-bit CFB. This draft data communications standard is designed for the transmission of ASCII characters in the standard, serial-by-bit manner (b1,b2,...,b7).

TIME	DES INPUT BLOCK	DES OUTPUT BLOCK	P	⊕	O	= C
1	1234567890abcdef	3494ccf2bda243a6	0	⊕	0	= 0
2	2468ac1121579bde	0a3c58d16a551826	1	⊕	0	= 1
3	48d159e242af37bd	87647b405d0b8cdf	0	⊕	1	= 1
4	91a2b3c4855e6f7b	e91173c434165ae0	0	⊕	1	= 1
5	234567890abcdef7	ca46c7d8c3aab695	1	⊕	1	= 0
6	468acf121579bdee	c3c832f66747157d	1	⊕	1	= 0
7	8d159e242af37bdc	7dd595cc10590044	1	⊕	0	= 1
8	1a2b3c4855e6f7b9	6fb8b7e872332de4	0	⊕	0	= 0
9	34567890abcdef72	9c91cbdde38c8104	0	⊕	1	= 1
10	68acf121579bdee5	fc4307d1d4e0b047	1	⊕	1	= 0
11	d159e242af37bdca	5fb5a8881bc850dd	1	⊕	0	= 1
12	a2b3c4855e6f7b95	57bba20ef9c025bd	0	⊕	0	= 0
13	4567890abcdef72a	5ea14c224e01dc2c	1	⊕	0	= 1
14	8acf121579bdee55	8e869e2277f5a1ad	1	⊕	1	= 0
15	159e242af37bdcaa	f68135d6b7585f91	1	⊕	1	= 0
16	2b3c4855e6f7b954	dc6d28bbb9061212	1	⊕	1	= 0
17	567890abcdef72a8	3d959a3e4d11eb9b	0	⊕	0	= 0
18	acf121579bdee550	32747b8355a832bf	1	⊕	0	= 1
19	59e242af37bdcaa1	eb5598e0a949d791	1	⊕	1	= 0
20	b3c4855e6f7b9542	e6308121b905adbd	1	⊕	1	= 0
21	67890abcdef72a84	f7998d0e85a6661b	0	⊕	1	= 1
22	cf121579bdee5509	1ccf6e6bef3d34e5	1	⊕	0	= 1
23	9e242af37bdcaa13	1c7da296b765e487	1	⊕	0	= 1
24	3c4855e6f7b95427	bbfdbec304117d48	1	⊕	1	= 0

APPENDIX B

EFFECTS OF CIPHER TEXT ERRORS

DES MODES OF OPERATION

CIPHER TEXT ERRORS AND THE ECB MODE

The ECB mode in the decrypt state has been selected.

The plain text is the ASCII code for "Now is the time for all ." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1). The last ASCII character in the first cipher text block has been changed to "3e" instead of the correct value "3d." The first block of cipher text should have decrypted to "4e6f772069732074." Bit error(s) within an ECB cipher text block will cause each bit of the corresponding plain text block to be in error with a probability of approximately fifty percent. Thus thirty-two errors are expected in the first block of decrypted plain text. For this specific example there are exactly 31 errors in this block. Note that bit errors within one ECB cipher text block do not affect the decryption of other cipher text blocks. Asterisks are used to identify the blocks affected by the cipher text errors.

Cryptographic Key = 0123456789abcdef

TIME	CIPHER TEXT	DES INPUT BLOCK	DES OUTPUT BLOCK	PLAIN TEXT
1	3d10fae4418fb83e*	3d10fae4418fb83e*	380e655486fb2d08*	380e655486fb2d08*
2	73b5bc13ffcd86fd	73b5bc13ffcd86fd	68652074696d6520	68652074696d6520
3	ff8f8fe4583a5a0f	ff8f8fe4583a5a0f	666f7220616c6c20	666f7220616c6c20

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DES MODES OF OPERATION

CIPHER TEXT ERRORS AND THE CBC MODE

The CBC mode in the decrypt state has been selected.

The plain text is the ASCII code for "Now is the time for all ." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1). The last ASCII character in the first cipher text block has been changed to "c6" instead of the correct value "c5." The first plain text block should have been "4e6f772069732074." Note that these bit errors affect the decryption of two blocks before cryptographic synchronization is re-established. Each bit in the first plain text block will be in error with a probability of approximately fifty percent; thus 32 binary errors are expected in this block. In this specific example there are exactly 30 errors in the first plain text block. The second block will have only those bits in error which correspond directly in number and position to the garbled cipher text bits. In this example the last two bits of plain text block #2 are incorrect. The third and succeeding plain text blocks are unaffected by bit errors in the first cipher text block. Asterisks are used to identify the blocks which are affected by the cipher text errors.

Cryptographic Key = 0123456789abcdef
Initialization Vector = 1234567890abcdef

TIME	CIPHER TEXT	DES INPUT BLOCK	DES OUTPUT BLOCK	PLAIN TEXT
1	c785361299fdf8c6*	c785361299fdf8c6*	4d91d5742e497411*	5fa5830cbee2b9fe*
2	9bebded075e1096a	9bebded075e1096a	afe01666f0909de5	686520746966d6523*
3	d0745b3dd304f9e1	d0745b3dd304f9e1	fd84acf0148d654a	666f7220616c6c20

DES MODES OF OPERATION

CIPHER TEXT ERRORS AND THE CFB MODE

The 8-bit CFB mode in the decrypt state has been selected.

The plain text is the ASCII code for "Now is the time for." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1). The cipher text character at time #4 has been changed to "c4" instead of the correct value "c3." In the general k-bit CFB mode, bit errors within a k-bit character will affect the decryption of one character in those bit positions corresponding to the errors. Succeeding characters will experience an error probability of approximately fifty percent until the garbles have been flushed from the DES input block. In 8-bit CFB, errors within a character affect the decryption of nine cipher text characters before cryptographic synchronization is re-established. The ⊕ represents bit-by-bit, modulo-2 addition.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

TIME	DES INPUT BLOCK	DES OUTPUT BLOCK	C ⊕ O = P
1	1234567890abcdef	3494ccf2bda243a6	7a ⊕ 34 = 4e
2	34567890abcdef7a	bd914d9386658541	d2 ⊕ bd = 6f
3	567890abcdef7ad2	adaf8c45c53f1f92	da ⊕ ad = 77
		ERROR IN NEXT CIPHER	
4	7890abcdef7ad2da	e3a3acc86c429d97	c4 ⊕ e3 = 27
5	90abcdef7ad2dac4	23ae7d3f645f7daa	35 ⊕ 23 = 16
6	abcdef7ad2dac435	aca8467513ba93ae	80 ⊕ ac = 2c
7	cdef7ad2dac43580	383b374dc55ba511	8a ⊕ 38 = b2
8	ef7ad2dac435808a	fbebef188f6ceab0	e6 ⊕ fb = 1d
9	7ad2dac435808ae6	307a55324bc7d098	27 ⊕ 30 = 17
10	d2dac435808ae627	a3179850047a27f9	08 ⊕ a3 = ab
11	dac435808ae62708	0d0eaf64dc7e5ccb	0f ⊕ 0d = 02
12	c435808ae627080f	5cc2582fc7ca06f3	6d ⊕ 5c = 31
		AUTORESYNC ON NEXT CIPHER	
13	35808ae627080f6d	953d fb12d8a4cf4	fc ⊕ 95 = 69
14	808ae627080f6dfc	dc365b7e426e726e	b1 ⊕ dc = 6d
15	8ae627080f6dfcb1	57cb75f386e76662	32 ⊕ 57 = 65
16	e627080f6dfcb132	68bbd6da037c3eb1	48 ⊕ 68 = 20
17	27080f6dfcb13248	71e50a54bd8c1f1d	17 ⊕ 71 = 66
18	080f6dfcb1324817	b91c8fd54d1d45f5	d6 ⊕ b9 = 6f
19	0f6dfcb1324817d6	009b705bb2ef50d6	72 ⊕ 00 = 72

APPENDIX C

CBC AND CFB FLOW CHARTS

(FOR ILLUSTRATIVE PURPOSES ONLY)

FIGURE C.1: CIPHER BLOCK CHAINING (CBC) OPERATIONS

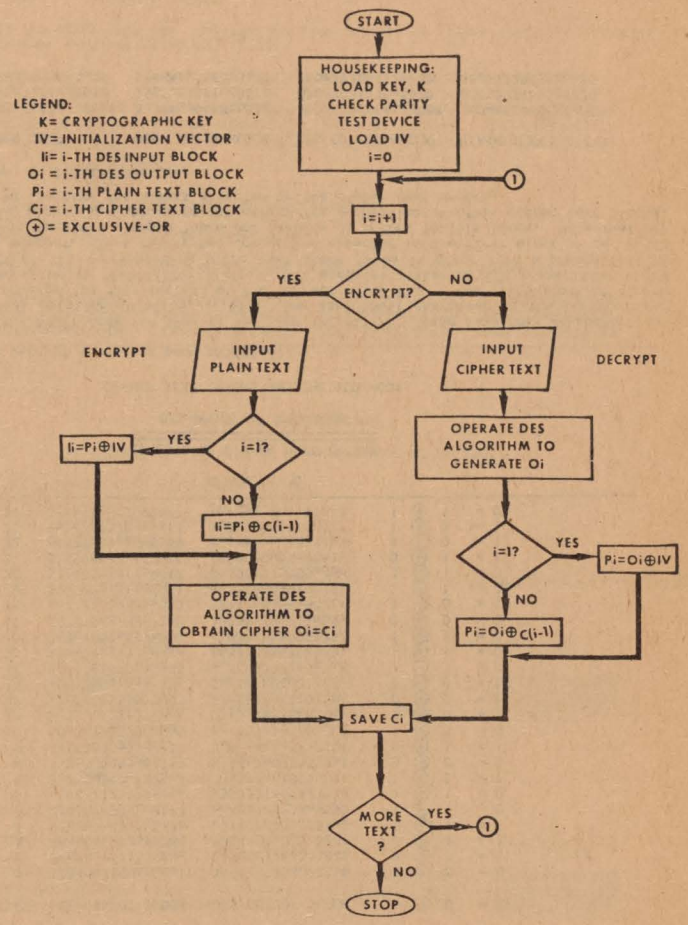
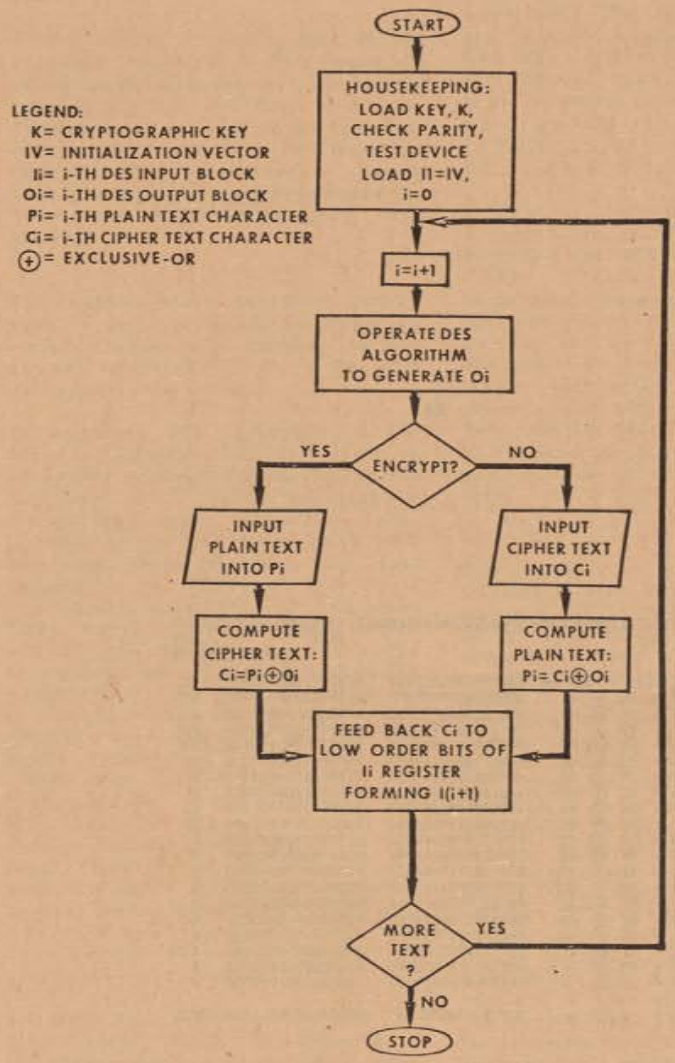


FIGURE C.2: CIPHER FEEDBACK (CFB) OPERATIONS



APPENDIX D

EXAMPLES OF AUTHENTICATION-ONLY MODE

DES MODES OF OPERATION

AN EXAMPLE OF THE AUTHENTICATION-ONLY MODE USING CBC

The CBC mode in the encrypt state has been selected.

For this example, the MID structure is a 48-bit binary counter which has been initialized to a pseudorandom value concatenated with sixteen zeros. Note that the first "plain text" block is all zeros; this is done to force the first DES input block to be equal to the MID in the CBC authentication mode. The last plain text block is padded to sixty-four bits with zeros on its right. The MID and the plain text are communicated unencrypted along with the MAC to the data destination. For this example, a 32-bit MAC has been selected. The plain text is the ASCII code for "Now is the time for ." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1).

Cryptographic Key = 0123456789abcdef

Initialization Vector = 00006ac103b28f99

TIME	PLAIN TEXT	DES INPUT BLOCK	DES OUTPUT BLOCK	
1	0000000000000000	00006ac103b28f99	efd5218cc2439930	
2	4e6f772069732074	a1ba56acab30b944	40f0a1601d7547c9	
3	686520746696d6520	28958114741822e9	b50e378f6058b74a	
4	666f722000000000	d36145af6058b74a	7ab019e4dd481bca	=> MAC = 7ab019e4

MESSAGE TEXT:

MID	TEXT	MAC
00006ac103b28f99	4e6f77206973207468652074696d6520666f72207	ab019e4

AN EXAMPLE OF THE AUTHENTICATION-ONLY MODE USING 8-BIT CFB

The 8-bit CFB mode in the encrypt state has been selected. For this example the MID structure consists of a 32-bit date-time code concatenated with a 32-bit, one-up binary counter. The date-time code designates the year (0), day of the year (003), hour of the day (10 or 1000 hours), and minutes (15). This value is used to uniquely identify the cryptographic period. The binary counter has been initialized to 00000001; it is incremented by "1" for each message to be authenticated within the same DES key period. A 24-bit MAC was selected for this example. The plain text is the ASCII code for "Now is the time for." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1). The ⊕ represents bit-by-bit, modulo-2 addition.

Cryptographic Key = 0123456789abcdef
Initialization Vector = 0003101500000001

TIME	DES INPUT BLOCK	DES OUTPUT BLOCK	P ⊕ O = C
1	0003101500000001	973c7b54e5bdd4da	4e ⊕ 97 = d9
2	03101500000001d9	bde39e43bf3f2258	6f ⊕ bd = d2
3	101500000001d9d2	1998d46fe4175d64	77 ⊕ 19 = 6e
4	1500000001d9d26e	5ddf40f5124917fa	20 ⊕ 5d = 7d
5	00000001d9d26e7d	09342c9870b4fe85	69 ⊕ 09 = 60
6	000001d9d26e7d60	ffedd60c4e72814e	73 ⊕ ff = 8c
7	0001d9d26e7d608c	3f873ff6e2e4cd39	20 ⊕ 3f = 1f
8	01d9d26e7d608c1f	724f0467a5fffdeb	74 ⊕ 72 = 06
9	d9d26e7d608c1f06	9ec1876e54493a52	68 ⊕ 9e = f6
10	d26e7d608c1f06f6	01a5d888c472bcdd	65 ⊕ 01 = 64
11	6e7d608c1f06f664	0b6f90e412246e54	20 ⊕ 0b = 2b
12	7d608c1f06f6642b	992db95a018d921f	74 ⊕ 99 = ed
13	608c1f06f6642bed	95c9b701a4681991	69 ⊕ 95 = fc
14	8c1f06f6642bedfc	b2e4f4318882ca59	6d ⊕ b2 = df
15	1f06f6642bedfcdf	6dfff2d406ea81de	65 ⊕ 6d = 08
16	06f6642bedfcdf08	43148a850bd66dc8	20 ⊕ 43 = 63
17	f6642bedfcdf0863	a26e7ae5815d7b60	66 ⊕ a2 = c4
18	642bedfcdf0863c4	57d8cc8f837534b9	6f ⊕ 57 = 38
19	2bedfcdf0863c438	560cccbc949bb350	72 ⊕ 56 = 24
20	edfcdf0863c43824	63113f72e8a09991	=> MAC = 63113f

MESSAGE FORMAT:

MID	TEXT	MAC
0003101500000001	4e6f772069732074686520746965206f66	63113f

APPENDIX E

RECOMMENDATIONS FOR
DES IV MANAGEMENT

The security of a CFB or CBC implementation depends, inter alia, upon cryptographic synchronization procedures. For these modes of operation, this means proper management of the DES initialization vectors (IVs). IV management encompasses the generation, distribution, protection, usage, and disposal of initialization vectors.

At least one standard (*) currently under development is specifying security requirements for CFB and CBC IVs in telecommunication environments. It is conceivable that a special application standard may need to tailor IV management to fit a particular set of application requirements in order to make the standard reasonably efficient as well as effective.

This standard on the modes of operation does not mandate specific techniques in IV management. This standard specifies only those requirements which are essential for unambiguously describing the mechanics needed to implement the modes of operation.

The following suggestions are recommended as preliminary guidelines which may be used until the publication of official guideline(s) or standard(s) in the area of IV management.

CBC IVs:

The CBC IV consists of sixty-four binary digits. A single IV may be used throughout an entire CBC cryptographic period, however, this IV should be protected from disclosure. CBC IVs should not be repeated across cryptographic periods (same key) with a probability greater than 2 to the (-64). A 64-bit random or pseudorandom generation technique will satisfy this characteristic.

CFB IVs:

CFB IVs consist of 64 binary digits. As with other DES additive stream ciphers, it is desirable that CFB IVs change as frequently as possible in order to insure a unique additive stream to protect the plain text. CFB IVs should not repeat within a specific cryptographic period or across different cryptographic periods with a probability greater than 2 to the (-48). As a corollary, CFB IVs may only contain a maximum of sixteen fixed bits. A 48-bit random or pseudorandom process is sufficient to satisfy this property. CFB IVs do not need to be protected from disclosure, i.e., they may be transmitted unencrypted through an unsecured channel.

* Proposed Federal Standard 1027; Telecommunications: Security Requirements for Use of the Data Encryption Standard; 4 September 1979, 18 pages.

B. THE OUTPUT-BLOCK FEEDBACK (OFB) MODE

(This section is not a part of the proposed standard. This mode is being considered for inclusion as an integral part of the final standard. Comments are solicited on its technical content and suitability for inclusion in the final standard. Terms used in this section are defined in Document A accompanying this notice.)

The output-block feedback (OFB) mode is an additive stream cipher in which cipher text garbles do not cause additional errors in the decrypted plain text.

To commence OFB operations, a 64-bit initialization vector (IV) is processed through a Data Encryption Standard (DES) device operated in the encrypt state. The IV is right-justified in the DES input block with any zero fill on its left. The least significant bit (LSB) of the IV is aligned with the LSB of the DES input block; other IV bits are placed to the left of the LSB in increasing order of significance. For OFB encryption (decryption), the DES output block is exclusive-ORed with the first plain (cipher) text character to form the cipher (plain) text. The entire DES output block is fed back to the DES input block. The l-th bit, l = 1,2,...,64, of the output block at time t becomes the l-th bit of the input block at time t+1. The second output block is generated in order to process the second OFB character. The OFB operation continues in this manner until the entire "message" is encrypted or decrypted.

An OFB "character" length may be from 1 to 64 bits. The leftmost or the high-order bits of the DES output block are used in the exclusive-OR operation for encryption or decryption. The DES is operated once for each character that is processed. For example, if the plain text data is k bits, $(D1,D2,...,Dk)$ $0<k<65$, and the output block is $(O1,O2,...,O64)$, then the cipher text resulting from the exclusive-OR operation is defined by $(C1,C2,...,Ck) = (D1 \oplus O1, D2 \oplus O2,...,Dk \oplus Ok)$.

In OFB, all sixty-four bits of the DES output block at time t are fed back to define the DES input block at time (t+1). These feedback bits are completely independent of all plain text and all cipher text. As a result, there is no error extension characteristic associated with OFB cipher text errors as is the case in the CBC and CFB modes of operation. Errors in the decrypted plain text will correspond directly to the number and location of errors in the cipher text.

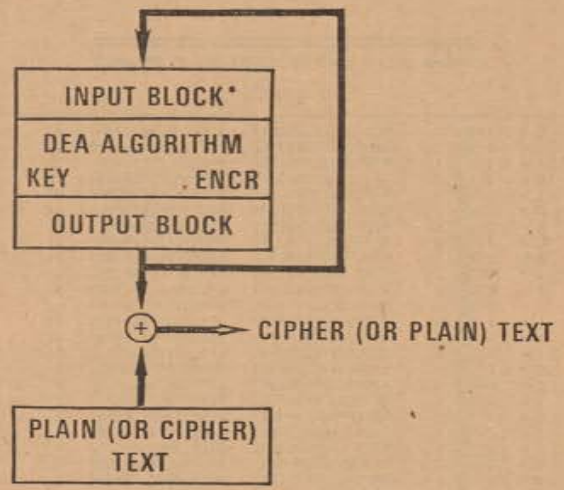
The security of an OFB system is affected, inter alia, by the proper management of OFB IVs. A unique IV for each OFB "message" within a cryptographic period avoids a repetition problem with the additive stream. Uniqueness can be achieved, for example, through the use of a one-up binary counter. However, it is also desirable to avoid repeating with high probability a fixed DES input-block value across different key periods. Consequently, a unique cryptographic period identifier could be concatenated to a unique message identifier to form an OFB IV. Another OFB IV technique would be to use a random start on a large binary counter, e.g., 32 bits. Since exhausting the range of a counter within a cryptographic period defeats the purpose of the random start, it is recommended that only a small segment, say much less than 5%, of the total range of the counter should be used in any single key period.

Still a third approach to this problem is to exclusive-OR a one-up counter with a 64-bit, random or pseudorandom value which is generated or provided at the beginning of each new key period and is used for the duration of the key period.

OFB IV synchronization messages should be protected from bit manipulation, insertion of bogus messages, and the deletion or replay of valid service messages. These synchronization messages should be at least authenticated if not encrypted.

The OFB mode has a potential security problem in that it is susceptible to a substitution attack in an active threat environment under a known plain text assumption. If a DES user is concerned about this problem, then a secure, not secret, error detection code (EDC) or some equivalent process should be encrypted along with the plain text. The authentication-only mode provides one way of generating a secure EDC.

OUTPUT-BLOCK FEEDBACK (OFB) MODE



* FIRST OPERATION REQUIRES AN INITIALIZATION VECTOR

APPENDIX A

EXAMPLES OF THE OUTPUT-BLOCK FEEDBACK MODE

DES MODES OF OPERATION

AN EXAMPLE OF THE 8-BIT OUTPUT-BLOCK FEEDBACK (OFB) MODE

The 8-bit OFB mode in the encrypt state has been selected.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

The plain text is the ASCII code for "Now is the." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1). The ⊕ represents bit-by-bit, modulo-2 addition.

TIME	DES INPUT BLOCK	DES OUTPUT BLOCK	P ⊕ 0 = C
1	1234567890abcdef	3494ccf2bda243a6	4e ⊕ 34 = 7a
2	3494ccf2bda243a6	128fa088277e62cd	6f ⊕ 12 = 7d
3	128fa088277e62cd	7170c97b346227b1	77 ⊕ 71 = 06
4	7170c97b346227b1	3a3f58a4fd176dfe	20 ⊕ 3e = 1e
5	3a3f58a4fd176dfe	19db2db28422e81d	69 ⊕ 19 = 70
6	19db2db28422e81d	afdb44cd90ed192d	73 ⊕ af = dc
7	afdb44cd90ed192d	2d1a0d9fc009acd5	20 ⊕ 2d = 0d
8	2d1a0d9fc009acd5	28655e9cc656003f	74 ⊕ 28 = 5c
9	28655e9cc656003f	294ed4236f175217	68 ⊕ 29 = 41
10	294ed4236f175217	54bcb378e31d6722	65 ⊕ 54 = 31

The 8-bit OFB mode in the decrypt state has been selected.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

TIME	DES INPUT BLOCK	DES OUTPUT BLOCK	C ⊕ 0 = P
1	1234567890abcdef	3494ccf2bda243a6	7a ⊕ 34 = 4e
2	3494ccf2bda243a6	128fa088277e62cd	7d ⊕ 12 = 6f
3	128fa088277e62cd	7170c97b346227b1	06 ⊕ 71 = 77
4	7170c97b346227b1	3a3f58a4fd176dfe	1a ⊕ 3a = 20
5	3a3f58a4fd176dfe	19db2db28422e81d	70 ⊕ 19 = 69
6	19db2db28422e81d	afdb44cd90ed192d	dc ⊕ af = 73
7	afdb44cd90ed192d	2d1a0d9fc009acd5	0d ⊕ 2d = 20
8	2d1a0d9fc009acd5	28655e9cc656003f	5c ⊕ 28 = 74
9	28655e9cc656003f	294ed4236f175217	41 ⊕ 29 = 68
10	294ed4236f175217	54bcb378e31d6722	31 ⊕ 54 = 65

[FR Doc. 80-15687 Filed 5-21-80; 8:45 am]

BILLING CODE 3510-13-C

DES MODES OF OPERATION

AN EXAMPLE OF THE ONE-BIT OUTPUT-BLOCK FEEDBACK (OFB) MODE

The 1-bit OFB mode in the encrypt state has been selected.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

The plain text is the ASCII code for "Now." These seven-bit characters are written in binary as (0,b7,b6,...,b1). The DES input and output blocks are written in hexadecimal notation. The ⊕ represents bit-by-bit, modulo-2 addition.

TIME	DES INPUT BLOCK	DES OUTPUT BLOCK	P ⊕ 0 = C
1	1234567890abcdef	3494ccf2bda243a6	0 ⊕ 0 = 0
2	3494ccf2bda243a6	128fa088277e62cd	1 ⊕ 0 = 1
3	128fa088277e62cd	7170c97b346227b1	0 ⊕ 0 = 0
4	7170c97b346227b1	3a3f58a4fd176dfe	0 ⊕ 0 = 0
5	3a3f58a4fd176dfe	19db2db28422e81d	1 ⊕ 0 = 1
6	19db2db28422e81d	afdb44cd90ed192d	1 ⊕ 1 = 0
7	afdb44cd90ed192d	2d1a0d9fc009acd5	1 ⊕ 0 = 1
8	2d1a0d9fc009acd5	28655e9cc656003f	0 ⊕ 0 = 0
9	28655e9cc656003f	294ed4236f175217	0 ⊕ 0 = 0
10	294ed4236f175217	54bcb378e31d6722	1 ⊕ 0 = 1
11	54bcb378e31d6722	574fa36a700694cc	1 ⊕ 0 = 1
12	574fa36a700694cc	cd2c8de0f5406aba	0 ⊕ 1 = 1
13	cd2c8de0f5406aba	09fe1a8983854545	1 ⊕ 0 = 1
14	09fe1a8983854545	d5636540ba585bcf	1 ⊕ 1 = 0
15	d5636540ba585bcf	6601c4c459539b93	1 ⊕ 0 = 1
16	6601c4c459539b93	85d0e71e0a2e3eeb	1 ⊕ 1 = 0
17	85d0e71e0a2e3eeb	cd034072ba3d3c7c	0 ⊕ 1 = 1
18	cd034072ba3d3c7c	533a0153d9660729	1 ⊕ 0 = 1
19	533a0153d9660729	8c6334decf474e26	1 ⊕ 1 = 0
20	8c6334decf474e26	1996b8b657082dce	1 ⊕ 0 = 1
21	1996b8b657082dce	3f2ef675242017df	0 ⊕ 0 = 0
22	3f2ef675242017df	9cff00f7bf34abca	1 ⊕ 1 = 0
23	9cff00f7bf34abca	cd6b53263281cb76	1 ⊕ 1 = 0
24	cd6b53263281cb76	f4986619722a120a	1 ⊕ 1 = 0

APPENDIX B

EXAMPLES OF THE EFFECT OF CIPHER TEXT ERRORS

DES MODES OF OPERATION

CIPHER TEXT ERRORS AND THE OFB MODE

The 64-bit OFB mode in the decrypt state has been selected.

Cryptographic Key = 0123456789abcdef

Initialization Vector = 1234567890abcdef

The plain text is the ASCII code for "Now is the time for all." These seven-bit characters are written in hexadecimal notation (0,b7,b6,...,b1). The last ASCII character in the first cipher text block has been changed to "d3" instead of the correct value "d2." This change results in the last bit of the last character in the first plain text block to be in error.

TIME	CIPHER TEXT	DES INPUT BLOCK	DES OUTPUT BLOCK	PLAIN TEXT
1	7afbbbd2d4d163d3	1234567890abcdef	3494ccf2bda243a6	4e6f772069732075
2	7aea80fc4e1307ad	3494ccf2bda243a6	128fa088277e62cd	68652074696d6520
3	171fbb5b550e4b91	128fa088277e62cd	7170c97b346227b1	666f7220616c6c20

COMMISSION OF FINE ARTS

Meeting

The Commission of Fine Arts will next meet in open session on Tuesday, June 10, 1980, at 10:00 a.m. in the Commission's offices at 708 Jackson Place, NW., Washington, D.C. 20006 to discuss various projects affecting the appearance of Washington, D.C.

Inquiries regarding the agenda and requests to submit written or oral statements should be addressed to Mr. Charles H. Atherton Secretary, Commission of Fine Arts, at the above address.

Dated in Washington, D.C. May 15, 1980.

Charles H. Atherton,

Secretary.

[FR Doc. 80-15745 Filed 5-21-80; 8:45 am]

BILLING CODE 6330-01-M

CONSUMER PRODUCT SAFETY COMMISSION

Privacy Act of 1974; System of Records

AGENCY: Consumer Product Safety Commission.

ACTION: Revision of new system of records.

SUMMARY: The purpose of this document is to announce revisions in the Consumer Producer Safety Commission's Field Work Tracking System, CPSC–20, as published at 44 FR 71857, December 12, 1979.

DATES: These revisions are effective May 22, 1980.

FOR FURTHER INFORMATION CONTACT: Joseph F. Rosenthal, Office of General Counsel, Consumer Product Safety Commission, Washington, D.C. 20207, Telephone (202) 634–7770.

SUPPLEMENTARY INFORMATION: On December 12, 1979 the Consumer Product Safety Commission published its intent, at 44 FR 71857, to create a new Privacy Act System of Records, entitled Field Work Tracking System—CPSC–20, and solicited comments to be received on or before February 11, 1980.

Certain revisions to the system description have been made as a result of comments received.

One comment was received from an interested citizen and seven from CPSC Area Office employees or groups of employees.

The interested citizen suggested that the system be expanded to track the payroll costs of each work assignment. This suggestion was not adopted because the Commission has other means of tracking project costs.

All other commentors objected to the use of the CPSC employee identification number as a record identifier on the grounds that such use would permit access to an individual's records by a large number of other employees, most of whom would have no need for such access in the performance of their duties. The system has accordingly been modified, as reflected by revisions in the Categories of Records and Safeguards sections of the System Notice, by replacing the regular CPSC employee identification numbers with special identification numbers for use in this system. Those numbers are known only to a limited number of people, not including other staff members performing work assignments covered by the system or supervisors in other Area Offices.

The Commission has not complied with the request of some commentors that access to individual employee data be limited to an employee's first line supervisor, because higher level supervisors and certain other employees have a legitimate need for access to that data also.

One commentor pointed out that the completion date entered in the system would not accurately reflect an employee's performance in meeting target dates because of typing and supervisory review delays not under the employee's control. The system has accordingly been modified, as reflected by revisions in the Categories of Records section of the System Notice, by redefining what was formerly an interim date as the "date employee submitted report to supervisor for review and typing," and redefining what was formerly a completion date as the "date typed report is endorsed by supervisor."

Some commentors noted that any employee performing work assignments covered by the system could tamper with the computer records of any other such employee. The possibility of that happening is greatly reduced since the only persons who will know the identification of any other such employee will be those persons who have a legitimate need to have access to that information. In addition, as reflected in additional language in the Safeguards section, such employees will not ordinarily be able to add to or alter such records because additional passwords are required to enter or alter computer records and are only issued to specially designated persons. An additional safeguard against inaccurate data is the fact, now noted in the Safeguards section, that all employees can gain access to the computer data pertaining to themselves. Employees will be encouraged to review their data at least once a month and report any errors.

Some commentors objected generally to the implementation of the system because it fails to take account of quality of work performed, priority assignments, sick leave taken, and other non-quantitative factors relevant to characterizing employee performance. These commentors also objected to possible use of the system to prescreen applicants for transfers or promotions.

The Commission realizes that no kind of quantitative or numerical data about employees can fully characterize their performance, but equally believes that it is impossible to characterize employee performance without quantitative data. Employee performance evaluations are primarily the responsibility of the first line supervisors who are most aware of and most able to take account of the various non-quantitative attributes of an employee's work. The system will not be used as the only factor to prescreen or disqualify any person eligible for transfer or promotion. It will only be used as one of many factors to be considered in a thorough evaluation process. For these reasons the Commission will implement the Field Work Tracking System, as revised.

The Commission is also correcting the addresses of two of the Area Offices listed in Appendix I. For convenience of the reader, the entire system description, as revised, is being republished.

Since the revisions do not expand the system in any way or alter the routine uses previously published, the revised system of records will be effective May 22, 1980.

Dated: May 19, 1980.

Sadye E. Dunn,

Secretary, Consumer Product Safety Commission.

CPSC–20

SYSTEM NAME:

Field Work Tracking System CPSC–20.

SYSTEM LOCATION:

Consumer Product Safety Commission, Directorate for Field Operations, 5401 Westbard Avenue, Washington, D.C. 20207, and the Area Offices listed in Appendix I.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Professional, non-managerial, staff members of CPSC Area Offices who are

performing work assignments covered by the system.

CATEGORIES OF RECORDS IN THE SYSTEM:

The records contain information on work assignments performed by CPSC Area Offices. The data included are: an identification number of the assigned employee; assignment identification number; organizational unit initiating the assignment and Area Office performing the assignment; program, project and activity codes; assignment date; target completion date; date employee submitted report to supervisor for review and typing; date typed report is endorsed by supervisor; number of activities performed; actual hours required to complete the assignment; and a narrative description of the assignment.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

15 U.S.C. 2051 et seq.; 44 U.S.C. 3101.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

These records, or a compilation of these records, are used by the Directorate for Field Operations and its Area Offices as a management aid to:

(a) Track the status of field assignments

(b) Track the progress against planned goals

(c) Compare Area Office performance

(d) Identify resource allocation deficiencies

(e) Provide reports to top level CPSC management on field accomplishment

In addition, within each Area Office, the Area Office management will use the records, or a compilation of information from the records, to:

(a) Assure efficient distribution of assignments to employees

(b) Track employees' ability to meet target dates in relation to performance standards.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records are stored on computer magnetic media. Hard copies of the records are stored at the Consumer Product Safety Commission, Directorate for Field Operations, 5401 Westbard Avenue, Bethesda, Maryland 20207, and the Area Offices listed in Appendix I.

RETRIEVABILITY:

The records may be retrieved by any one or any combination of the data items.

SAFEGUARDS:

Access to the computer data is restricted to Area Office personnel and Field Operations Directorate staff at Headquarters through the use of computer access passwords. The system identification number for an Area Office staff member is known only to that person, that person's supervisors and Area Office Director, Area Office clerical staff involved in operating the system, the Associate Executive Director for Field Operations, the head of the Directorate's operations staff, and the program analyst with operational responsibility for the system. Any Area Office staff member can gain access to the computer data pertaining to himself or herself. Special passwords are required to enter or change computer data and are issued only to persons designated by Area Office directors.

Hard copies of the records are kept in lockable file drawers.

RETENTION AND DISPOSAL:

Records are retained indefinitely.

SYSTEM MANAGER(S) AND ADDRESS:

Associate Executive Director for Field Operations, Consumer Product Safety Commission, 5401 Westbard Avenue, Washington, D.C. 20207.

NOTIFICATION PROCEDURE:

Same as System Manager

RECORD ACCESS PROCEDURES:

Same as System Manager

CONTESTING RECORD PROCEDURES:

Same as System Manager

RECORD SOURCE CATEGORIES:

Information in this system of records comes from employees performing the recorded assignments and their supervisors.

Appendix I

Area Offices:

Atlantic Area Office, 1330 West Peachtree Street, N.W., Atlanta, Georgia 30309.

Boston Area Office, 100 Summer Street, 16th Floor, Room 1607, Boston, Mass. 02110.

Chicago Area Office, 230 S. Dearborn Street, Room 2945, Chicago, Illinois 60604.

Cleveland Area Office, Plaza Nine Building, Room 520, 55 Erie View Plaza, Cleveland, Ohio 44114.

Dallas Area Office, 1100 Commerce Street, Room 1C10, Dallas, Texas 75242.

Denver Area Office, Suite 938, Guaranty Bank Bldg., 817 17th Street, Denver, Colorado 90202.

Kansas City Area Office, Suite 1000, Midland Building, 1221 Baltimore Avenue, Kansas City, Missouri 64105.

Los Angeles Area Office, 3660 Wilshire Boulevard, Suite 1100, Los Angeles, California 90010.

Twin Cities Area Office, Metro Square, Suite 580, 7th and Robert, St. Paul, Minnesota 55101.

New York Area Office, 6 World Trade Center, Vesey Street, 6th Floor, New York, New York 10048.

Philadelphia Area Office, 10th Floor, 400 Market Street, Philadelphia, PA 19106.

Seattle Area Office, Federal Building, Room 3240, 915 Second Avenue, Seattle, Washington 98174.

San Francisco Area Office, 555 Battery Street, Room 416, San Francisco, Calif. 94111.

[FR Doc. 80-15773 Filed 5-21-80; 8:45 am]

BILLING CODE 6355-01-M

COUNCIL ON ENVIRONMENTAL QUALITY

Request for Comments and Notice of Public Meeting on Integrated Pest Management; Draft Report to the President

AGENCY: Council on Environmental Quality, Executive Office of the President

ACTION: Request for comments and notice of public meeting on a Draft Report to the President on the federal role in Integrated Pest Management (IPM).

SUMMARY: In his August 1979 Environmental Message, the President stated, "The Federal government—which spends more than $200 million a year on pest control research and implementation programs—should encourage the development and use of integrated pest management (IPM) in agriculture, forestry, public health and urban pest control." The President directed federal agencies to review their existing pest management activities, to support and adopt IPM strategies wherever practicable, and to coordinate their efforts through an interagency committee chaired by the Council on Environmental Quality.

This Interagency IPM Coordinating Committee was directed to report to the President by June 30, 1980 on progress made by federal agencies in the advancement of integrated pest management and on any institutional barriers thereto. The Committee has prepared a draft report to the President, and determined that, in order to have the benefit of public opinion on its findings and recommendations, the draft report should be made available for review and comment prior to submitting a final version to the President. While the Committee urges all interested parties to provide written comments, provision has also been made for a public meeting if individuals wish to make oral comments as well.

DATES: All comments must be received by June 23, 1980. A public meeting will be held, if sufficient interest is expressed, on Monday , June 23, at 9:00 a.m., in the Jefferson Auditorium, first floor, South Agriculture Building, U.S. Department of Agriculture, 14th and Independence Avenue SW., Washington, D.C. Persons wishing to speak should notify the Council as soon as possible by sending a post card or letter to the address given below.

ADDRESS: Persons wishing to comment should request copies of the Draft Report to the President on Integrated Pest Management from: Ms. Odelia Doggette, Council on Environmental Quality, 722 Jackson Place NW., Washington, D.C. 20006. To save time, requests can be made to Ms. Doggette by telephone; the number is 202/395–4540. Persons wishing to speak at the public meeting should notify Ms. Doggette at the same address or telephone number, giving their name, address, telephone number and the name of any organization they will be representing. Speakers should plan to limit their remarks to approximately 10 minutes, and are encouraged to provide written copies of their statements at the hearing. The meeting room may be changed in response to the level of public interest; if a change is made, speakers will be notified in advance.

Written comments must be received by the Council not later than June 23, 1980. Comments should be sent to: Mr. Robert B. Smythe, Senior Staff Member for Natural Resources, Council on Environmental Quality, 722 Jackson Place NW., Washington, D.C. 20006.

FOR FURTHER INFORMATION CONTACT: Mr. Robert Smythe or Dr. Allen Steinhauer at the above address; their telephone number is 202/395–4540.

Dated: May 19, 1980.

Edward L. Strohbehn, Jr.,

Executive Director.

[FR Doc. 80–15737 Filed 5–21–80; 8:45 am]

BILLING CODE 3125–01–M

DEPARTMENT OF DEFENSE

Department of the Navy

Continued Withdrawal and Exclusive Jurisdiction Over Bravo–20 Weapons Test Range, Naval Air Station, Fallon, Churchill County, Nev.; Finding of No Significant Impact

Pursuant to the provisions of the regulations implementing the procedural provisions of the National Environmental Policy Act (Part 1508.13 of Title 40 CFR), the Department of the Navy gives notice that an environmental impact statement is not being prepared for the continued withdrawal and exclusive jurisdiction over the BRAVO–20 Weapons Test Range at Naval Air Station, Fallon, Nevada. The Navy has utilized the range through leaseholds at 5-year increments since 1950. The present segregation for naval use of the lands in question, except for the private lands noted below, expires in 1980.

Under provisions of the Federal Land and Policy Management Act of 1976, withdrawal actions for the BRAVO–20 range cannot be extended and jurisdiction must be transferred to that Department, Bureau or Agency having use for the land. No new "uses" are authorized by this action and any alterations from the land's present state are to be addressed in subsequent, site-specific environmental documentation.

The BRAVO–20 range includes 21,600 acres of Bureau of Land Management (BLM) lands and 19,430 acres of interspersed privately owned (Southern Pacific) land. These latter parcels are to be separately acquired by purchase. Approximately at the center of these combined lands, naval aerial, gunnery-related test and development projects are conducted on about 8,000 acres or 20 percent of the total acreage.

The remainder of the range remains in its "natural," state and serves as a safety zone mandated by the operational characteristics of modern combatant aircraft.

The Environmental Assessment of this action, accomplished in close cooperation with the Bureau of Land Management, U.S. Department of the Interior, indicates that continued withdrawal and Navy jurisdiction over the lands in question will not cause significant impacts on the environment. Studies completed and primarily addressing the "affected" 8,000 acres included: topography, geology, hydrology, air quality, cultural resources, biological resources, land use, socioeconomic aspects, public health and safety, and aesthetic impacts. Alternatives included: no action, or reversion to public land status, enlarging or reducing the withdrawal area, relocation to other existing ranges, or creation of new and equivalent ranges in a new area. Of the alternatives addressed, the proposed continued withdrawal alternative is considered to have the least environmental impact. By virtue of the Navy's continued stewardship, most of the land in question has the greatest potential to remain in its undisturbed state.

As a result of the assessment and consultation with the Federal and state land management agencies involved, it has been determined that preparation and review of an environmental impact statement is not required.

The Environmental Assessment prepared by the Navy addressing this action is on file and may be reviewed by interested parties at both the point of origin, Commander, Naval Air Station, Fallon, NV 89406 (attention: Public Works Officer); or at the Environmental Protection and Occupational Safety and Health Division (NOP–45), Office of the Chief of Naval Operations, RM BD–766, Pentagon, Washington, D.C. 20350 (202) 697–3668. Additionally, a limited number of copies of the Environmental Assessment are available to fill single-copy requests. The Navy will receive comments on this proposed action for a 30-day period (on or before June 20, 1980) commencing on the date this notice appears in the **Federal Register.**

Dated: May 14, 1980.

P. B. Walker,

Captain, JAGC, U.S. Navy Deputy Assistant Judge Advocate General (Administrative Law).

[FR Doc. 80–15630 Filed 5–21–80; 8:45 am]

BILLING CODE 3810–71–M

Office of the Secretary

Defense Science Board Review Panel on ASW; Advisory Committee Meeting

An ASW Review Panel under the Defense Science Board will meet in closed session on 25 June 1980 in Washington, D.C.

The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Rearch and Engineering on scientific and technical matters as they affect the perceived needs of the Department of Defense.

The ASW Review Panel will review the technical aspects of ASW programs in the 25 June meeting.

In accordance with 5 U.S.C. App 1 10(d) (1976), it has been determined that this Defense Science Board Task Force meeting concerns matters listed in 5 U.S.C. 552b(c)(1) (1976), and that accordingly this meeting will be closed to the public.

M. S. Healy,

OSD Federal Register Liaison Officer, Washington Headquarters Services, Department of Defense.

May 19, 1980.

[FR Doc. 80–15642 Filed 5–21–80; 8:45 am]

BILLING CODE 3810–70–M

Defense Science Board Task Force on Cruise Missiles; Advisory Committee Meeting

The Defense Science Board Task Force on Cruise Missiles will meet in closed session on June 18 and 19, 1980 at Strategic Air Command, Offutt Air Force Base, Nebraska.

The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Research and Engineering on overall research and engineering policy and to provide long-range guidance to the Department of Defense in these areas.

The Task Force will provide an analysis of the major issues concerning cruise missile navigation and testing.

In accordance with 5 U.S.C. App I § 10(d)(1976), it has been determined that this Defense Science Board Task Force meeting concerns matters listed in 5 U.S.C. 552b(c)(1)(1976), and that accordingly this meeting will be closed to the public.

M. S. Healy,

OSD Federal Register Liaison Officer, Washington Headquarters Services, Department of Defense.

May 19, 1980.

[FR Doc. 80-15640 Filed 5-21-80; 8:45 am]

BILLING CODE 3810-70-M

Defense Science Board Task Force on ECM; Advisory Committee Meeting

The Defense Science Board Task Force on ECM will meet in closed session 12–13 June 1980 at the Pentagon in Washington, D.C.

The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Research and Engineering on scientific and technical matters as they affect the perceived needs of the Department of Defense.

The Task Force will discuss potential technical solutions to several current problems in electronic countermeasures.

In accordance with 5 U.S.C. App. 1 § 10(d)(1976), it has been determined that this Defense Science Board Task Force meeting concerns matters listed in 5 U.S.C. 552b(c)(1)(1976), and that accordingly, this meeting will be closed to the public.

M. S. Healy,

OSD Federal Register Liaison Officer, Washington Headquarters Service, Department of Defense.

May 19, 1980.

[FR Doc. 80-15641 Filed 5-21-80; 8:45 am]

BILLING CODE 3810-70-M

DEPARTMENT OF EDUCATION

Office of the Assistant Secretary for Postsecondary Education

National Advisory Committee on Black Higher Education and Black Colleges and Universities; Meeting

AGENCY: National Advisory Committee on Black Higher Education and Black Colleges and Universities.

ACTION: Notice.

SUMMARY: This notice sets forth the schedule and proposed agenda of the fourteenth meeting of the National Advisory Committee on Black Higher Education and Black Colleges and Universities. Notice of this meeting is required under Section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. Appendix 1). This document is intended to notify the general public of their opportunity to attend.

DATE: June 19–20, 1980, 9:00 am to 5:00 pm.

ADDRESS: Howard University, Armour J. Blackburn University Center, Washington, D.C. 20059.

FOR FURTHER INFORMATION CONTACT: Ms. Carol J. Smith, Program Delegate, National Advisory Committee on Black Higher Education and Black Colleges and Universities, Suite 702–6, 1100 17th Street, N.W. Washington, D.C. 20036, AC 202 653–7558.

The National Advisory Committee on Black Higher Education and Black Colleges and Universities is governed by the provisions of Part D of the General Education Provisions Act (Pub. L. 90–247 as amended; 20 U.S.C. 1233 *et seq.*) and the Federal Advisory Committee Act (Pub. L. 92–463; 5 U.S.C. Appendix 1) which set forth standards for the formation and use of advisory committees.

This Committee was established to examine all approaches to the higher education of Black Americans as well as the historically Black colleges and universities. Originally scheduled to expire on June 30, 1980, Secretary Hufstedler has announed her intention to extend the Committee so that the Education Department may continue to benefit from the Committee's recommendations.

The meeting on June 19–20, 1980, will be open to the public beginning at 9:00 am each day. The meeting will be held at Howard University, Armour J. Blackburn University Center, West Ballroom, Washington, D.C. 20059.

The proposed agenda will include a review of the reports on the Long Range Plan to enhance opportunities for Blacks in higher education, and Access, Opportunity for Success, and Diversity—The Necessary System Supports; review of commissioned research reports on "The Problems of Low-Income/Black Students in Higher Education: A Community Perspective" and "Policy and Its Development—An Examination of the Involvement of Private Corporate Entities in Philanthropy to Black Higher Education and Black Colleges"; and a discussion of the Committee's plans to study the impact of current trends in higher education on Black Americans.

Records shall be kept of all Committee proceedings and shall be available for public inspection at the Office of the National Advisory Committee on Black Higher Education and Black Colleges and Universities located at 1100 17th Street, N.W., Suite 702–6, Washington, D.C. 20036.

Signed at Washington, D.C. on May 19, 1980.

Carol J. Smith,

Program Delegate, National Advisory Committee on Black Higher Education and Black Colleges and Universities.

[FR Doc. 80-15683 Filed 5-21-80; 8:45 am]

BILLING CODE 4110-02-M

National Advisory Council on Extension and Continuing Education; Amendment

The notice of a meeting of the National Advisory Council on Extension and Continuing education, published in the **Federal Register** May 5, 1980 (page 29638) is hereby amended to include the following details which had to be rescheduled to accommodate panelists and speakers invited by the Council to participate in its meeting.

1. The Council meeting will begin on May 21, 1980 at 2:00 p.m. in the Treaty Signing Room, Old Executive Office Building, Washington, D.C. The agenda includes a briefing on the Council meeting schedule and meetings of the Council's four ad hoc committees.

A Council dinner meeting will be held at 7:30 p.m. in the Assembly Room of the Washington Hotel, Fifteenth Street and Pennsylvania Avenue, N.W., Washinton, D.C., followed by a CLOSED MEETING for Council's evaluation of the Executive Director.

2. On May 22, 1980 the Council will reconvene its meeting in the Treaty Signing Room, Old Executive Office Building, from 9:00 a.m. to 4:00 p.m. Luncheon and dinner meetings will be conducted at 12:00 Noon and 7:30 p.m., respectively, in the Federal Room of the Washington Hotel.

The agenda for May 22 includes panel discussions and presentations by

Congressional staff and members of the Education Department.

3. The final session of the Council's meeting will begin at 9:00 a.m. on May 23, 1980, in the Treaty Signing Room, Old Executive Office Building. Included on the agenda are reports from ad hoc committees and other Council business. The Council's meeting is scheduled to adjourn at 11:30 a.m.

Dated: May 19, 1980.

William G. Shannon,

Executive Director.

[FR Doc. 80-15684 Filed 5-21-80; 8:45 am]

BILLING CODE 4110-02-M

National Advisory Council on Adult Education; Meeting

AGENCY: National Advisory Council on Adult Education.

ACTION: Notice of Meeting.

SUMMARY: This notice sets forth the schedule and proposed agenda of a forthcoming meeting of the National Advisory Council on Adult Education. This notice also describes the functions of the Council. Notice of this meeting is required under the Federal Advisory Committee Act (Pub. L. 92-463, Sec. 10(a)(2)).

DATES: June 18, 1980, 7:00 p.m. to 10:00 p.m., Executive Committee Meeting: June 19-20, 1980, 9:00 a.m. to 5:00 p.m., June 21, 1980, 9:00 a.m. to 12:00 p.m.

ADDRESS: Hotel Washington, 15th and Pennsylvania Avenue, N.W., Washington, D.C.

FOR FURTHER INFORMATION CONTACT: Dr. Gary A. Eyre, Executive Director, National Advisory Council on Adult Education, 425 13th St., N.W., Washington, D.C. 20004 (202/376-8892).

SUPPLEMENTARY INFORMATION: The National Advisory Council on Adult Education is established under Section 313 of the Adult Education Act (20 U.S.C. 1201). The Council is directed to:

Advise the Commissioner in the preparation of general regulations and with respect to policy matters arising in the administration of this title, including policies and procedures governing the approval of State plans under section 306 and policies to eliminate duplication, and to effectuate the coordination of programs under this title and other programs offering adult education activities and services.

The Council shall review the administration and effectiveness of programs under this title, make recommendations with respect thereto, and make annual reports to the President of its findings and recommendations (including recommendations for changes in this title and other Federal laws relating to adult education activities and services). The President shall transmit each such report to the Congress together with his comments and recommendations.

The meeting of the Council shall be open to the public.

The proposed agenda includes:

Orientation Activities for New Members.

Oath of Office Ceremonies.

Standing Committee Reports.

September Council Meeting and Public Hearing Structure.

Election of Officers (10:30 a.m.—June 21, 1980).

Records shall be kept of all Council proceedings, and shall be available for public inspection at the Office of the National Advisory Council on Adult Education, 425 13th St., N.W., Suite 323, Washington, D.C. 20004.

Signed at Washington, D.C. on May 15, 1980.

Gary A. Eyre,

Executive Director, National Advisory Council on Adult Education.

[FR Doc. 80-15744 Filed 5-21-80; 8:45 am]

BILLING CODE 4110-02-M

DEPARTMENT OF ENERGY

Resource Applications, National Petroleum Council Subcommittee on Unconventional Gas Sources; Open Meeting

Pursuant to the provisions of the Federal Advisory Committee Act (Pub. L. 92-463, 86 Stat. 770), notice is hereby given of the following advisory committee meeting:

NAME: Subcommittee on Uncoventional Gas Sources of the National Petroleum Council.

DATE AND TIME: Tuesday, June 10, 1980, 2:30. p.m.

PLACE: International Club of Washington, 1800 K Street, N.W., Asian Room, Washington, D.C.

CONTACT: Georgia Hildreth, Director, Advisory Committee Management, Department of Energy, 1000 Independence Avenue, S.W., Forrestal Building—Room 8G087, Washington, D.C. 20585, Telephone: 202-252-5187.

PURPOSE OF PARENT COMMITTEE: To provide advice, information, and recommendations to the Secretary of Energy on matters relating to oil and gas or the oil and gas industries.

TENTATIVE AGENDA:

- Introductory remarks by the Subcommittee's Chairman and Government Cochairman.
- Review and discuss three draft volumes for issuance as an interim report:
  - Coal Seams.
  - Devonian Shale.
  - Geopressured Brines.
- Progress report of the Tight Gas Reservoirs Task Group.
- Discussion of any other matters pertinent to the overall assignment of the Subcommittee on Unconventional Gas Sources.
- Public Comment (10 minute rule).

PUBLIC PARTICIPATION: The meeting is open to the public. The Chairperson of the Subcommittee is impowered to conduct the meeting in a fashion that will, in his judgment, facilitate the orderly conduct of business. Any member of the public who wishes to file a written statement with the Subcommittee will be permitted to do so, either before or after the meeting. Members of the public who wish to make oral statements pertaining to the agenda items should contact the Advisory Committee Management Office at the address or telephone number listed above. Requests must be received at least 5 days prior to the meeting and reasonable provision will be made to include the presentation on the agenda.

TRANSCRIPTS: Available for public review and copying at the Freedom of Information Public Reading Room, Room 5B180, Forrestal Building, 1000 Independence Avenue, S.W., Washington, D.C., between 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

Issued at Washington, D.C., on May 15, 1980.

Georgia Hildreth,

Director, Advisory Committee Management.

[FR Doc. 80-15762 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-01-M

Resource Applications, National Petroleum Council; Open Meeting

Pursuant to the provisions of the Federal Advisory Committee Act (Pub. L. 92-463, 86 Stat. 770), notice is hereby given of the following advisory committee meeting:

NAME: National Petroleum Council.

DATE AND TIME: Wednesday, June 11, 1980, 9:00 a.m.

PLACE: Department of Energy, 1000 Independence Avenue, S.W., James Forrestal Building Auditorium, Washington, D.C. 20585.

CONTACT: Georgia Hildreth, Director, Advisory Committee Management, Department of Energy, 1000 Independence Avenue, S.W., Forrestal Building, Room 8G087, Washington, D.C. 20585, Telephone: 202–252–5187.

PURPOSE OF COMMITTEE: To provide advice, information, and recommendations to the Secretary of Energy on matters relating to oil and gas or the oil and gas industries.

TENTATIVE AGENDA:

- Call to Order by C. H. Murphy, Jr., Chairman, National Petroleum Council.
- Remarks of the Honorable Charles W. Duncan, Jr., Secretary of Energy.
- Reports of the Subcommittees of the National Petroleum Council.
- Subcommittee on Refinery Flexibility (Progress Report).
- Subcommittee on Unconventional Gas Sources (Interim Report).
- Consideration of Administrative Matters.
- Discussion of any other business properly brought before the National Petroleum Council.
- Public Comment (10 minute rule).

PUBLIC PARTICIPATION: The meeting is open to the public. The Chairperson of the Committee is empowered to conduct the meeting in a fashion that will, in his judgment, facilitate the orderly conduct of business. Any member of the public who wishes to file a written statement with the Committee will be permitted to do so, either before or after the meeting. Members of the public who wish to make oral statements pertaining to the agenda items should contact the Advisory Committee Management Office at the address or telephone number listed above. Requests must be received at least 5 days prior to the meeting and reasonable provision will be made to include the presentation on the agenda.

TRANSCRIPTS: Available for public review and copying at the Freedom of Information Public Reading Room, Room 5B180, Forrestal Building, 1000 Independence Avenue, S.W., Washington, D.C., between 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

EXECUTIVE SUMMARY: Available approximately 30 days following the meeting from the Advisory Committee Management Office.

Issued at Washington, D.C., on May 15, 1980.

Georgia Hildreth,

Director, Advisory Committee Management.

[FR Doc. 80-15761 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-01-M

Economic Regulatory Administration

Biglane Operating Co.; Action Taken on Consent Order

AGENCY: Economic Regulatory Administation, Department of Energy.

ACTION: Notice of action taken and opportunity for comment on Consent Order.

SUMMARY: The Economic Regulatory Administration (ERA) of the Department of Energy (DOE) announces action taken to execute a Consent Order and provides an opportunity for public comment on the Consent Order and on potential claims against the refunds deposited in an escrow account established pursuant to the Consent Order.

DATE: Effective date April 18, 1980.

COMMENTS BY: June 23, 1980.

ADDRESS: Send comments to: James C. Easterday, District Manager of Enforcement, 1655 Peachtree Street, N.E., Atlanta, Georgia 30309.

FOR FURTHER INFORMATION CONTACT: James C. Easterday, District Manager of Enforcement, 1655 Peachtree Street, N.E., Atlanta, Georgia 30309, Telephone (404) 881–2661.

SUPPLEMENTARY INFORMATION: April 18, 1980 the Office of Enforcement of the ERA finalized a Consent Order with Biglane Operating Company, a Natchez, Mississippi, crude producer. The Consent Order was actually signed by Biglane Operating Company on August 16, 1979. Under 10 CFR Section 205.199J(b), a Consent Order which involves a sum of less than $500,000 in the aggregate, excluding penalties and interest, becomes effective upon its execution. Because of the settlement negotiations involved in this case and the desire to conclude this matter expeditiously, the DOE has determined that it is in the public interest to make the Consent Order with Biglane Operating Company effective as of the date of its execution by the DOE and Biglane Operating Company.

I. The Consent Order

Biglane Operating Company (Biglane), with its home office located in Natchez, Mississippi, is a crude oil producer, and is subject to the jurisdiction of the DOE with regard to prices charged in sales of crude oil, pursuant to 10 CFR Section 212.93. To resolve certain civil actions which could be brought by the Office of Enforcement of the ERA as a result of its audit of Biglane, the Office of Enforcement, ERA, and Biglane entered into a Consent Order, the significant terms of which are as follows:

1. The Consent Order relates to production and sales of crude oil by Biglane during the period September 1, 1973 through December 31, 1976.

2. From the audit conducted during the above period, the Office of Enforcement concluded that Biglane erroneously classified properties so that crude oil production was sold as either stripper well oil or new oil in violation of applicable DOE pricing regulations.

3. Biglane agrees to refund the total sum of $65,701.07, plus applicable interest, in full settlement of all outstanding overcharges found by DOE during the audit period. Payments shall be in the form of a certified check submitted to the Assistant Administrator for Enforcement, ERA, Washington, D.C., who will ensure distribution in accordance with current DOE policies and procedures.

4. The Consent Order provides that Biglane shall make refunds totalling $65,701.07, plus applicable interest, within a three (3) year period of time from the date of execution of the Consent Order. If the total sum is not repaid within three (3) years, Biglane, shall repay with certified check, the remaining overcharges and interest by paying an equivalent sum to the Assistant Administrator for Enforcement.

5. The Consent Order further provides that during the three (3) year rollback period, the overcharge amount and interest specified in paragraph 4, above, shall be repaid to the Assistant Administrator, ERA by the respective purchaser in accordance with Ancillary Orders issued by the ERA on April 18, 1980.

6. In the event of any permanent shut-it, abandonment or other permanent disposition of the properties specified in the Consent Order prior to three (3) years from the date of execution of the Consent Order, Biglane shall repay the remaining overcharges and interest by paying an equivalent sum to the Assistant Administrator for Enforcement.

7. The provisions of 10 C.F.R. Section 205.199J, including the publication of this Notice, are applicable to the Consent Order.

II. Disposition of Refunded Overcharges

In the Consent Order, Biglane agrees to refund, in full settlement of any civil liability with respect to actions which might be brought by the Office of Enforcement, ERA, arising out of the transactions specified in I.1. and I.2. above, the sum of $65,701.07, within three (3) years of execution of the Consent Order. Refund methodology will be as specified in I.3 through I.7

above. Refunded overcharges will be in the form of certified checks made payable to the United States Department of Energy and will be delivered to the Assistant Administrator for Enforcement, ERA. These funds will remain in a suitable account pending the determination of their proper disposition.

The DOE intends to distribute the refund amounts in a just and equitable manner in accordance with applicable laws and regulations. Accordingly, distribution of such refunded overcharges requires that only those "persons" (as defined at 10 C.F.R. Section 205.2) who actually suffered a loss as a result of the transactions described in the Consent Order receive appropriate refunds. Because of the petroleum industry's complex marketing system, it is likely that overcharges have either been passed through as higher prices to subsequent purchasers or offset through devices such as the Old Oil Allocation (Entitlements) Program, 10 C.F.R. Section 211.67. In fact, the adverse effects of the overcharges may have become so diffused that it is a practical impossibility to identify specific, adversely affected persons, in which case disposition of the refunds will be made in the general public interest by an appropriate means such as payment to the Treasury of the United States pursuant to 10 C.F.R. Section 205.199I(a).

III. Submission of Written Comments

A. *Potential Claimants:* Interested persons who believe that they have a claim to all or a portion of the refund amount should provide written notification of the claim to the ERA at this time. Proof of claims is not now being required. Written notification to the ERA at this time is requested primarily for the purpose of identifying valid potential claims to the refund amount. After potential claims are identified, procedures for the making of proof of claims may be established. Failure by a person to provide written notification of a potential claim within the comment period for this Notice may result in the DOE irrevocably disbursing the funds to other claimants or to the general public interest.

B. *Other Comments:* The ERA invites interested persons to comment on the terms, conditions, or procedural aspects of this Consent Order.

You should send your comments or written notification of a claim to James C. Easterday, District Manager of Enforcement, 1665 Peachtree Street, N. E., Atlanta, Georgia 30309. You may obtain a copy of this Consent Order with proprietary information deleted by writing to the same address.

You should identify your comments or writen notification of a claim on the outside of your envelope and on the documents you submit with the designation, "Comments on Biglane Consent Order." Comments received by 4:30 p.m., local time on June 23, 1980 will be considered. You should identify any information or data which, in your opinion, is confidential and submit it in accordance with the procedures in 10 C.F.R. Section 205.9(f).

Issued in Atlanta, Georgia on the 13th day of May 1980.

James C. Easterday,

District Manager of Enforcement.

Concurrence:

Leonard F. Bittner,

Chief Enforcement Counsel.

[FR Doc. 80-15644 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-01-M

Availability of the Draft Environmental Impact Statement, 230kV International Transmission Line, San Diego County, Calif., to Tijuana, Mex.

AGENCY: Department of Energy, Economic Regulatory Administration.

ACTION: Notice of availability of the Draft Environmental Impact Statement, DOE/EIS-0067, 230kV International Transmission Line, San Diego County, California to Tijuana, Mexico.

SUMMARY: The Department of Energy (DOE) announces the availability of a draft environmental impact statement, DOE/EIS-0067, 230kV International Transmission Line, San Diego County, California, to Tijuana, Mexico.

The proposed DOE action is the granting of a Presidential Permit for the construction, connection, operation and maintenance of 10 miles of a 230kV transmission line from Miguel Substation to the international border. The proposed project will connect the San Diego Gas & Electric (SDG&E) system with that of the Comision Federal de Electricidad (CFE) for the purpose of economic exchange of power and increasing reliability. Major environmental impacts involve visual changes, U.S. Border Patrol aviation safety, disturbance of rare and endangered plant species and cultural resources.

DATES: Written comments should be received at DOE by June 30, 1980, in order to ensure consideration in preparing the final environmental impact statement.

ADDRESSES: Written comments on the DEIS should be addressed to: Department of Energy, attention: Mr. James M. Brown, Jr., RG-751, Division of Power Supply and Reliability, 2000 M St., N.W., Room 4110, Washington, D.C. 20461.

FOR FURTHER INFORMATION YOU MAY CONTACT:

Ms. Linda Desell, NEPA Affairs Division, Office of Environment, Department of Energy, Room 4G-057, Forrestal Building, Washington, D.C. 20585, Phone: 202/252-4610.

Mr. J. Thomas Wolfe, Office of the General Counsel, Department of Energy, 1000 Independence Ave., S.W., Room 6D-033, Washington, D.C. 20585, Phone: 202/252-6947.

Mr. William Yuen Lee, P.E., Environmental Impact Branch, Public Utilities Commission, 350 McAllister Street, San Francisco, California 94102, Phone: 415/557-1748.

SUPPLEMENTARY INFORMATION: San Diego Gas & Electric Company (SDG&E) filed an application with the Economic Regulatory Administration (ERA) for a Presidential Permit pursuant to Executive Order 10485, as amended. The SDG&E also filed an application with the California Public Utilities Commission (CPUC) for Certification of Public Convenience and Necessity, Cal. Pub. Util. Code 1001 and Cal. Pub. Util. Comm. Rule 17.1 and General Order No. 131B.

SDG&E has applied for a Presidential Permit to construct, operate and maintain a 230kV transmission Line across the U.S./Mexico border to interconnect with the electric power system of the Comision Federal de Electricidad. The proposed transmission line corridor covers 10 miles from SDG&E's Miguel Substation to the international border.

The DOE considers the issuance of the subject Presidential Permit to be a major Federal action significantly affecting the quality of the human environmental, within the meaning of the National Environmental Policy Act (NEPA). Therefore, the preparation of an Environmental Impact Statement (EIS) is required in accordance with 40 CFR 1502.3 *et seq.* Similarly, a determination has been made by the CPUC that this project may have a substantial adverse

impact on the environment and the preparation of an environmental Impact Report (EIR) is required, pursuant to Cal. Pub. Res. Code 21100. To expedite the regulatory proceedings, DOE and CPUC have prepared the joint environmental document to meet the requirements of NEPA, California Environmental Policy Act, and the participating agencies' regulations.

The DOE published a notice of intent (44 FR 28714) on May 16, 1979, regarding the preparation of a draft EIS on the proposed international interconnection. Also, a public meeting was held by DOE and CPUC on Thursday, May 24, 1979, to obtain information from all interested parties regarding the scope of the environmental impacts.

The DEIS addresses the potential impact of the construction and operation of a 230kV transmission line. In addition, the potential long-range and cumulative impacts of possible future international transmission lines are discussed.

The range of alternatives addressed in the DEIS includes the no-action alternative, conservation of electricity, purchase power from other U.S. sources, and additional generating capacity. In addition, alternative transmission corridors are addressed.

COMMENT PROCEDURES: Copies of the DEIS have been distributed to Federal, state and local agencies, organizations and to individuals known to be interested in the proposed transmission lines. Additional copies may be obtained from the Office of Utility Systems, Division of Power Supply and Reliability, Room 4110G, 2000 M St., N.W., Washington, D.C. 20461. (Phone: (202) 653-3825.

Copies of the DEIS are available for public inspection at the following locations:

Portrero County Library, 24955 Library Lane, Campo, CA 92006.
Poway County Library, 13264 Poway Rd., Poway, CA 92064.
Ramona County Library, 1406 Monteccito Rd., Ramona, CA 92065.
Santee County Library, 10515 Mission Gorge Rd., Santee, CA 92071.
Solana Beach County Library, 155 Hwy. 101, Solano Beach, CA 92075.
Spring Valley County Library, 1043 Elkelton, Spring Valley, CA 92077.
Woodlawn Park County Library, 155 Spruce Road, Chula Vista, CA 92011.
San Diego City Library, 800 E. St., San Diego, CA 92112.
San Diego City Library, East Park Avenue & East Sanyidro Blvd., Sanyidro, CA 92112.
San Diego County Library, 5555 Overload, San Diego, CA 92112.

WRITTEN COMMENTS: Interested parties are invited to provide written comments on the DEIS to the Division of Power Supply and Reliability, 2000 M St., N.W., Room 4110G, Washington, D.C. 20461. Comments should be identified on the outside of the envelope with the designation "Draft EIS on the 230kV on the International Interconnection". In order to insure consideration in preparing the final statement, all comments and related information should be received by DOE by June 30, 1980.

Any information or data, considered by the person furnishing it to be confidential, must be so identified and submitted in writing. Any material not accompanied by a statement of confidentiality will be considered to be nonconfidential. DOE reserves the rights to determine the confidential status of the information or data and to treat it according to its determination.

Issued in Washington, D.C., May 9, 1980.

Ruth C. Clusen,

Assistant Secretary for Environment, Department of Energy.

[FR Doc. 80-15643 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-01-M

[ERA Case No. 52414-9163-07-82]

Public Service Electric & Gas Co. of New Jersey; Notice and Issuance of Proposed Prohibition Order Pursuant to Sections 301 and 701 of the Powerplant and Industrial Fuel Use Act of 1978

The Economic Regulatory Administration (ERA) of the Department of Energy (DOE) hereby gives notice pursuant to Section 701(b) of the Powerplant and Industrial Fuel Use Act of 1978 (FUA), 42 U.S.C. 8301 *et seq.*, and Section 504.5(b), 10 CFR 500 *et seq.*, (Regulations), promulgated thereunder, of the issuance of the following proposed prohibition order which would prohibit the powerplant named below, (Burlington 7), from burning natural gas or petroleum as its primary energy source.

Proposed Prohibition Order

Pursuant to the authority granted by Section 301(b) of FUA, ERA issues this proposed prohibition order to the following powerplant owned by the Public Service Electric and Gas Company of New Jersey (Utility).

ERA case No.	Generating station	Powerplant No.	MW	Location
52414-9163-07-82	Burlington	7	195.5	Bulington, N.J.

Statement of Basis and Rationale for Proposed Prohibition Order

ERA has issued regulations applicable to existing powerplants 10 CFR Part 504 (Regulations), to implement the prohibitions contained in Section 301(b) of Title III of FUA. Section 504.5 of the Regulations sets forth the basis upon which ERA will propose to prohibit by order the use of natural gas or petroleum as a primary energy source by a powerplant, where ERA finds that the powerplant has or previously had the technical capability to use an alternate fuel as a primary energy source.

ERA estimates that the potential oil displacement in converting the Burlington 7 to an alternate fuel (coal) is approximately 5,000 barrels of oil per day or 1,800,000 barrels annually assuming a utilization factor of 70 percent.

Finding of Technical Capability

In accordance with Section 301(b) of Title III of FUA, this proposed order is based on a finding by ERA that Burlington 7 has or previously had the technical capability to use an alternate fuel (coal) as a primary energy source. This finding is based upon documentation furnished to ERA by the Utility (Descriptive Material, No. 7 Unit, Burlington Generating Station, dated November 19, 1955) that describes in detail the coal burning capability of Burlington 7. Additionally, the unit burned coal from 1955 until 1971 when conversion to oil was initiated in response to action by the U.S. Environmental Protection Agency.

The technical capability finding is made in accordance with the requirements of § 504.5(d) of the Regulations, taking into consideration the ability of Burlington 7, from the point of fuel intake, to physically sustain combustion of coal and maintain heat transfer. This finding also recognizes, in accordance with § 504.5(d), that Burlington 7 is capable of burning coal, notwithstanding the fact that minor adjustments must be made to the unit before it may burn an alternate fuel (coal) as its primary energy source, or that additional pollution control equipment may be necessary to meet air quality requirements.

Other Required Findings

Section 301(b) of FUA requires that prior to the issuance of a final prohibition order, ERA must also find that (1) the powerplant has the technical capability to use coal or another alternate fuel as a primary energy source, or it could have such capability

without (A) substantial physical modification of the powerplant or (B) substantial reduction in the rated capacity of the powerplant; and (2) it is financially feasible for the powerplant to use coal or another alternate fuel as a primary energy source.

Proposed Prohibition Order Under Title III of FUA

Subject to the other required findings that ERA must make, ERA hereby proposes to prohibit Burlington 7 from burning petroleum or natural gas as its primary energy source.

Description of Prohibition Order Proceedings

Pursuant to Section 301 of FUA, ERA has promulgated regulations applicable to the issuance of prohibition orders to existing facilities, a summary of which follows:

(1) ERA must initially gather information with respect to the question of technical capability of a powerplant to burn an alternate fuel as its primary energy source. ERA may convene a conference with a utility in accordance with Section 501.32 of the regulations. If the powerplant has or previously had such capability the utility will be informed that ERA is considering issuance of a proposed prohibition order. In this case, ERA has made the required initial finding for the powerplant and has informed the Utility accordingly.

(2) If a decision is made to issue a proposed prohibition order, ERA must publish its technical capability finding and such proposed prohibition order in the **Federal Register** as required by Section 701(b) of FUA. ERA, having made the decision to issue a proposed prohibition order in this case, herein publishes the required technical capability finding and proposed prohibition order. In accordance with Section 301(b) of FUA, a proposed prohibition order is not required to contain, at this point in the proceeding, the other required findings that ERA must make before a final prohibition order can be issued.

(3) In accordance with Section 501.51(b)(3) of the Regulations, a public comment period of at least three months is to commence after publication of the proposed prohibition order, during which period the Utility will be given an opportunity to challenge ERA's initial finding of technical capability contained in this proposed prohibition order. During this three-month comment period, the Utility is required to furnish ERA with such additional evidence as is necessary to enable ERA to make the other statutory findings which are required to be made by ERA prior to issuance of a final prohibition order. The Utility will also be required, during this period, to identify, but not to demonstrate its entitlement to, any exemptions for which the powerplant may qualify.

(4) Subsequent to the end of the initial three-month comment period, ERA will issue a notice of whether it intends to proceed with the proposed prohibition order. Within three months of the issuance of the notice of intention to proceed with the proposed prohibition order, the owner or operator of the powerplant may demonstrate that the powerplant would qualify for an exemption if the prohibition had been established by rule.

(5) Subsequent to the end of the second three-month period, ERA will, if it intends to issue the final prohibition order, prepare and publish a notice of availability of the tentative staff decision.

(6) Under the provisions of Section 701(d) of FUA, any interested person may request a public hearing on the proposed prohibition order. Under the Regulations, interested persons wishing a hearing must make their request in writing no later than 45 days after publication of the notice of availability of the tentative staff decision. If a hearing is requested, ERA shall provide interested persons with an opportunity to present oral data, views and arguments at a public hearing held in accordance with Subpart C, Part 501 of the Regulations.

(7) At the hearing, if any, interested persons will have the opportunity to question the parties about ERA's proposed prohibition order and tentative staff decision, the Utility's showing on any exemptions and rebuttal of ERA's proposed prohibition order, and ERA's rebuttal to any showing of potential qualification for exemption.

(8) After the hearing, if any, and the second three-month comment period, ERA shall determine whether the final prohibition order will be issued, based upon ERA's review of the entire administrative record. The final prohibition order, if issued, together with a summary of the basis therefore, will be published in the **Federal Register.** Such order shall not take effect earlier than sixty days after publication.

Comment and Public Hearing Procedures

ERA hereby also gives notice of the opportunity to submit written comments, views, and arguments by interested persons regarding the proposed prohibition order. Comments need not be limited to ERA's technical capability finding, but may include a discussion of all three statutory findings.

The initial comment period shall remain open for a period of three months after publication of the proposed order in the **Federal Register**, unless reduced at the request of the recipient of the proposed prohibition order pursuant to § 501.51(b)(8). Notice of any such change during the time for public comment will be published in the **Federal Register.** Comments should make reference to the case number set forth in this notice and proposed prohibition order. Comments should address the adequacy and validity of the finding and any other aspects or impacts of the proposed prohibition order believed to be relevant.

Written comments on the proposed prohibition order in this case should be directed to Public Hearing Management (Case No. 52414–9163–07–82), U.S. Department of Energy, Box 4629, Room 3214, 2000 M Street, NW., Washington, D.C. 20461, and should be received before 4:30 p.m. ninety days after the date of publication of this notice in the **Federal Register** (August 20, 1980).

In accordance with § 501.34, any interested person may request a public hearing on the proposed prohibition order. The request must include a description of the person's interest in the proposed prohibition order, an outline of the anticipated content of the presentation to be made at the public hearing, and an address and telephone number where the person requesting the public hearing may be reached.

Comments and other documents submitted to DOE Public Hearing Management should be identified on the outside of the envelope in which they are transmitted and on the document itself with the designation "Proposed Prohibition Order for the Burlington No. 7." Fifteen copies should be submitted. All written comments, all oral presentations, and all other relevant information submitted to or available to ERA will be considered by ERA. Any information or data considered to be confidential by the person furnishing it, must be so identified in writing in accordance with 10 CFR 303.9(f). ERA reserves the right to determine the confidential status of the information or data and to treat it in accordance with that determination.

FOR FURTHER INFORMATION CONTACT:

William L. Webb (Office of Public Information), Economic Regulatory Administration, Department of Energy, 2000 M Street NW., Room B–110, Washington, D.C. 20461, (202) 653–4055.

Robert L. Davies (Fuels Conversion-Program Office), Economic Regulatory Administration, Department of Energy, 2000 M Street, NW., Room 3128L, Washington, D.C. 20461, (202) 653–3649.

Marx Elmer (Office of General Counsel), Department of Energy, 1000 Independence Avenue SW., Room 6G-087, Washington, D.C. 20585, (202) 252-2967.

Issued in Washington, D.C., May 16, 1980.

Robert L. Davies,

Assistant Administrator, Office of Fuels Conversion, Economic Regulatory Administration.

[FR Doc. 80-15689 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-01-M

[ERA Case No. 53146-3804-03-82]

Virginia Electric & Power Co., Richmond, Va.; Notice and Issuance of Proposed Prohibition Order Pursuant to Sections 301 and 701 of the Powerplant and Industrial Fuel Use Act of 1978

The Economic Regulatory Administration (ERA) of the Department of Energy (DOE) hereby gives notice pursuant to Section 701(b) of the Powerplant and Industrial Fuel Use Act of 1978 (FUA), 42 USC 8301 *et seq.*, and Section 504.5(b), 10 CFR 500 *et seq.*, (Regulations), promulgated thereunder, of the issuance of the following proposed prohibition order which would prohibit the powerplant named below (Possum Point 3) from burning natural gas or petroleum as its primary energy source.

Proposed Prohibition Order

Pursuant to the authority granted by Section 301(b) of FUA, ERA issues this proposed prohibition order to the following powerplant owned by the Virginia Electric and Power Company (Utility).

ERA case No.	Generating station	Powerplant No.	MW	Location
53146-3804-03-82	Possum Point	3	114	Dumfries, Va.

Statement of Basis and Rationale for Proposed Prohibition Order

Parts 504 of the Regulations, applicable to existing facilities, refers to implementation of the prohibition contained in Section 301(b) of Title III of FUA. Section 504.5 of the Regulations sets forth the basis upon which ERA will propose to prohibit by order the use of natural gas or petroleum as a primary energy source by a powerplant where ERA finds that the powerplant has or previously had the technical capability to use an alternative fuel as a primary energy source.

The Utility reported to the Federal Energy Regulatory Commission (FPC Form 67), for the year ending December 31, 1978, that Possum Point No. 3 burned an average of 2225 barrels of oil per day (812,000 barrels annually). The potential oil displacement in converting Possum Point 3 to an alternate fuel (coal), assuming a capacity factor of 70 percent, is 3040 barrels of oil per day (1,110,000 barrels annually).

Finding of Technical Capability

In accordance with Section 301(b) of Title III of FUA, this proposed order is based on a finding by ERa that Possum Point 3 has or previously had the technical capability to use an alternate fuel (coal) as a primary energy source. This finding is based upon the information furnished to ERA by the Utility on FPC Form 67, that the unit actually burned coal until 1969, and a copy of the original contract data sheet for the unit, dated June 22, 1953, showing the design fuel to be utilized in the unit to be either bituminous coal or oil at the same capacity. A site visit made by the staff of ERA on January 7, 1980, confirmed that Possum Point 3 is technically capable of burning coal.

The technical capability finding is made in accordancw with the requirements of Section 504.5(d) of the Regulations, taking into consideration the ability of the unit, from the point of fuel intake, to physically sustain combustion of coal and maintain heat transfer. This finding also recognizes, in accordance with Section 504.5(d), that the unit is capable of burning coal, notwithstanding the fact that minor adjustments must be made to the unit before it may burn an alternate fuel (coal) as its primary energy source, or that additional pollution control equipment may be necessary to meet air quality requirements.

Other Required Findings

Section 301(b) of FUA requires that prior to the issuance of a final prohibition order ERA must also find that (1) the powerplant has the technical capability to use coal or another alternate fuel as a primary energy source, or it could have such capability without (A) substantial physical modification of the powerplant or (B) substantial reduction in the rated capacity of the powerplant; and (2) it is financially feasible for the powerplant to use coal or another alternate fuel as a primary energy source in such powerplant.

Proposed Prohibition Order Under Title III of FUA

Subject to the other required findings that ERA must make, ERA hereby proposes to prohibit Possum Point 3 from burning petroleum or natural gas as its primary energy source.

Description of Prohibition Order Proceedings

Pursuant to Section 301 of FUA, ERA has promulgated regulations applicable to the issuance of prohibition orders to existing facilities, a summary of which follows:

(1) ERA must initially gather information with respect to the question of technical capability of a powerplant to burn an alternate fuel as its primary energy source. ERA may convene a conference with a utility in accordance with § 501.32 of the regulations. If the powerplant has or previously had such capability the utility will be informed that ERA is considering issuance of a proposed prohibiton order. In this case, ERA has made the required initial finding for the powerplant and has informed the Utility accordingly.

(2) If a decision is made to issue a proposed prohibition order, ERA must publish its technical capability finding and such proposed prohibition order in the **Federal Register** as required by Section 701(b) of FUA. ERA, having made the decision to issue a proposed prohibition order in this case, herein publishes the required technical capability finding and proposed prohibition order. In accordance with Section 301(b) of FUA, a proposed prohibition order is not required to contain, at this point in the proceeding, the other required findings that ERA must make before a final prohibition order can be issued.

(3) In accordance with § 501.51(b)(3) of the Regulations, a public comment period of at least three months is to commence after publication of the proposed prohibition order, during which period the Utility will be given an opportunity to challenge ERA's initial finding of technical capability contained in this proposed prohibition order. During this three month comment

period, the Utility is required to furnish ERA with such additional evidence as is necessary to enable ERA to make the other statutory findings which are required to be made by ERA prior to issuance of a final prohibition order. The Utility will also be required, during this period, to identify, but not to demonstrate its entitlement to, any exemptions for which the powerplant may qualify.

(4) Subsequent to the end of the initial three-month comment period, ERA will issue a notice of whether it intends to proceed with the proposed prohibition order. Within three months of the issuance of the notice of intention to proceed with the proposed prohibition order, the owner or operator of the powerplant may demonstrate that the powerplant would qualify for an exemption if the prohibition had been established by rule.

(5) Subsequent to the end of the second three-month period, ERA will, if it intends to issue the final prohibition order, prepare and publish a notice of availability of the tentative staff decision.

(6) Under the provisions of Section 701(d) of FUA, any interested person may request a public hearing on the proposed prohibition order. Under the Regulations, interested persons wishing a hearing must make their request in writing no later than 45 days after publication of the notice of availability of the tentative staff decision. If a hearing is requested, ERA shall provide interested persons with an opportunity to present oral data, views and arguments at a public hearing held in accordance with Subpart C, Part 501 of the Regulations.

(7) At the hearing, if any, interested persons will have the opportunity to question the parties about ERA's proposed prohibition order and tentative staff decision, the Utility's showing on any exemptions and rebuttal of ERA's proposed prohibition order, and ERA's rebuttal to any showing of potential qualification for exemption.

(8) After the hearing, if any, and the second three-month comment period, ERA shall determine whether the final prohibition order will be issued, based upon ERA's review of the entire administrative record. The final prohibition order, if issued, together with a summary of the basis therefor, will be published in the **Federal Register.** Such order shall not take effect earlier than sixty days after publication.

Comment and Public Hearing Procedures

ERA hereby also gives notice of the opportunity to submit written comments, views, and arguments by interested persons regarding the proposed prohibition order. Comments need not be limited to ERA's technical capability finding, but may include a discussion of all three statutory findings.

The initial comment period shall remain open for a period of three months after publication of the proposed order in the **Federal Register,** unless reduced at the request of the recipient of the proposed prohibition order pursuant to § 501.51(b)(8). Notice of any such change during the time for public comment will be published in the **Federal Register.** Comments should make reference to the case number set forth in this notice and proposed prohibition order. Comments should address the adequacy and validity of the finding and any other aspects or impacts of the proposed prohibition order believed to be relevant.

Written comments on the proposed prohibition order in this case should be directed to Public Hearing Management (Case No. 53146–3804–03–82), U.S. Department of Energy, Box 4629, Room 3214, 2000 M Street, N.W., Washington, D.C. 20461, and should be received before 4:30 p.m. ninety days after the date of publication of this notice in the **Federal Register** (August 20, 1980).

In accordance with § 501.34, any interested person may request a public hearing on the proposed prohibition order. The request must include a description of the person's interest in the proposed prohibition order, an outline of the anticipated content of the presentation to be made at the public hearing, and an address and telephone number where the person requesting the public hearing may be reached.

Comments and other documents submitted to DOE Public Hearing Management should be identified on the outside of the envelope in which they are transmitted and on the document itself with the designation "Proposed Prohibition Order for the Possum Point Powerplant No. 3." Fifteen copies should be submitted. All written comments, all oral presentations, and all other relevant information submitted to or available to ERA will be considered by ERA. Any information or data considered to be confidential by the person furnishing it, must be so identified in writing in accordance with 10 CFR 303.9(f). ERA reserves the right to determine the confidential status of the information or data and to treat it in accordance with that determination.

FOR FURTHER INFORMATION CONTACT:

William L. Webb (Office of Public Information), Economic Regulatory Administration, Department of Energy, 2000 M Street NW., Room B–110, Washington, D.C., 20461, (202) 653–4055.

Robrt L. Davies (Fuels Conversion-Program Office), Economic Regulatory Administration, Department of Energy, 2000 M Street NW., Room 3128L, Washington, D.C., 20461, (202) 653–3649.

Jim Renjilian (Office of General Counsel), Department of Energy, 1000 Independence Avenue SW., Room 6G–087, Washington, D.C., 20585, (202) 252–2967.

Issued in Washington, D.C., May 16, 1980.

Robert L. Davies,

Assistant Administrator, Office of Fuels Conversion, Economic Regulatory Administration.

[FR Doc. 80–15690 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–01–M

St. James Resources Corporation and Wholly Owned Subsidiaries; Action Taken on Consent Order

AGENCY: Economic Regulatory Administration, Department of Energy.

ACTION: Notice of action taken and opportunity for comment on Consent Order.

SUMMARY: The Economic Regulatory Administration (ERA) of the Department of Energy (DOE) announces action taken to execute a Consent Order and on potential claims against the refunds deposited in an escrow account established pursuant to the Consent Order.

EFFECTIVE DATE: March 20, 1980.

Comments by: June 23, 1980.

ADDRESS: Send comments to: James J. Dowd, Audit Director of the Office of Enforcement, Northeast District, Economic Regulatory Administration, Room 700, 150 Causeway Street, Boston, MA 02114.

FOR FURTHER INFORMATION CONTACT:

James J. Dowd, Audit Director Office of Enforcement, Northeast District, Economic Regulatory Administration, Room 700, 150 Causeway Street, Boston, MA 02114, 617–223–5265.

SUPPLEMENTARY INFORMATION: "On March 20, 1980, the Office of Enforcement of the ERA executed a Consent Order with St. James Resources Corporation and Wholly Owned Subsidiaries (St. James) of Boston, Massachusetts. Under 10 CFR 205.199J(b), a Consent Order which involves a sum of less than $500,000 in the aggregate, excluding penalties and interest, becomes effective upon its execution."

I. The Consent Order

St. James, with its home office located in Boston, Massachusetts, is a firm engaged in the sale of No. 2 Heating Oil and is subject to the Mandatory Petroleum Price and Allocation Regulations at 10 CFR, Parts 210, 211, 212. To resolve certain civil actions which could be brought by the Office of Enforcement of the Economic Regulatory Administration as a result of its audit of St. James, the Office of Enforcement, ERA, and St. James entered into a Consent Order, the significant terms of which are as follows:

1. The Consent Order settles all issues involved in St. James' sale of No. 2 Heating Oil during the period May 1, 1974 through June 30, 1976.

2. The ERA alleges that St. James sold the above covered product at prices in excess of those permitted under 10 CFR 212.93, as preceded by 6 CFR 150.359.

3. St. James, in executing the Consent Order, does not admit to having violated the price regulations nor does DOE make a finding that St. James has violated the regulations, but in order to resolve all issues without expensive and time consuming litigation St. James agrees to refund $228,335.71 as specified in the Consent Order.

4. The provisions of 10 CFR 205.199J, including the publication of this Notice, are applicable to the Consent Order.

II. Disposition of Refunded Overcharges

In this Consent Order, St. James agrees to refund, in full settlement of any civil liability with respect to actions which might be brought by the Office of Enforcement, ERA, arising out of the transactions specified in I.1. above, the sum of $228,335.71 as follows:

St. James shall, within thirty (30) days after the effective date of this Consent Order, deliver a certified check in the sum of $228,335.71 made payable to the United States Department of Energy. Delivery shall be to the Assistant Administrator for Enforcement, Economic Regulatory Administration, Room 5302, 2000 M Street, NW., Washington, D.C. 20461.

The DOE intends to distribute the refund amounts in a just and equitable manner in accordance with applicable laws and regulations. Accordingly, distribution of such refunded overcharges requires that only those "persons" (as defined at 10 CFR 205.2) who actually suffered a loss as a result of the transactions described in the Consent Order receive appropriate refunds. Because of the petroleum industry's complex marketing system, it is likely that overcharges have either been passed through as higher prices to subsequent purchasers or offset through devices such as the Old Oil Allocation (Entitlements) Program, 10 CFR 211.67. In fact, the adverse effects of the overcharges may have become so diffused that it is a practical impossibility to identify specific, adversely affected persons, in which case disposition of the refunds will be made in the general public interest by an appropriate means such as payment to the Treasury of the United States pursuant to 10 CFR 205.199I(a).

III. Submission of Written Comments

A. Potential Claimants: Interested persons who believe that they have a claim to all or a portion of the refund amount should provide written notification of the claim to the ERA at this time. Proof of claims is not now being required. Written notification to the ERA at this time is requested primarily for the purpose of identifying valid potential claims to the refund amount. After potential claims are identified, procedures for the making of proof of claims may be established. Failure by a person to provide written notification of a potential claim within the comment period for this Notice may result in the DOE irrevocably disbursing the funds to other claimants or to the general public interest.

B. Other Comments: The ERA invites interested persons to comment on the terms, conditions, or procedural aspects of this Consent Order.

You should send your comments or written notification of a claim to James J. Dowd, Audit Director, Office of Enforcement, Northeast District, Economic Regulatory Administration, Room 700, 150 Causeway Street, Boston, MA 02114. You may obtain a free copy of this Consent Order by writing to the same address or by calling 617–223–5275.

You should identify your comments or written notification of a claim on the outside of your envelope and on the documents you submit with the designation, "Comments on St. James Consent Order." We will consider all comments we receive by 4:30 P.M., local time on (30 days from publication). You should identify any information or data, which in your opinion, is confidential and submit it in accordance with the procedures in 10 CFR 205.9(f).

Issued in Washington, D.C. on the 16th day of May 1980.

Robert D. Gerring, Director,

Enforcement Program Operations Division, Economic Regulatory Administration.

[FR Doc. 80-15688 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-01-M

Federal Energy Regulatory Commission

[Docket No. ER80-386]

Arizona Public Service Co.; Filing

May 15, 1980.

The filing company submits the following:

Take notice that on May 12, 1980, Arizona Public Service Company (APS) tendered for filing a Firm Transmission Service Agreement for Power and Energy from APS' Unit 4 of its Cholla Generating Station to Southern California Edison Co. (SEC).

Early approval under Section 35.3 is requested by SCE as SCE may be required to make other arrangements should the provisions of this Agreement not be available.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, D.C. 20426, in accordance with Sections 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8, 1.10). All such petitions or protests should be filed on or before June 9, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15695 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket No. ER80-385]

Arizona Public Service Co.; Filing

May 15, 1980

The filing company submits the following:

Take notice that on May 12, 1980, Arizona Public Service Company (APS) tendered for filing a Layoff Agreement for Power and Energy from APS' Unit 4 of its Cholla Generating Station to Southern California Edison Co. (SCE).

Early approval under Section 35.3 is requested by SCE as SCE may be required to make other arrangements should the provisions of this Agreement not be available.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington,

DC 20426, in accordance with Sections 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8, 1.10). All such petitions or protests should be filed on or before June 9, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15696 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket No. ER80-382]

Arizona Public Service Co.; Filing

May 16, 1980

The filing company submits the following:

Take notice that on May 9, 1980, Arizona Public Service Company (APS) tendered for filing a transmission project agreement between APS, the United States of America, Department of Water and Power of the City of Los Angeles, El Paso Electric Company, Nevada Power Company, Public Service Company of New Mexico, Salt River Project Agricultural Improvement and Power District, and Tucson Electric Power Company.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, DC 20426, in accordance with Sections 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8, 1.10). All such petitions or protests should be filed on or before June 9, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15697 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket No. ER80-384]

Central Hudson Gas & Electric Corp.; Rate Filing

May 15, 1980.

The filing company submits the following:

Take notice the Central Hudson Gas & Electric Corporation (Central Hudson), on May 12, 1980, tendered for filing as a rate schedule an executed agreement dated May 8, 1980 between Central Hudson and Jersey Central Power and Light Company (JCP&L). The proposed rate schedule provides for the sale of generating capacity and associated energy by Central Hudson as available and as scheduled from day to day.

The rate schedule provides for a capacity charge of $3 per megawatt per hour scheduled and an energy charge equal to Central Hudson's incremental fuel and maintenance costs, incremental out-of-pocket costs, incremental cost of transmission losses an applicable taxes.

Central Hudson requests waiver of the notice requirements of Section 35.3 of the Commission's Regulations so that the proposed rate schedule can be made effective on May 11, 1980 in accordance with the terms thereof.

Central Hudson states that a copy of its filing was served on JCP&L.

Any person desiring to be heard or to protest said application should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capital Street, NE, Washington, DC 20426, in accordance with Sections 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8, 1.10). All such petitions or protests should be filed on or before June 9, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15698 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket No. ID-1719]

Patrick J. Chambers, Jr.; Application

May 16, 1980.

Take notice that on May 6, 1980, Patrick J. Chambers, Jr. (Applicant), filed an application pursuant to Section 305(b) of the Federal Power Act to hold the following positions:

Director, Rockland Electric Company, Public Utility.

Director, Pike County Light & Power Company, Public Utility.

Any person desiring to be heard or to protest said application should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426, in accordance with Sections 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8, 1.10). All such petitions of protests should be filed on or before June 13, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15699 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[No. 202]

Determinations by Jurisdictional Agencies Under the National Gas Policy Act of 1978

Issued: May 15, 1980

The Federal Energy Regulatory Commission received notices from the jurisdictional agencies listed below of determinations pursuant to 18 CFR 274.104 and applicable to the indicated wells pursuant to the Natural Gas Policy Act of 1978.

Alabama Oil and Gas Board

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80-30854/3-7-802PD-B
2. 01-057-20202-0000
3. 103 000 000
4. Enserch Exploration Inc
5. A E Pinkerton 25-3 No 1
6. North Fayette
7. Fayette AL
8. 182.0 million cubic feet
9. April 24, 1980
10 Coronado Transmission Co

1. 80-30855/4-11-801PD-A
2. 01-057-20196-0000
3. 102 000 000
4. Grace Petroleum Corp
5. Fowler 22-9 #1

6. Musgrove Creek
7. Fayette AL
8. 120.0 million cubic feet
9. April 24, 1980
10

1. 80–30856/4–11–802PD
2. 01–075–20233–0000
3. 102 000 000
4. Southland Royalty Co
5. J M Hankins 14–3 #1
6. Beaverton
7. Lamar AL
8. 73.0 million cubic feet
9. April 24, 1980
10 Northwest Alabama Gas District

1. 80–30857/4–11–806PD
2. 01–057–20189–0000
3. 102 000 000
4. Petroleum Corp of Texas
5. Loggins Unit A #3 Well Permit No 26
6. Beaverton
7. Lamar AL
8. 150.0 million cubic feet
9. April 24, 1980
10 Northwest Alabama Gas District

Kansas Corporation Commission

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31172/K–79–0283
2. 15–129–00000–0000
3. 108 000 000
4. Anadarko Production Company
5. Roll A No 1
6. Interstate Red Cave
7. Morton KS
8. 18.0 million cubic feet
9. April 28, 1980
10 Panhandle Eastern Pipeline Company

1. 80–31173/K–79–1645
2. 15–139–20366–0000
3. 103 000 000
4. Cities Service Company
5. Morgan B–2
6. Panoma
7. Morton KS
8. 18.2 million cubic feet
9. May 2, 1980
10 Northern Natural Gas Co

Louisiana Office of Conservation

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–30866/80–1213
2. 17–073–20319–0000
3. 108 000 000
4. IMC Exploration Co
5. La Del #F–242
6. Monroe Gas Field
7. Quachita LA
8. 2.0 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co

1. 80–30867/80–1212
2. 17–073–20306–0000
3. 108 000 000
4. IMC Exploration Co
5. La Del #F–243
6. Monroe Gas Field
7. Quachita LA
8. 2.0 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co

1. 80–30868/80–1211
2. 17–073–20307–0000
3. 108 000 000
4. IMC Exploration Co
5. La Del #F–244
6. Monroe Gas Field
7. Quachita LA
8. 2.0 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co

1. 80–30869/80–1210
2. 17–073–20320–0000
3. 108 000 000
4. IMC Exploration Co
5. La Del #F–245
6. Monroe Gas Field
7. Quachita LA
8. 2.0 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co

1. 80–30870/80–1209
2. 17–073–20321–0000
3. 108 000 000
4. IMC Exploration Co
5. La Del #F–246
6. Monroe Gas Field
7. Quachita LA
8. 2.0 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co

1. 80–30871/80–1208
2. 17–073–20322–0000
3. 108 000 000
4. IMC Exploration Co
5. La Del #F–247
6. Monroe Gas Field
7. Quachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co

1. 80–30872/80–1207
2. 17–111–21603–0000
3. 108 000 000
4. IMC Exploration Co
5. Frost #71
6. Monroe Gas Field
7. Union LA
8. 15.6 million cubic feet
9. May 2, 1980
10 Mid Louisiana Gas Co

1. 80–30873/80–1206
2. 17–111–21601–0000
3. 108 000 000
4. IMC Exploration Co
5. Frost #68
6. Monroe Gas Field
7. Union LA
8. 10.0 million cubic feet
9. May 2, 1980
10 Mid Louisiana Gas Co

1. 80–30874/80–1205
2. 17–111–21571–0000
3. 108 000 000
4. IMC Exploration Co
5. Frost #67
6. Monroe Gas Field
7. Union LA
8. 16.0 million cubic feet
9. May 2, 1980
10 Mid Louisiana Gas Co

1. 80–30875/80–1228
2. 17–067–20036–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #18
6. Monroe Gas Field
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10 Georgia Pacific Corp

1. 80–30876/80–1227
2. 17–067–20015–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #16
6. Monroe Gas Field
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10 Georgia Pacific Corp

1. 80–30877/80–1226
2. 17–067–20025–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #9
6. Monroe Gas Field
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10 Georgia Pacific Corp

1. 80–30878/80–1224
2. 17–067–20014–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #10
6. Monroe Gas Field
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10 Georgia Pacific Corp

1. 80–30879/80–1223
2. 17–067–20018–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #30
6. Monroe Gas Field
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10 Georgia Pacific Corp

1. 80–30880/80–1200
2. 17–067–20338–0000
3. 108 000 000
4. IMC Exploration Co
5. Allison #N–231
6. Monroe Gas Field
7. Morehouse LA
8. 2.6 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co

1. 80–30881/80–1199
2. 17–111–20226–0000
3. 108 000 000
4. IMC Exploration Co
5. Grayling Lumber Co #N–230
6. Monroe Gas Field

7. Union LA
8. 13.0 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co
1. 80–30882/80–1198
2. 17–111–20156–0000
3. 108 000 000
4. IMC Exploration Co
5. Grayling Lumber Co #N–229
6. Monroe Gas Field
7. Union LA
8. 10.0 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co
1. 80–30883/80–1197
2. 17–067–20349–0000
3. 108 000 000
4. IMC Exploration Co
5. Allison #N–237
6. Monroe Gas Field
7. Morehouse LA
8. 2.0 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co
1. 80–30884/80–1196
2. 17–067–20345–0000
3. 108 000 000
4. IMC Exploration Co
5. Allison #N–236
6. Monroe Gas Field
7. Morehouse LA
8. 2.5 million cubic feet
9. May 2, 1980
10 IMC Pipeline Co
1. 80–30885/80–1195
2. 17–111–00247–0000
3. 108 000 000
4. IMC Exploration Co
5. Grayling Lumber Co #44
6. Monroe Gas Field
7. Union LA
8. 13.0 million cubic feet
9. May 2, 1980
10. Mid Louisiana Gas Co
1. 80–30886/80–1194
2. 17–111–21298–0000
3. 108 000 000
4. IMC Exploration Co
5. Frost #61
6. Monroe Gas Field
7. Union LA
8. 11.0 million cubic feet
9. May 2, 1980
10. Mid Louisiana Gas Co
1. 80–30887/80–1341
2. 17–067–20895–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–100
6. Monroe
7. Morehouse LA
8. 9.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30888/80–1340
2. 17–067–20894–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–99
6. Monroe
7. Morehouse LA
8. 9.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30889/80–1339
2. 17–067–20870–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–98
6. Monroe
7. Morehouse LA
8. 10.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30890/80–1338
2. 17–067–20893–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–96
6. Monroe
7. Morehouse LA
8. 6.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30891/80–1337
2. 17–067–20210–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F87
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30892/80–1336
2. 17–067–20200–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F86
6. Monroe
7. Morehouse LA
8. .0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30893/80–1335
2. 17–067–20199–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F85
6. Monroe
7. Morehouse LA
8. .0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30894/80–1334
2. 17–067–20198–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–84
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30895/80–1333
2. 17–067–20123–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–56
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30896/80–1332
2. 17–067–00349–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #35
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30897/80–1331
2. 17–067–00390–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #34
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30898/80–1330
2. 17–067–00388–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #33
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30899/80–1329
2. 17–067–00405–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #24
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp
1. 80–30900/80–162
2. 17—027–20591–0000
3. 102 000 000
4. Texas Oil & Gas Corp
5. Worley #1
6. Blackburn
7. Claiborne Parish LA
8. 640.0 million cubic feet
9. May 2, 1980
10. United Pipe Line Gas Co
1. 80–30901/80–2919
2. 17–027–20381–0000
3. 102 000 000
4. IMC Exploration Co
5. John Ferrell Estate No 154119
6. Athens Field
7. Claiborne LA
8. 365.0 million cubic feet
9. May 2, 1980
10. Louisiana Gas Intrastate Inc
1. 80–30902/80–173
2. 17–039–20153–0000
3. 102 000 000
4. Sandefer and Andress Inc
5. Pardee No 1
6. Reddell
7. Evangeline LA
8. 298.0 million cubic feet
9. May 2, 1980
10. Louisiana Intrastate Gas Corp
1. 80–30903/80–163
2. 17–027–20569–0000
3. 102 000 000
4. Texas Oil & Gas Corp
5. Lee D #1
6. Blackburn
7. Claiborne Parish LA
8. 450.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co
1. 80–30904/80–176

2. 17–097–20499–0000
3. 102 000 000
4. Shell Oil Co
5. Vua R L Wolfe No 1
6. Elba
7. St Landry LA
8. 180.0 million cubic feet
9. May 2, 1980
10. See Remarks (1)

1. 80–30905/80–1158
2. 17–073–20157–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–295
6. Monroe Gas Field
7. Ouachita LA
8. 4.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30906/80–1157
2. 17–073–20197–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–283
6. Monroe Gas Field
7. Ouachita LA
8. .4 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30907/80–1156
2. 17–073–20215–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–284
6. Monroe Gas Field
7. Ouachita LA
8. .5 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30908/80–1155
2. 17–073–20214–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–278
6. Monroe Gas Field
7. Ouachita LA
8. 1.3 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30909/80–1154
2. 17–0023–20141–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–285
6. Monroe Gas Field
7. Ouachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30910/80–1153
2. 17–073–20142–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–286
6. Monroe Gas Field
7. Ouachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30911/80–1152
2. 17–073–20143–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–287
6. Monroe Gas Field
7. Ouachita LA
8. .9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30912/80–1151
2. 17–073–20144–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–288
6. Monroe Gas Field
7. Ouachita LA
8. 4.8 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30913/80–1150
2. 17–0111–20224–0000
3. 108 000 000
4. IMC Exploration Co
5. Grayling Lumber Co #N–208
6. Monroe Gas Field
7. Union LA
8. 6.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30914/80–1149
2. 17–111–20225–0000
3. 108 000 000
4. IMC Exploration Co
5. Grayling Lumber Co #N–209
6. Monroe Gas Field
7. Union LA
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30915/80–1148
2. 17–067–20359–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–178
6. Monroe Gas Field
7. Morehouse LA
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30916/80–1147
2. 17–067–20360–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–179
6. Monroe Gas Field
7. Morehouse LA
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30917/80–1180
2. 17–073–20177–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–258
6. Monroe Gas Field
7. Ouachita LA
8. 2.5 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30918/80–1179
2. 17–073–20136–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–257
6. Monroe Gas Field
7. Ouachita LA
8. 2.5 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30919/80–1178
2. 17–073–20132–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–256
6. Monroe Gas Field
7. Ouachita LA
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30920/80–1177
2. 17–073–20131–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–255
6. Monroe Gas Field
7. Ouachita LA
8. 1.8 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30921/80–1317
2. 17–067–00357–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #36
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30922/80–1316
2. 17–067–00358–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Land Co B #1
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30923/80–1315
2. 17–067–00295–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #8
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30924/80–1314
2. 17–067–00305–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #7
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30925/80–1184
2. 17–073–20279–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–315
6. Monroe Gas Field
7. Ouachita, LA
8. .7 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30926/80–1183
2. 17–073–20276–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–310
6. Monroe Gas Field

7. Ouachita, LA
8. .8 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30927/80–1182
2. 17–073–20179–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–260
6. Monroe Gas Field
7. Ouachita, LA
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30928/80–1181
2. 17–073–20178–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–259
6. Monroe Gas Field
7. Ouachita, LA
8. 3.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30929/80–1117
2. 17–111–21877–0000
3. 103 000 000
4. K D Lankford Jr & L&N DRLG Co
5. Moore #3
6. Monroe Gas
7. Union, LA
8. 36.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co

1. 80–30930/80–1116
2. 17–111–21889–0000
3. 103 000 000
4. K D Lankford Jr & L&N DRLG Co
5. Moore #4
6. Monroe Gas
7. Union, LA
8. 36.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co

1. 80–30931/80–1115
2. 17–111–21875–0000
3. 103 000 000
4. K D Lankford Jr & L&N Drilling Co
5. Edwards #2
6. Monroe Gas
7. Union, LA
8. 22.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co

1. 80–30932/80–1114
2. 17–111–21886–0000
3. 103 000 000
4. K D Lankford Jr & L&N Drilling Co
5. McGough #4
6. Monroe Gas
7. Union, LA
8. 22.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co

1. 80–30933/80–1113
2. 17–111–21888–0000
3. 103 000 000
4. K D Lankford Jr & L&N Drilling Co
5. McGough #6
6. Monroe Gas
7. Union, LA
8. 22.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co

1. 80–30934/80–1112
2. 17–067–20396–0000
3. 108 000 000
4. James P Madison
5. G Eubanks No 1–140293
6.
7. Morehouse, LA
8. .4 million cubic feet
9. May 2, 1980
10. Mid Louisiana Gas Co

1. 80–30935/80–1111
2. 17–067–20393–0000
3. 108 000 000
4. James P Madison
5. Madison No 1–140111
6. Monroe
7. Morehouse, LA
8. 1.7 million cubic feet
9. May 2, 1980
10. Mid Louisiana Gas Co

1. 80–30936/80–1110
2. 17–067–21386–0000
3. 103 000 000
4. Nip-N-Tuck Minerals Inc
5. Pipes #6
6. Monroe Gas Field
7. Morehouse, LA
8. 30.0 million cubic feet
9. May 2, 1980
10. Louisiana Gas Service Co

1. 80–30937/80–1109
2. 17–067–21409–0000
3. 103 000 000
4. Nip-N-Tuck Minerals Inc
5. Pipes #7
6. Monroe Gas Field
7. Morehouse, LA
8. 28.0 million cubic feet
9. May 2, 1980
10. Louisiana Gas Service Co

1. 80–30938/80–1108
2. 17–067–21004–0000
3. 108 000 000
4. Enerco Exploration & Management Co
5. Spyker E #25—#156269
6. Monroe
7. Morehouse, LA
8. 24.5 million cubic feet
9. May 2, 1980
10. Southern Natural Gas

1. 80–30939/80–1107
2. 17–111–01341–0000
3. 108 000 000
4. Pennzoil Producing Co
5. Fee 105 No 5
6. Monroe
7. Union, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co

1. 80–30940/80–1106
2. 17–111–21761–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Gibson Estate #1
6. Monroe Gas Field
7. Union, LA
8. 21.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30941/80–1105
2. 17–111–21762–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Gibson Estate #2
6. Monroe Gas Field
7. Union, LA
8. 22.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30942/80–1104
2. 17–111–21763–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Gibson Estate #3
6. Monroe Gas Field
7. Union, LA
8. 24.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30943/80–1103
2. 17–111–21764–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Gibson Estate #4
6. Monroe Gas Field
7. Union, LA
8. 20.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30944/80–1102
2. 17–111–21765–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Gibson Estate #5
6. Monroe Gas Field
7. Union, LA
8. 22.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30945/80–1101
2. 17–111–21766–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Gibson Estate #6
6. Monroe Gas Field
7. Union, LA
8. 26.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30946/80–1100
2. 17–111–21767–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Gibson Estate #7
6. Monroe Gas Field
7. Union, LA
8. 19.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30947/80–1099
2. 17–109–22097–0000
3. 107 000 000
4. The Superior Oil Co
5. LL & E Unit 20 No 3
6. Four Isle Dome
7. Terrebonne Parish, LA
8. 768.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co

1. 80–30948/80–1271
2. 17–111–21724–0000
3. 103 000 000
4. Ergon Inc
5. Mike Estate No 1
6. Monroe (6824)
7. Union, (056) LA
8. 14.9 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30949/80–1270

2. 17–111–21881–0000
3. 103 000 000
4. Ergon Inc
5. Milas Medlin No 3
6. Monroe
7. Union, LA
8. 16.7 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30950/80–1269
2. 17–111–21874–0000
3. 103 000 000
4. Ergon Inc
5. Vua Brooks Jones et al No 1
6. Monroe (6824)
7. Union, (056) LA
8. 6.2 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30951/80–1268
2. 17–111–21873–0000
3. 103 000 000
4. Ergon Inc
5. H D Green No 11
6. Monroe (6824)
7. Union, (056) LA
8. 11.5 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30952/80–1267
2. 17–111–21346–0000
3. 103 000 000
4. Ergon Inc
5. Joe C Miller No 3
6. Monroe (6824)
7. Union, (056) LA
8. 17.1 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–30953/80–1266
2. 17–111–21743–0000
3. 103 000 000
4. Ergon Inc
5. Smith-Slater No 1
6. Monroe (6824)
7. Union, (056) LA
8. 16.4 million cubic feet
9. May 2, 1980
10. IMC Exploration Co

1. 80–30954/80–1265
2. 17–111–21880–0000
3. 103 000 000
4. K D Lankford Jr & L&N Drilling Co
5. Meeks #7
6. Monroe Gas
7. Union, LA
8. 22.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co

1. 80–30955/80–1146
2. 17–067–20368–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–180
6. Monroe Gas Field
7. Morehouse, LA
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30956/80–1145
2. 17–067–20369–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–181
6. Monroe Gas Field
7. Morehouse, LA
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30957/80–1144
2. 17–067–20405–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–199
6. Monroe Gas Field
7. Morehouse, LA
8. 5.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30958/80–1143
2. 17–067–20406–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–200
6. Monroe Gas Field
7. Morehouse, LA
8. 5.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30959/80–1142
2. 17–067–20407–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–201
6. Monroe Gas Field
7. Morehouse, LA
8. 5.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30960/80–1141
2. 17–067–20408–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–202
6. Monroe Gas Field
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30961/80–1140
2. 17–067–20409–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–203
6. Monroe Gas Field
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30962/80–1139
2. 17–067–20410–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–204
6. Monroe Gas Field
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30963/80–1138
2. 17–067–20411–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–205
6. Monroe Gas Field
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30964/80–1137
2. 17–067–20378–0000
3. 108 000 000
4. IMC Exploration Co
5. Ethridge #F–239
6. Monroe Gas Field
7. Morehouse, LA
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30965/80–1136
2. 17–111–20229–0000
3. 108 000 000
4. IMC Exploration Co
5. Olinkraft #1
6. Monroe gas field
7. Union LA
8. 16.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30966/80–1280
2. 17–073–20166–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbank Real Estate F–299
6. Monroe Gas Field
7. Quachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30967/80–1279
2. 17–073–20170–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–303
6. Monroe gas field
7. Quachita LA
8. .9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30968/80–1278
2. 17–073–20195–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–282
6. Monroe gas field
7. Quachita LA
8. .4 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30969/80–1277
2. 17–067–20344–0000
3. 108 000 000
4. IMC Exploration Co
5. Allison #N–235
6. Monroe gas field
7. Morehouse LA
8. 1.7 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30970/80–1276
2. 17–067–20343–0000
3. 108 000 000
4. IMC Exploration Co
5. Allison #N–234
6. Monroe gas field
7. Morehouse LA
8. 1.3 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30971/80–1128
2. 17–073–21012–0000
3. 108 000 000
4. Primos Production Co
5. Breard #6
6. Monroe gas field

7. Quachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline

1. 80–30972/80–1127
2. 17–073–21030–0000
3. 108 000 000
4. Primos Production Co
5. Breard #3
6. Monroe gas field
7. Quachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline

1. 80–30973/80–1126
2. 17–073–21000–0000
3. 108 000 000
4. Primos Production Co
5. Breard #1
6. Monroe gas field
7. Quachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline

1. 80–30974/80–1125
2. 17–073–21011–0000
3. 108 000 000
4. Primos Production Co
5. Breard #2
6. Monroe gas field
7. Quachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline

1. 80–30975/80–1124
2. 17–073–20981–0000
3. 108 000 000
4. Primos Production Co
5. Cole Heirs Corp #14
6. Monroe gas field
7. Quachita LA
8. 18.9 million cubic feet
9. May 2, 1980
10. United Gas Pipeline

1. 80–30976/80–1123
2. 17–073–20983–0000
3. 108 000 000
4. Primos Production Co
5. Cole Heirs Corp #15
6. Monroe gas field
7. Quachita LA
8. 17.9 million cubic feet
9. May 2, 1980
10. United Gas Pipeline

1. 80–30977/80–1122
2. 17–073–20986–0000
3. 108 000 000
4. Primos Production Co
5. Cole Heirs Corp #13
6. Monroe gas field
7. Quachita LA
8. 17.9 million cubic feet
9. May 2, 1980
10. United Gas Pipeline

1. 80–30978/80–1121
2. 17–073–20977–0000
3. 108 000 000
4. Primos Production Co
5. Cole Heirs Corp #16
6. Monroe gas field
7. Quachita LA
8. 17.9 million cubic feet
9. May 2, 1980
10. United Gas Pipeline

1. 80–30979/80–1120
2. 17–073–20987–0000
3. 108 000 000
4. Primos Production Co
5. Cole Heirs Corp #17
6. Monroe gas field
7. Quachita LA
8. 17.9 million cubic feet
9. May 2, 1980
10. United Gas Pipeline

1. 80–30980/80–1165
2. 17–073–20168–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–301
6. Monroe gas field
7. Quachita LA
8. .7 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30981/80–1164
2. 17–073–20145–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–289
6. Monroe gas field
7. Quachita LA
8. 3.5 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30982/80–1163
2. 17–073–20146–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–290
6. Monroe gas field
7. Quachita LA
8. 4.2 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30983/80–1162
2. 17–073–20153–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–291
6. Monroe gas field
7. Quachita LA
8. .9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30984/80–1161
2. 17–073–20154–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–292
6. Monroe gas field
7. Quachita LA
8. 1.4 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30985/80–1160
2. 17–073–20155–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–293
6. Monroe gas field
7. Quachita LA
8. 1.5 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30986/80–1159
2. 17–073–20156–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–294
6. Monroe gas field
7. Quachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–30987/80–1323
2. 17–067–20131–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–59
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30988/80–1322
2. 17–067–20127–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–58
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30989/80–1321
2. 17–067–20126–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–57
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30990/80–1320
2. 17–067–20122–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–55
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30991/80–1319
2. 17–067–00365–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #39
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30992/80–1318
2. 17–067–00364–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #38
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30993/80–1119
2. 17–111–21876–0000
3. 108 000 000
4. K D Lankford Jr & L&N Drilling Co
5. Meeks #5
6. Monroe Gas
7. Union LA
8. 29.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–30994/80–1118

2. 17–111–21879–0000
3. 108 000 000
4. K D Lankford Jr & L&N Drilling Co
5. Meeks #6
6. Monroe Gas
7. Union LA
8. 29.0 million cubic feet
9. May 2, 1980
10. United Gas Pipe Line Co

1. 80–30995/80–1378
2. 17–067–20925–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–135
6. Monroe
7. Morehouse LA
8. 3.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30996/80–1377
2. 17–067–20924–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N134
6. Monroe
7. Morehouse LA
8. 3.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30997/80–1376
2. 17–067–20923–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–133
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30998/80–1375
2. 17–067–20921–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–132
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–30999/80–1374
2. 17–067–20949–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–141
6. Monroe
7. Morehouse LA
8. 3.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31000/80–1373
2. 17–067–20943–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–14D
6. Monroe
7. Morehouse LA
8. 3.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31001/80–1372
2. 17–067–20877–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–156
6. Monroe
7. Morehouse LA
8. 1.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31002/80–1391
2. 17–073–20133–0000
3. 108 000 000
4. IMC Exploration Co
5. Cental Immigration #F–271
6. Monroe gas field
7. Quachita LA
8. .9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31003/80–1325
2. 17–067–20091–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–33
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31004/80–1324
2. 17–067–20132–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–60
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31005/80–1191
2. 17–111–21235–0000
3. 108 000 000
4. IMC Exploration Co
5. Frost #38
6. Monroe gas field
7. Union LA
8. 15.0 million cubic feet
9. May 2, 1980
10. Mid Louisiana Gas Co

1. 80–31006/80–1192
2. 17–111–21266–0000
3. 108 000 000
4. IMC Exploration Co
5. Frost #47
6. Monroe gas field
7. Union LA
8. 15.0 million cubic feet
9. May 2, 1980
10. Mid Louisiana Gas Co

1. 80–31007/80–1193
2. 17–111–21297–0000
3. 108 000 000
4. IMC Exploration Co
5. Frost #55
6. Monroe gas field
7. Union LA
8. 16.0 million cubic feet
9. May 2, 1980
10. Mid Louisiana Gas Co

1. 80–31008/80–1313
2. 17–067–00313–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #6
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31009/80–1312
2. 17–067–00321–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #4
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31010/80–1311
2. 17–067–00318–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #3
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31011/80–1189
2. 17–073–20272–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–308
6. Monroe gas field
7. Quachita LA
8. 7.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31012/80–1328
2. 17–067–00404–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #23
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31013/80–1327
2. 17–067–20105–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–47
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31014/80–1246
2. 17–073–21153–0000
3. 103 000 000
4. Teel 78–A
5. Smith A #1
6. Monroe gas rock field
7. Quachita LA
8. 6.6 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31015/80–1245
2. 17–073–21136–0000
3. 103 000 000
4. Frank Spooner
5. Pipes No 8 (161771)
6. Monroe
7. Quachita Parish LA
8. 20.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31016/80–1244
2. 17–073–21134–0000
3. 103 000 000
4. Frank Spooner
5. Pipes No 6 (161769)
6. Monroe

7. Quachita Parish LA
8. 70.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31017/80–1243
2. 17–073–21133–0000
3. 103 000 000
4. Frank Spooner
5. Pipes No 5 (161768)
6. Monroe
7. Quachita Parish LA
8. 80.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31018/80–1242
2. 17–073–21132–0000
3. 103 000 000
4. Frank Spooner
5. Pipes No 4 (16176)
6. Monroe
7. Quachita Parish LA
8. 40.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31019/80–1241
2. 17–073–21131–0000
3. 103 000 000
4. Frank Spooner
5. Pipes No 3 (161766)
6. Monroe
7. Quachita Parish LA
8. 24.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31020/80–1240
2. 17–073–21130–0000
3. 103 000 000
4. Frank Spooner
5. Pipes No 2 (161765)
6. Monroe
7. Quachita Parish LA
8. 25.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31021/80–1239
2. 17–073–21129–0000
3. 103 000 000
4. Frank Spooner
5. Pipes No 1 (161764)
6. Monroe
7. Quachita Parish LA
8. 40.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31022/80–1238
2. 17–067–20060–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–32
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31023/80–1237
2. 17–067–20102–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–25
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31024/80–1236
2. 17–067–20057–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–22
6. Monroe
7. Morehouse LA
8. 17.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31025/80–1235
2. 17–067–20100–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–19
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31026/80–1234
2. 17–067–20059–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–27
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31027/80–1233
2. 17–067–20058–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–24
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31028/80–1380
2. 17–073–20139–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–275
6. Monroe gas field
7. Quachita LA
8. .7 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31029/80–1379
2. 17–073–20284–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–314
6. Monroe gas field
7. Quachita LA
8. 3.4 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31030/80–1282
2. 17–073–20164–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–297
6. Monroe gas field
7. Quachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31031/80–1281
2. 17–073–20165–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate F–298
6. Monroe gas field
7. Quachita LA
8. 1.7 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31032/80–1310
2. 17–067–00311–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #2
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31033/80–1309
2. 17–067–20950–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–142
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31034/80–1308
2. 17–067–20850–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–105
6. Monroe
7. Morehouse LA
8. 8.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31035/80–1307
2. 17–067–20851–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–106
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31036/80–1306
2. 17–067–20852–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–107
6. Monroe
7. Morehouse LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31037/80–1305
2. 17–067–20853–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–108
6. Monroe
7. Morehouse LA
8. 7.6 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31038/80–1304
2. 17–067–20942–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–139
6. Monroe
7. Morehouse LA
8. 3.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31039/80–1303

2. 17–067–20941–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–138
6. Monroe
7. Morehouse LA
8. 12.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31040/80–1302
2. 17–067–20936–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–137
6. Monroe
7. Morehouse LA
8. 3.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31041/80–1301
2. 17–067–20926–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–136
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31042/80–1300
2. 17–067–00265–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–40
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31043/80–1299
2. 17–067–00264–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–39
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31044/80–1298
2. 17–067–00263–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–38
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31045/80–1166
2. 17–073–20171–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–304
6. Monroe Gas Field
7. Ouachita LA
8. .9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31046/80–1167
2. 17–073–20172–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–305
6. Monroe Gas Field
7. Ouachita LA
8. .7 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31047/80–1297
2. 17–067–00262–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–37
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31048/80–1296
2. 17–067–00261–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–36
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31049/80–1295
2. 17–067–00251–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–34
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31050/80–1294
2. 17–067–00250–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–33
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31051/80–1293
2. 17–067–00256–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–36
6. Monroe
7. Morehouse LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31052/80–1292
2. 17–073–20134–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–273
6. Monroe Gas Field
7. Ouachita LA
8. .6 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31053/80–1291
2. 17–073–20191–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–313
6. Monroe Gas Field
7. Ouachita LA
8. 3.9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31054/80–1290
2. 17–073–20189–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–312
6. Monroe Gas Field
7. Ouachita LA
8. 3.6 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31055/80–1289
2. 17–073–20161–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–280
6. Monroe Gas Field
7. Ouachita LA
8. 1.3 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31056/80–1288
2. 17–073–20160–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–280
6. Monroe Gas Field
7. Ouachita LA
8. .4 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31057/80–1287
2. 17–073–20159–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–276
6. Monroe Gas Field
7. Ouachita LA
8. 1.3 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31058/80–1286
2. 17–073–20162–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–277
6. Monroe Gas Field
7. Ouachita LA
8. 1.4 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31059/80–1285
2. 17–073–20169–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–302
6. Monroe Gas Field
7. Ouachita LA
8. .9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31060/80–1284
2. 17–073–20167–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–300
6. Monroe Gas Field
7. Ouachita LA
8. 1.1 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31061/80–1283
2. 17–073–20158–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–296
6. Monroe Gas Field

7. Ouachita LA
8. .8 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31062/80–1168
2. 17–073–20173–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–306
6. Monroe Gas Field
7. Ouachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31063/80–1135
2. 17–073–21010–0000
3. 108 000 000
4. Primos Production Co
5. Breard #7
6. Monroe
7. Ouachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31064/80–1134
2. 17–073–21001–0000
3. 108 000 000
4. Primos Production Co
5. Breard #8
6. Monroe
7. Ouachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31065/80–1133
2. 17–073–21006–0000
3. 108 000 000
4. Primos Production Co
5. Breard #10
6. Monroe
7. Ouachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31066/80–1132
2. 17–073–21017–0000
3. 108 000 000
4. Primos Production Co
5. Breard #11
6. Monroe
7. Ouachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31067/80–1131
2. 17–073–21009–0000
3. 108 000 000
4. Primos Production Co
5. Breard #5
6. Monroe
7. Ouachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31068/80–1130
2. 17–073–21008–0000
3. 108 000 000
4. Primos Production Co
5. Breard #4
6. Monroe
7. Ouachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31069/80–1129
2. 17–073–21013–0000
3. 108 000 000
4. Primos Production Co
5. Breard #9
6. Monroe
7. Ouachita LA
8. 18.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31070/80–1275
2. 17–709–20215–0000
3. 103 000 000
4. Texaco Inc
5. RIS 9700 RD–L SU S/L 340 NO 183
6. Rabbit Island
7. Iberia LA
8. 921.0 million cubic feet
9. May 2, 1980
10. Kaiser Aluminum & Chemical Corp, Gulf Oil Corp, W R Grace & Co, Monsanto Chemical Co

1. 80–31071/80–1274
2. 17–709–20206–0000
3. 103 000 000
4. Texaco Inc
5. RIS 9700 RK–L SU S/L 340 No 177
6. Rabbit Island
7. St Mary LA
8. 50.0 million cubic feet
9. May 2, 1980
10. Kaiser Aluminum & Chemical Corp, Gulf Oil Corp, W R Grace & Co, Monsanto Chemical Co

1. 80–31072/80–1273
2. 17–709–20208–0000
3. 103 000 000
4. Texaco Inc
5. RIS 9700 RK–L SU S/L 340 No 176
6. Rabbit Island
7. St Mary LA
8. 128.0 million cubic feet
9. May 2, 1980
10. Kaiser Aluminum & Chemical Corp, Gulf Oil Corp, W R Grace & Co, Monsanto Chemical Co

1. 80–31073/80–1272
2. 17–726–20173–0000
3. 103 000 000
4. Kerr-McGee Corp
5. Brs 20 6600 RA SU SL 2000 No 50
6. Breton Sound block 20
7. Plaquemines Parish LA
8. 15.0 million cubic feet
9. May 2, 1980
10. Southern Natural Gas Co

1. 80–31074/80–1098
2. 17–031–21082–0000
3. 102 000 000
4. Transco Exploration Co
5. Hoss Sug Wofford No 1
6. Spider
7. Desoto Parish LA
8. 1095.0 million cubic feet
9. May 2, 1980
10. Transcontinental Gas Pipe Line Corp

1. 80–31075/80–1097
2. 17–073–20949–0000
3. 103 000 000
4. Franks & Bass Etal
5. CVD RA SU U Verdie Wassan No 1
6. South Drew
7. Ouachita LA
8. 657.0 million cubic feet
9. May 2, 1980
10. Olinkraft Inc

1. 80–31076/80–1096
2. 17–001–20750–0000
3. 102 000 000
4. Edwin L Cox
5. E Cobena et al No 1
6. Branch
7. Acadia LA
8. 250.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–31077/80–1176
2. 17–073–20121–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–254
6. Monroe
7. Ouachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31078/80–1175
2. 17–073–20130–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–253
6. Monroe
7. Ouachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31079/80–1174
2. 17–073–20180–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–261
6. Monroe
7. Ouachita LA
8. 3.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31080/80–1173
2. 17–073–20125–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–252
6. Monroe
7. Ouachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31081/80–1172
2. 17–073–20124–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–251
6. Monroe
7. Ouachita LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31080/80–1171
2. 17–073–20188–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–311
6. Monroe
7. Ouachita LA
8. 3.7 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31083/80–1170
2. 17–073–20183–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–281

6. Monroe
7. Ouachita, LA
8. .3 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31084/80–1169
2. 17–073–20174–0000
3. 108 000 000
4. IMC Exploration Co
5. Fairbanks Real Estate #F–307
6. Monroe
7. Ouachita, LA
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31085/80–1344
2. 17–067–20896–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–101
6. Monroe
7. Morehouse, La
8. 17.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31086/80–1343
2. 17–067–20897–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–102
6. Monroe
7. Morehouse, LA
8. 17.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31087/80–1342
2. 17–067–20898–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–103
6. Monroe
7. Morehouse, LA
8. 17.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31088/80–1222
2. 17–067–00354–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #6
6. Monroe
7. Morehouse, LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31089/80–1221
2. 17–067–00360–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #5
6. Monroe
7. Morehouse, LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31090/80–1220
2. 17–067–00384–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #11
6. Monroe
7. Morehouse, LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31091/80–1219
2. 17–067–00398–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #4
6. Monroe
7. Morehouse, LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31092/80–1218
2. 17–067–00383–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #49
6. Monroe
7. Morehouse, LA
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31093/80–1354
2. 17–067–20840–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–97
6. Monroe
7. Morehouse, LA
8. 8.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31094/80–1353
2. 17–067–20841–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–98
6. Monroe
7. Morehouse, LA
8. 8.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31095/80–1352
2. 17–067–20842–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–99
6. Monroe
7. Morehouse, LA
8. 8.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31096/80–1351
2. 17–067–20844–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–100
6. Monroe
7. Morehouse, LA
8. 8.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31097/80–1350
2. 17–067–20845–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–101
6. Monroe
7. Morehouse, LA
8. 8.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31098/80–1349
2. 17–067–20846–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–102
6. Monroe
7. Morehouse, LA
8. 8.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31099/80–1348
2. 17–067–20847–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–103
6. Monroe
7. Morehouse, LA
8. 8.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31100/80–1347
2. 17–067–20849–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–104
6. Monroe
7. Morehouse, LA
8. 8.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31101/80–1346
2. 17–067–20873–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–154
6. Monroe
7. Morehouse, LA
8. 1.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31102/80–1345
2. 17–067–21197–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–106
6. Monroe
7. Morehouse, LA
8. 18.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31103/80–1359
2. 17–067–00322–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #13
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31104/80–1358
2. 17–067–00297–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #12
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31105/80–1357
2. 17–067–00284–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #11
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31106/80–1356
2. 17–067–00000–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #10
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31107/80–1355
2. 17–067–00296–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #9
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31108/80–1190
2. 17–111–21245–0000
3. 108 000 000
4. IMC Exploration Co
5. Frost #37
6. Monroe Gas Field
7. Union, LA
8. 16.7 million cubic feet
9. May 2, 1980
10. Mid Louisiana Gas Co

1. 80–31109/80–1204
2. 17–111–21552–0000
3. 108 000 000
4. IMC Exploration Co
5. Frost #62
6. Monroe Gas Field
7. Union, LA
8. 18.0 million cubic feet
9. May 2, 1980
10. Mid Louisiana Gas Co

1. 80–31110/80–1203
2. 17–067–21204–0000
3. 108 000 000
4. IMC Exploration Co
5. J B Miles #F–113
6. Monroe Gas Field
7. Morehouse, LA
8. 14.8 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31111/80–1202
2. 17–067–20341–0000
3. 108 000 000
4. IMC Exploration Co
5. Allison #N–233
6. Monroe Gas Field
7. Morehouse, LA
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31112/80–1201
2. 17–067–20339–0000
3. 108 000 000
4. IMC Exploration Co
5. Allison #N–232
6. Monroe Gas Field
7. Morehouse, LA
8. 2.7 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31113/80–1371
2. 17–067–20874–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #N–155
6. Monroe
7. Morehouse, LA
8. 1.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31114/80–1370
2. 17–067–00255–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #34
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31115/80–1369
2. 17–067–00280–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #33
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31116/80–1368
2. 17–067–00277–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #31
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31117/80–1367
2. 17–067–00257–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #28
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31118/80–1366
2. 17–067–00281–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #27
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31119/80–1365
2. 17–067–00306–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #26
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31120/80–1364
2. 17–067–00000–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #23
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31121/80–1363
2. 17–067–00247–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #22
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31122/80–1362
2. 17–067–00254–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #21
6. Monroe
7. Morehouse, LA
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31123/80–1361
2. 17–067–00253–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #20
6. Monroe
7. Morehouse La
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31124/80–1360
2. 17–067–00323–0000
3. 108 000 000
4. IMC Exploration Co
5. Ball #18
6. Monroe
7. Morehouse La
8. 4.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31125/801231
2. 17–067–20052–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #26
6. Monroe
7. Morehouse La
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31126/80–1230
2. 17–067–20053–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #20
6. Monroe
7. Morehouse La
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31127/80–1229
2. 17–067–20019–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #31
6. Monroe
7. Morehouse La
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31128/80–1188
2. 17–073–20273–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–309

6. Monroe Gas Field
7. Quachita La
8. 6.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31129/80–1187
2. 17–073–20118–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–249
6. Monroe Gas Field
7. Quachita La
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31130/80–1390
2. 17–073–20129–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–269
6. Monroe Gas Field
7. Quachita La
8. .9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31131/80–1389
2. 17–073–20137–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–270
6. Monroe Gas Field
7. Quachita La
8. 1.4 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31132/80–1388
2. 17–073–20128–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–268
6. Monroe Gas Field
7. Quachita La
8. .9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31133/80–1186
2. 17–073–20120–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–250
6. Monroe Gas Field
7. Quachita La
8. 1.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31134/80–1185
2. 17–073–20140–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–274
6. Monroe Gas Field
7. Quachita La
8. 3.5 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31135/80–1326
2. 17–067–20092–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #F–34
6. Monroe
7. Morehouse La
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31136/80–1253
2. 17–111–21914–0000
3. 103 000 000
4. Godfrey & Riley
5. Dorothy Meeks #1
6. Monroe
7. Union La
8. 21.5 million cubic feet
9. May 2, 1980
10. Mid–Louisiana Gas Co

1. 80–31137/80–1252
2. 17–111–21915–0000
3. 103 000 000
4. Godfrey & Riley
5. E G Meeks #1
6. Monroe
7. Union La
8. 21.5 million cubic feet
9. May 2, 1980
10. Mid–Louisiana Gas Co

1. 80–31138/80–1251
2. 17–111–21913–0000
3. 103 000 000
4. Godfrey & Riley
5. Brantley–Hayes #1
6. Monroe
7. Union La
8. 21.5 million cubic feet
9. May 2, 1980
10. Mid–Louisiana Gas Co

1. 80–31139/80–1250
2. 17–073–21175–0000
3. 103 000 000
4. Teel 78–A
5. Smith A #5
6. Monroe Gas Rock Field
7. Quachita La
8. 8.8 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31140/80–1249
2. 17–073–21174–0000
3. 103 000 000
4. Teel 78–A
5. Smith A #4
6. Monroe Gas Rock Field
7. Quachita La
8. 6.2 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31141/80–1248
2. 17–073–21173–0000
3. 103 000 000
4. Teel 78–A
5. Smith A #3
6. Monroe Gas Rock Field
7. Quachita La
8. 5.5 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31142/80–1247
2. 17–073–21157–0000
3. 103 000 000
4. Teel 78–A
5. Smith A #2
6. Monroe Gas Rock Field
7. Quachita 037 La
8. 7.3 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31143/80–1387
2. 17–073–20127–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–267
6. Monroe Gas Field
7. Quachita La
8. 1.5 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31144/80–1386
2. 17–073–20126–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–266
6. Monroe Gas Field
7. Quachita La
8. .9 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31145/80–1385
2. 17–073–20123–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–265
6. Monroe Gas Field
7. Quachita La
8. 1.5 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31146/80–1384
2. 17–073–20119–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–264
6. Monroe Gas Field
7. Quachita La
8. 1.4 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31147/80–1383
2. 17–073–20122–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–263
6. Monroe Gas Field
7. Quachita La
8. 1.8 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31148/80–1382
2. 17–073–20181–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–262
6. Monroe Gas Field
7. Quachita La
8. 2.5 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31149/80–1381
2. 17–073–20138–0000
3. 108 000 000
4. IMC Exploration Co
5. Central Immigration #F–272
6. Monroe Gas Field
7. Quachita La
8. 1.4 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31150/80–1232
2. 17–067–20054–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta Fee #23
6. Monroe
7. Morehouse La
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31151/80–177
2. 17–045/20595–0000
3. 102 000 000
4. Energy Reserves Group
5. Lucy Viator Lopez #1
6. Jefferson Island
7. Iberia La
8. 3600.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–31152/80–221
2. 17–001–20727–0052
3. 102 000 000
4. Conoco Inc
5. E Meaux #1 (Prop Hmsk D–4 Rd Su A)
6. Rayne
7. Acadia La
8. 1400.0 million cubic feet
9. May 2, 1980
10. Conoco Inc

1. 80–31153/80–220
2. 17–097–20521–0000
3. 102 000 000
4. Shell Oil Co
5. C A G Jarrell No 1
6. Elba
7. St Landry La
8. .0 million cubic feet
9. May 2, 1980
10.

1. 80–31154/80–1217
2. 17–067–00350–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #48
6. Monroe
7. Morehouse La
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31155/80–1216
2. 17–067–00366–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #46
6. Monroe
7. Morehouse La
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31156/80–1215
2. 17–067–00386–0000
3. 108 000 000
4. IMC Exploration Co
5. Tensas Delta #44
6. Monroe
7. Morehouse La
8. 7.0 million cubic feet
9. May 2, 1980
10. Georgia Pacific Corp

1. 80–31157/80–1214
2. 17–073–20318–0000
3. 108 000 000
4. IMC Exploration Co
5. Ladel #F–241
6. Monroe Gas Field
7. Quachita La
8. 2.0 million cubic feet
9. May 2, 1980
10. IMC Pipeline Co

1. 80–31158/80–1264
2. 17–111–21916–0000
3. 103 000 000
4. K D Lankford Jr & L&N Drilling Co
5. Hollis #1
6. Monroe Gas
7. Union La
8. 22.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31159/80–1263
2. 17–111–21887–0000
3. 103 000 000
4. K D Lankford Jr & L&N Drilling Co
5. McGough #5
6. Monroe Gas
7. Union La
8. 22.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31160/80–1262
2. 17–111–21890–0000
3. 103 000 000
4. K D Lankford Jr & L&N Drilling Co
5. Pace #2
6. Monroe Gas
7. Union La
8. 22.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31161/80–1261
2. 17–111–21895–0000
3. 103 000 000
4. K D Lankford Jr et al
5. Jarmon #1
6. Monroe Gas
7. Union La
8. 22.0 million cubic feet
9. May 2, 1980
10. United Gas Pipeline Co

1. 80–31162/80–1260
2. 17–111–21768–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Gibson Estate #9
6. Monroe Gas field
7. Union La
8. 23.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–31163/80–1259
2. 17–111–21758–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Gibson Estate #8
6. Monroe Gas Field
7. Union LA
8. 26.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–31164/80–1258
2. 17–111–21802–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Wells #1
6. Monroe Gas Field
7. Union LA
8. 21.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–31165/80–1257
2. 17–111–21338–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Hopkins Estate #2
6. Monroe Gas Field
7. Union LA
8. 25.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–31166/80–1256
2. 17–111–21337–0000
3. 103 000 000
4. Ace Drilling Services Inc
5. Hopkins Estate #1
6. Monroe Gas Field
7. Union LA
8. 24.0 million cubic feet
9. May 2, 1980
10. Texas Gas Transmission Corp

1. 80–31167/80–1255
2. 17–111–21911–0000
3. 103 000 000
4. Godfrey & Riley
5. Stell #2
6. Monroe
7. Union LA
8. 21.5 million cubic feet
9. May 2, 1980
10. Mid-Louisiana Gas Co

1. 80–31168/80–1254
2. 17–111–21909–0000
3. 103 000 000
4. Godfrey & Riley
5. Stell #1
6. Monroe
7. Union LA
8. 21.5 million cubic feet
9. May 2, 1980
10. Mid-Louisiana Gas Co

N. Dak. Geological Survey

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or Block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31174/224–NGPA
2. 33–011–00287–0000
3. 103 000 000
4. Joseph J C Paine and Associate
5. D C Ringstad #1–4
6. Little Missouri
7. Bowman ND
8. .0 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities Co

1. 80–31175/225–NGPA
2. 33–011–00284–0000
3. 103 000 000
4. Joseph J C Paine and Associate
5. G Woll #1–33
6. Little Missouri
7. Bowman ND
8. .0 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities Co

1. 80–31176/226–NGPA
2. 33–011–00291–0000
3. 103 000 000
4. Joseph J C Paine and Associate
5. Chapman #1–32
6. Little Missouri
7. Bowman ND
8. 43.4 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities Co

1. 80–31177/227–NGPA
2. 33–011–00285–0000
3. 103 000 000

4. Joseph J C Paine and Associate
5. M Carpenter #3-33
6. Little Missouri
7. Bowman ND
8. .0 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities Co
1. 80-31178/228-NGPA
2. 33-011-00293-0000
3. 103 000 000
4. Joseph J C Paine and Associate
5. Johnson #3-9
6. Little Missouri
7. Bowman ND
8. .0 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities Co
1. 80-31179/229-NGPA
2. 33-011-00292-0000
3. 103 000 000
4. Joseph J C Paine and Associates
5. Aasen #1-9
6. Little Missouri
7. Bowman ND
8. .0 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities Co
1. 80-31180/230-NGPA
2. 33-011-00295-0000
3. 103 000 000
4. Joseph J C Paine and Associates
5. State #1-16
6. Little Missouri
7. Bowman ND
8. 62.5 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities Company
1. 80-31181/231-NGPA
2. 33-011-00288-0000
3. 103 000 000
4. Joseph J C Paine and Associates
5. Chapman #3-28
6. Little Missouri
7. Bowman ND
8. .0 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities Co
1. 80-31182/240-NGPA
2. 33-007-00432-0000
3. 102 000 000
4. Gulf Oil Corporation
5. J & G Hurinenko 2-1-3A
6. Little Knife
7. Billings ND
8. 16.0 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities
1. 80-31183/239-NGPA
2. 33-007-00364-0000
3. 102 000 000
4. Gulf Oil Corporation
5. Joe Tachenko 3-17-2C
6. Little Knife
7. Billings ND
8. 8.0 million cubic feet
9. May 2, 1980
10. Montana Dakota Utilities
1. 80-31184/238-NGPA
2. 33-007-00403-0000
3. 102 000 000
4. Gulf Oil Corporation
5. Tedrow 6-12-2A
6. Little Knife
7. Billings ND
8. 29.0 million cubic feet
9. May 2, 1980
10. Montana-Dakota Utilities
1. 80-31185/237-NGPA
2. 33-053-00963-0000
3. 102 000 000
4. Mosbacher Production Co
5. Verlin Fossum et al 26-1
6. Indian Hills (Red River Pool)
7. McKenzie ND
8. 84.0 million cubic feet
9. May 2, 1980
10. Montana-Dakota Utilities Co
1. 80-31186/236-NGPA
2. 33-023-00170-0000
3. 102 000 000
4. Mosbacher Production Co
5. Harold W Haugen 25-1
6. Daneville (Madison Pool)
7. Divide ND
8. 3.6 million cubic feet
9. May 2, 1980
10.
1. 80-31187/235-NGPA
2. 33-007-00379-0000
3. 102 000 000
4. William Herbert Hunt Trust Estate
5. Dorothy Osadchuk #1 (Madison)
6. Treetop
7. Billings ND
8. 185.0 million cubic feet
9. May 2, 1980
10. Koch Hydrocarbon Company
1. 80-31188/233-NGPA
2. 33-007-00405-0000
3. 102 000 000
4. William Herbert Hunt Trust Estate
5. Dorothy Osadchuk B #1 (Madison)
6. Treetop
7. Billings ND
8. 131.0 million cubic feet
9. May 2, 1980
10. Koch Hydrocarbon Company
1. 80-31189/234-NGPA
2. 33-007-00382-0000
3. 102 000 000
4. William Herbert Hunt Trust Estate
5. Rodakowski #1
6. Treetop
7. Billings ND
8. 92.0 million cubic feet
9. May 2, 1980
10. Koch Hydrocarbon Company
1. 80-31190/232-NGPA
2. 33-007-00414-0000
3. 102 000 000
4. William Herbert Hunt Trust Estate
5. Dorothy Osadchuk A #1
6. Treetop
7. Billings ND
8. 237.0 million cubic feet
9. May 2, 1980
10. Koch Hydrocarbon Company

Okla. Corporation Commission

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or Block No.
8. Estimated Annual Volume
9. Date Received at FERC
10. Purchaser(s)
1. 80-30786A/1122
2. 35-093-21473-0000
3. 102 000 000
4. Sabine Production Co
5. Firebaugh #1-26
6. South Bado
7. Major OK
8. 175.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co
1. 80-30786B/1122
2. 35-093-21473-0000
3. 103 000 000
4. Sabine Production Co
5. Firebaugh #1-26
6. South Bado
7. Major OK
8. 175.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co
1. 80-30787/03524
2. 35-007-00000-0000
3. 108 000 000
4. Consolidated Oil & Gas Inc
5. Hinz No 1
6. Light
7. Beaver OK
8. 11.5 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipe Line Co
1. 80-30788/03545
2. 35-059-20798-0000
3. 103 000 000
4. Arco Oil and Gas Co
5. Norma Jeanne Dickinson Well #2
6. Northwest Lovedale
7. Harper OK
8. 36.5 million cubic feet
9. May 2, 1980
10. Cities Service Gas Co
1. 80-30789/03515
2. 35-059-20752-0000
3. 103 000 000
4. Cummings Oil Co
5. Rogers #1-13
6. Doby Springs
7. Harper OK
8. 336.0 million cubic feet
9. May 2, 1980
10. Transwestern Pipe Line Co
1. 80-30790/01033
2. 35-111-00000-0000
3. 103 000 000
4. Seagull Operating Co Inc
5. Rice No 1
6. Polly Anna
7. Okmulgee OK
8. 140.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co
1. 80-30791/01038
2. 35-111-21317-0000
3. 103 000 000
4. Seagull Operating Co Inc
5. Cruickshank No 1
6. Polly Anna
7. Okmulgee OK
8. 140.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co
1. 80-30792/01035
2. 35-111-21412-0000
3. 103 000 000
4. Seagull Operating Co Inc
5. Irby A No 1
6. Polly Anna

7. Okmulgee OK
8. 140.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30793/01037
2. 35–111–21411–0000
3. 103 000 000
4. Seagull Operating Co Inc
5. Irby No 1
6. Polly Anna
7. Okmulgee OK
8. 140.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30794/03516
2. 35–007–00000–0000
3. 108 000 000
4. Hughes Seewald
5. Jines #1
6. Boyd area
7. Beaver OK
8. 5.4 million cubic feet
9. May 2, 1980
10. Natural Gas Pipeline Co of America

1. 80–30795/03553
2. 35–043–20465–0000
3. 108 000 000
4. Coquina Oil Corp
5. McMillan #1
6.
7. Dewey OK
8. .0 million cubic feet
9. May 2, 1980
10. Delhi Gas Pipeline Corp

1. 80–30796/05295
2. 35–147–00000–0000
3. 103 000 000
4. W M Ramsey
5. I–A Doty
6. Ochelata Sec 33 + 25 N RG 13E
7. Washington OK
8. 75.0 million cubic feet
9. May 2, 1980
10. Cities Service Gas Co

1. 80–30797/03549
2. 35–083–20665–0000
3. 102 000 000
4. John J Shea
5. Treagle #1
6. Unnamed
7. Logan OK
8. 180.0 million cubic feet
9. May 2, 1980
10. Cities Service Gas Co

1. 80–30798/03531
2. 35–151–20901–0000
3. 103 000 000
4. Southland Royalty Co
5. Roring 1–29
6. Freedom 76
7. Woods OK
8. 30.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co

1. 80–30799/03533
2. 35–153–09280–0000
3. 103 000 000
4. Southland Royalty Co
5. Hyde 1–33
6. Freedom 76
7. Woodward OK
8. 200.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co

1. 80–30800/03529
2. 35–151–20907–0000
3. 103 000 000
4. Clifford Resources Inc
5. Bouma 1–35
6. South Waynoka
7. Woods OK
8. 100.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co

1. 80–30801/03527
2. 35–017–20979–0000
3. 103 000 000
4. Gulf Oil Corp
5. Harris West 1–15
6. Yukon
7. Canadian OK
8. 159.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30802/03211
2. 35–105–21163–0000
3. 103 000 000
4. Three Sands Oil Inc
5. Kolter-Porter #1
6. Northeast Nowata
7. Nowata OK
8. 11.0 million cubic feet
9. May 2, 1980
10. Nowata Gathering LTD

1. 80–30803/03530
2. 35–153–20927–0000
3. 103 000 000
4. Southland Royalty Co
5. London 1–4
6. Freedom 76
7. Woodward OK
8. 140.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co

1. 80–30804/01032
2. 35–111–00000–0000
3. 103 000 000
4. Seagull Operating Co Inc
5. Burnett No 1
6. Hamilton Switch
7. Okmulgee OK
8. 140.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30805/01036
2. 35–111–21238–0000
3. 103 000 000
4. Seagull Operating Co Inc
5. Raby No 1
6. Polly Anna
7. Okmulgee OK
8. 140.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30806/03212
2. 35–105–21657–0000
3. 103 000 000
4. Three Sands Oil Inc
5. Kolter-Porter #7
6. Northeast Nowata
7. Nowata OK
8. 11.0 million cubic feet
9. May 2, 1980
10. Nowata Gathering LTD

1. 80–30807/03207
2. 35–105–21870–0000
3. 103 000 000
4. Three Sands Oil Inc
5. Barbee # A–1
6. Northeast Nowata
7. Nowata OK
8. 51.0 million cubic feet
9. May 2, 1980
10. Nowata Gathering LTD

1. 80–30808/03534
2. 35–137–21932–0000
3. 103 000 000
4. Gulf Oil Corp
5. C Quinn #10–26
6. Velma-Sycamore
7. Stephens OK
8. 286.0 million cubic feet
9. May 2, 1980
10. Lone Star Gas Co

1. 80–30809/03532
2. 35–153–20947–0000
3. 103 000 000
4. Southland Royalty Co
5. Oklahoma 1–32
6. Freedom 76
7. Woodward OK
8. 300.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co

1. 80–30810/03521
2. 35–073–00000–0000
3. 108 000 000 Denied
4. Consolidated Oil & Gas Inc
5. Titterington No 1
6. Dover-Hennessey
7. Kingfisher OK
8. 12.0 million cubic feet
9. May 2, 1980
10. Exxon Co USA

1. 80–30811/03511
2. 35–139–00000–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Gresswell No 1
6. Guymon Hugoton
7. Texas OK
8. 17.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co

1. 80–30812/03509
2. 35–139–00000–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Dakar No 1
6. Guymon Hugoton
7. Texas OK
8. 18.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co

1. 80–30813/03468
2. 35–043–20957–0000
3. 103 000 000
4. Ennex Production Co
5. Oakley #1
6. Putnam
7. Dewey OK
8. 140.0 million cubic feet
9. May 2, 1980
10. Mobil Oil Corp

1. 80–30814/03480
2. 35–093–00000–0000
3. 103 000 000
4. Warren Drilling Co Inc
5. L M Brown #1
6. Okeene Northwest
7. Major OK
8. 35.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30815/03490

2. 35–087–20410–0000
3. 103 000 000
4. National Coop Refinery Assn
5. Dunning #1
6. Wildcat
7. McClain OK
8. 360.0 million cubic feet
9. May 2, 1980
10. Cities Service Gas Co

1. 80–30816/03479
2. 35–093–00000–0000
3. 103 000 000
4. Warren Drilling Co Inc
5. Specht #1–5
6. Okeene Northwest
7. Major OK
8. 75.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30817/03485
2. 35–093–00000–0000
3. 103 000 000
4. Warren Drilling Co
5. Sproul #1
6.
7. Major OK
8. 150.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30818/03062
2. 35–047–20491–0000
3. 108 000 000
4. Blaik Oil Co
5. Havlik #1
6. Sooner Trend
7. Garfield OK
8. 3.0 million cubic feet
9. May 2, 1980
10. Exxon Corp

1. 80–30819/03411
2. 35–007–00000–0000
3. 103 000 000
4. Wessely Energy Corp
5. Bourquin Unit No 1
6. S E Logan
7. Beaver OK
8. 180.0 million cubic feet
9. May 2, 1980
10. Northern Natural Gas Co

1. 80–30820/03421
2. 35–093–21498–0000
3. 103 000 000
4. Sabine Production Co
5. State #1–13
6. South Orion
7. Major OK
8. 444.1 million cubic feet
9. May 2, 1980
10. Michigan Wisconsin Pipeline Co

1. 80–30821/03418
2. 35–017–21271–0000
3. 103 000 000
4. Blue Quail Energy Inc
5. Ramsey #2
6. Yukon C NE/4 SE/4S10–T12N–R5W
7. Canadian OK
8. 720.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30822/03469
2. 35–043–20975–0000
3. 103 000 000
4. Ennex Production Co
5. Mosteller #2
6. Putnam
7. Dewey OK
8. 90.0 million cubic feet
9. May 2, 1980
10. Mobil Oil Corp

1. 80–30823/03456
2. 35–007–21647–0000
3. 103 000 000
4. Marathon Oil Co
5. Wilkerson Unit No 2 (Morrow)
6. Mocane
7. Beaver OK
8. 240.0 million cubic feet
9. May 2, 1980
10. Colorado Interstate Gas Co

1. 80–30824/03431
2. 35–073–22158–0000
3. 103 000 000
4. Harper Oil Co
5. Terry Brown #1
6. Sooner Trend
7. Kingfisher OK
8. 29.0 million cubic feet
9. May 2, 1980
10. Cities Service Gas Co

1. 80–30825/03435
2. 35–139–21057–0000
3. 103 000 000
4. Beren Corp
5. Hurliman #1–33
6. Camrick
7. Texas OK
8. 500.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30826/03434
2. 35–139–21057–0000
3. 103 000 000
4. Beren Corp
5. Dutch #1
6. Camrick
7. Texas OK
8. 400.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30827/02835
2. 35–121–20472–0000
3. 103 000 000
4. Kingery Drilling Co Inc
5. Crandell #1
6.
7. Pittsburg OK
8. 3.3 million cubic feet
9. May 2, 1980
10. Arkansas Louisiana Gas Co

1. 80–30828/02454
2. 35–007–21619–0000
3. 103 000 000
4. Barnell LTD
5. J S Shaffer #1
6. Mocane Laverne
7. Beaver OK
8. 685.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co

1. 80–30829/03498
2. 35–011–20941–0000
3. 103 000 000
4. Mustang Production Co
5. Prairie Woman #1–24
6. S Geary
7. Blaine OK
8. 300.0 million cubic feet
9. May 2, 1980
10.

1. 80–30830/03494
2. 35–053–20506–0000
3. 103 000 000
4. Corley Ginther Oil Corp
5. Jones No 1
6. Wakita
7. Grant OK
8. 100.0 million cubic feet
9. May 2, 1980
10. Cities Service Gas Co

1. 80–30831/03483
2. 35–093–00000–0000
3. 103 000 000
4. Warren Drilling Co Inc
5. Warkentin #1
6.
7. Major OK
8. 100.0 million cubic feet
9. May 2, 1980
10. Phillips Petroleum Co

1. 80–30832/03499
2. 35–011–20892–0000
3. 103 000 000
4. Mustang Production Co
5. Gepner #1
6. Squaw Creek
7. Blaine OK
8. 180.0 million cubic feet
9. May 2, 1980
10. Oklahoma Gas & Electric Co Michigan-Wisconsin Pipeline Co

1. 80–30833/03517
2. 35–007–20922–0000
3. 108 000 000
4. Consolidated Oil & Gas Inc
5. Johnson No 1
6. East Turpin
7. Beaver OK
8. 6.0 million cubic feet
9. May 2, 1980
10. Kansas-Nebraska Natural Gas Co Inc

1. 80–30834/03500
2. 35–043–20959–0000
3. 103 000 000
4. Mustang Production Co
5. Mercer #1–11
6. Putnam
7. Dewey OK
8. 150.0 million cubic feet
9. May 2, 1980
10.

1. 80–30835/03522
2. 35–047–21684–0000
3. 103 000 000
4. Texas American Oil Corp
5. Omer Sipe Well No 1
6. Sooner Trend
7. Garfield OK
8. 73.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co Exxon Co (USA)

1. 80–30836/03506
2. 35–047–21641–0000
3. 103 000 000
4. Texas American Oil Corp
5. Maxey No 1
6. Sooner Trend
7. Garfield OK
8. 190.0 million cubic feet
9. May 2, 1980
10. Grace Petroleum Corp

1. 80–30837/00812
2. 35–081–00000–0000
3. 103 000 000
4. C & C Energy Co

5. Jones No 1
6. Skellyville
7. Lincoln OK
8. 73.5 million cubic feet
9. May 2, 1980
10. Cities Service Gas Co

1. 80–30838/03514
2. 35–047–21682–0000
3. 103 000 000
4. Texas American Oil Corp
5. Urban Helberg No 1
6. Sooner Trend
7. Garfield OK
8. 319.0 million cubic feet
9. May 2, 1980
10. Grace Petroleum Corp

1. 80–30839/03512
2. 35–139–00000–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Wayne No 2
6. S Guymon
7. Texas OK
8. 18.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipe Line Co

1. 80–30840/03523
2. 35–017–21199–0000
3. 103 000 000
4. Texaco Inc
5. Anna Mouser No 1
6. Yukon N
7. Canadian OK
8. 241.0 million cubic feet
9. May 2, 1980
10. Conoco Inc

1. 80–30841/01026
2. 35–121–20477–0000
3. 103 000 000
4. Arkla Exploration Co
5. Miller #3–7–C
6. Reams NW
7. Pittsburg OK
8. 24.0 million cubic feet
9. May 2, 1980
10. Arkansas Louisiana Gas Co

1. 80–30842/01025
2. 35–121–20477–0000
3. 103 000 000
4. Arkla Exploration Co
5. Miller #3–7–T
6. Reams NW
7. Pittsburg OK
8. 48.0 million cubic feet
9. May 2, 1980
10. Arkansas Louisiana Gas Co

1. 80–30843/01053
2. 35–137–05346–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Eulan No 1
6. W Doyle
7. Stephens OK
8. 2.0 million cubic feet
9. May 2, 1980
10. Aminoil USA Inc

1. 80–30844/03123
2. 35–081–20766–0000
3. 103 000 000
4. Ketal Oil Producing Co
5. Wotipka #1
6. N Agra
7. Lincoln OK
8. 180.0 million cubic feet
9. May 2, 1980
10. Colorado Gas Compression Inc

1. 80–30845/01059
2. 35–049–39057–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Litton #1
6. Golden Trend
7. Garvin OK
8. 4.0 million cubic feet
9. May 2, 1980
10. Warren Petroleum Co

1. 80–30846/01058
2. 35–049–39038–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Eskridge #1
6. Golden Trend
7. Garvin OK
8. .7 million cubic feet
9. May 2, 1980
10. Warren Petroleum Co

1. 80–30847/01055
2. 35–049–39964–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Julia #1
6. Golden Trend
7. Garvin OK
8. 10.8 million cubic feet
9. May 2, 1980
10. Warren Petroleum Co

1. 80–30848/01049
2. 35–137–00000–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Donehen No 6
6. W Doyle
7. Stephens OK
8. 2.0 million cubic feet
9. May 2, 1980
10. Aminoil USA Inc

1. 80–30849/03495
2. 35–139–21189–0000
3. 103 000 000
4. Texas Oil & Gas Corp
5. Randles #1
6. Dombey
7. Texas OK
8. 378.0 million cubic feet
9. May 2, 1980
10.

1. 80–30850/03507
2. 35–139–00000–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Debee No 3
6. South Guymon
7. Texas OK
8. 19.0 million cubic feet
9. May 2, 1980
10. Panhandle Eastern Pipeline Co

1. 80–30851/01050
2. 35–137–00000–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Creel No 3
6. Doyle
7. Stephens OK
8. 8.5 million cubic feet
9. May 2, 1980
10. Aminoil USA Inc

1. 80–30852/01046
2. 35–137–00000–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Donehew No 5
6. W Doyle
7. Stephens OK
8. 2.1 million cubic feet
9. May 2, 1980
10. Aminoil USA Inc

1. 80–30853/01051
2. 35–137–00000–0000
3. 108 000 000
4. Phillips Petroleum Co
5. Culberson No 7
6. Doyle
7. Stephens OK
8. 4.0 million cubic feet
9. May 2, 1980
10. Aminoil USA Inc

United States Geological Survey Metairie, La.

1. Control Number (FERC/State)
2. API
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–30782/G0–1211
2. 17–708–40412–00S1–0
3. 102 000 000
4. Transco Exploration Co
5. A–9
6. South Marsh Island
7. 107
8. 150.0 million cubic feet
9. May 2, 1980
10. Transcontinental Gas Pipe Line

1. 80–30783/G0–1221
2. 17–715–40236–0000–0
3. 102 000 000
4. Shell Oil Co
5. A–12
6. South Timbalier
7. 175
8. 1341.0 million cubic feet
9. May 2, 1980
10. Trunkline Gas Co

1. 80–30784/G0–1250
2. 17–708–40397–0000–0
3. 102 000 000
4. Pennzoil Co
5. Pennzoil Company Well No A–24A (Alt)
6. South Marsh Island SA
7. 128
8. .0 million cubic feet
9. May 2, 1980
10. Sea Robin Pipeline Co Florida Gas Transmission Co Florida Power & Light

1. 80–30785/G0–1258
2. 42–706–40038–0000–0
3. 102 000 000
4. Oxy Petroleum Inc
5. B–6
6. Galveston
7. 144
8. 605.0 million cubic feet
9. May 2, 1980
10. Northern Natural Gas Co

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name

6. Field or OCS area name
7. County, State or Block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–30858/NM0012–79–ER
2. 30–039–05139–0000–0
3. 108 000 000 Denied
4. Amerada Hess Corp
5. Jicarilla Apache I #2
6. Otero
7. Rio Arriba NM
8. 17.0 million cubic feet
9. April 22, 1980
10. El Paso Natural Gas Co

1. 80–30859/NM 84–79–SA
2. 30–025–00000–0000–0
3. 108 000 000 Denied
4. Conoco Inc
5. Lockhart B–31 #4
6. New Mexico Federal Unit
7. Lea NM
8. 15.9 million cubic feet
9. April 22, 1980
10. El Paso Natural Gas Co

1. 80–30860/NM 88–79–SA
2. 30–039–05139–0000–0
3. 108 000 000 Denied
4. Amerada Hess Corp
5. Jicarilla Apache I #2
6. Otero
7. Rio Arriba NM
8. 17.0 million cubic feet
9. April 22, 1980
10. El Paso Natural Gas Co

1. 80–30861/NM 90–79–SA
2. 30–039–07044–0000–0
3. 108 000 000 Denied
4. Mobil Oil Corp
5. Jicarilla E #3
6. Gavilan PC Blanco MV
7. Rio Arriba NM
8. 19.0 million cubic feet
9. April 22, 1980
10. Northwest Pipeline Corp

1. 80–30862/NM 351–79
2. 30–045–20928–0000–0
3. 108 000 000 Denied
4. W M Gallaway
5. Delo #2
6. Fulcher Kutz Pictured Cliffs
7. San Juan NM
8. 20.0 million cubic feet
9. April 22, 1980
10. Southern Union Gathering Co

1. 80–30863/NM–2744–79
2. 30–039–00000–0000–0
3. 108 000 000 Denied
4. Caulkins Oil Co
5. Breech D 185
6. South Blanco Pictured Cliffs
7. Rio Arriba NM
8. 15.2 million cubic feet
9. April 22, 1980
10. Gas Co of New Mexico

1. 80–30864/NM–3757–79
2. 30–015–21877–0000–0
3. 103 000 000 Denied
4. D B Baxter
5. Ross Draw Unit #5–Z I D #16958
6. Ross Draw—Bone Springs
7. Eddy NM
8. 26.0 million cubic feet
9. April 22, 1980
10. El Paso Natural Gas Co

1. 80–30865/NM–4886–79–2
2. 30–045–11309–0000–0
3. 108 000 000 Denied
4. Northwest Pipeline Corp
5. New Mexico 32–11 #1
6. Blanco Mesaverde
7. San Juan NM
8. 21.0 million cubic feet
9. April 22, 1980
10. Northwest Pipeline Corp

Osage Agency, Bureau of Indian Affairs Osage County, Okla.

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or Block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31169
2. 35–113–00000–0000–0
3. 103 000 000
4. Golden Oil Co
5. W F Friend #16–1 NE16–27N–11E
6. East Bowring Field
7. Osage OK
8. 16.7 million cubic feet
9. May 2, 1980
10. Ajax Oil & Gas Corp Inc

1. 80–31170
2. 35–113–00000–0000–0
3. 108 000 000
4. Ajax Oil & Gas Corp Inc
5. Osage Well 409
6.
7. Osage OK
8. .0 million cubic feet
9. May 2, 1980
10. Cities Service Gas Co

1. 80–31171
2. 35–113–00000–0000–0
3. 108 000 000
4. Ajax Oil & Gas Corp Inc
5. Osage Well 433
6.
7. Osage OK
8. .0 million cubic feet
9. May 2, 1980
10. Cities Service Gas Co

The applications for determination in these proceedings together with a copy or description of other materials in the record on which such determinations were made are available for inspection, except to the extent such material is treated as confidential under 18 CFR 275,206, at the Commission's Office of Public Information, Room 1000, 825 North Capitol Street, N.E., Washington, D.C. 20426.

Persons objecting to any of these final determinations may, in accordance with 18 CFR 275.203 and 18 CFR 275.204, file a protest with the commission on or before June 6, 1980.

Please reference the FERC control number in all correspondence related to these determintions.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80–15691 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–01–M

[No. 189]

Determinations by Jurisdictional Agencies Under the Natural Gas Policy Act of 1978

Issued: May 16, 1980.

The Federal Energy Regulatory Commission received notices from the jurisdictional agencies listed below of determinations pursuant to 18 CFR 274.104 and applicable to the indicated wells pursuant to the Natural Gas Policy Act of 1978.

California Department of Conservation

Division of Oil and Gas

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block no.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–26638/80–6–0003
2. 04–095–20388–0000
3. 103 000 000
4. Gas Producing Enterprises Inc
5. E Dixon '1
6. East Dixon Gas
7. Solano CA
8. 246.0 million cubic feet
9. April 14, 1980
10. Pacific Gas & Electric

1. 80–26639/80–6–0004
2. 04–013–20146–0000
3. 102 000 000
4. Depco Inc
5. Stenzel No 71x–17
6. South Oakley
7. Contra Costa CA
8. 1095.0 million cubic feet
9. April 14, 1980
10.

Kansas Corporation Commission

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block no.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–26758/K–79–1174
2. 15–129–20371–0000
3. 102 000 000
4. Cities Service Co
5. Baughman O '2
6. Winter

7. Morton KS
8. 22.3 million cubic feet
9. April 14, 1980
10. Colorado Interstate Gas Co

1. 80–26759/K–79–1257
2. 15–129–20378–0000
3. 102 000 000
4. Cities Service Co
5. Posey A '2
6. Winter
7. Morton KS
8. 170.1 million cubic feet
9. April 14, 1980
10. Colorado Interstate Gas Co

1. 80–26760/K–79–1289
2. 15–151–20593–0000
3. 102 000 000
4. Texas Oil & Gas Corp
5. Konold '1
6. Wildcat
7. Pratt KS
8. 182.5 million cubic feet
9. April 14, 1980
10. Central States Pipeline Co

1. 80–26761/K–79–1294
2. 15–047–20205–0000
3. 102 000 000
4. Imperial Oil Co
5. Mull '1–33
6. Wildcat
7. Edwards KS
8. 109.5 million cubic feet
9. April 14, 1980
10. Kansas-Nebraska Natural Gas Co Inc

1. 80–26762/K–79–1295
2. 15–097–00000–0000
3. 102 000 000
4. Imperial Oil Co
5. Long '1–12
6. Wildcat
7. Kiowa KS
8. 29.2 million cubic feet
9. April 14, 1980
10. Kansas-Nebraska Natural Gas Co Inc

1. 80–26763/K–79–1296
2. 15–097–20356–0000
3. 102 000 000
4. Imperial Oil Co
5. Davis '1–18
6. Wildcat
7. Kiowa KS
8. 109.5 million cubic feet
9. April 14, 1980
10. Kansas-Nebraska Natural Gas Co Inc

1. 80–26764/K–79–1340
2. 15–025–20066–0000
3. 102 000 000
4. Robert L Haynie
5. '4 Tuttle
6. Snake Creek Sw
7. Clark KS
8. 91.0 million cubic feet
9. April 14, 1980
10. Northern Natural Gas Co

1. 80–26765/K–79–1341
2. 15–025–20044–0000
3. 102 000 000
4. Robert L Haynie
5. Tuttle '1
6. Snake Creek Sw
7. Clark KS
8. 91.2 million cubic feet
9. April 14, 1980
10. Northern Natural Gas Co

1. 80–26766/K–79–1342
2. 15–025–20154–0000
3. 102 000 000
4. Robert L Haynie
5. '8 Tuttle
6. Snake Creek Sw
7. Clark KS
8. 91.2 million cubic feet
9. April 14, 1980
10. Northern Natural Gas Co

Montana Board of Oil and Gas Conservation

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block no.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–26640/2–80–58
2. 25–101–21701–0000
3. 108 000 000
4. Jerry L Branch
5. State 5–28 Sec 28–T34N–R2W
6. Prairie Dell Field
7. Toole MT
8. 19.0 million cubic feet
9. April 14, 1980
10. Cascade Gas Co Montana Power Co

1. 80–26641/2–80–59
2. 25–101–21743–0000
3. 108 000 000
4. Jerry L Branch
5. Sager 4–20 Sec 20–T34N–R2W
6. Prairie Dell Field
7. Toole MT
8. 6.0 million cubic feet
9. April 14, 1980
10. Cascade Gas Co Montana Power Co

1. 80–26642/2–80–60
2. 25–101–21703–0000
3. 108 000 000
4. Jerry L Branch
5. State 11–21 Sec 21–T34N–R2W
6. Prairie Dell Field
7. Toole MT
8. 18.0 million cubic feet
9. April 14, 1980
10. Cascade Gas Co Montana Power Co

New Mexico Department of Energy and Minerals

Oil Conservation Division

1. Control Number (FERG/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block no.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–26637
2. 30–025–26500–0000–
3. 103 000 000
4. Doyle Hartman
5. Maralo State '1
6. Lalmat
7. lea NM
8. 90.0 million cubic feet
9. April 11, 1980
10. El Paso Natural Gas Co

North Dakota Geological Survey

1. Control number (F.E.R.C./State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–26767/217
2. 33–053–00684–0000–
3. 102 000 000
4. Belco Petroleum Corp
5. Edgar BN 1–13 00684
6. Roughrider
7. McKenzie ND
8. 95.0 million cubic feet
9. April 14, 1980
10. Koch Oil Co

1. 80–26768/218
2. 33–053–00813–0000–
3. 102 000 000
4. Belco Petroleum Corp
5. BN 2–33 00813
6. Roughrider
7. McKenzie ND
8. 29.0 million cubic feet
9. April 14, 1980
10. Koch Oil Co

1. 80–26769/219
2. 33–053–00619–0000–
3. 102 000 000
4. Belco Petroleum Corp
5. Roughrider BN #1–33 00619
6. Roughrider
7. McKenzie ND
8. 104.0 million cubic feet
9. April 14, 1980
10. Koch Oil Co

1. 80–26770/220
2. 33–053–00775–0000–
3. 102 000 000
4. Belco Petroleum Corp
5. Edgar BN 3–7 00775
6. Roughrider
7. McKenzie ND
8. 135.0 million cubic feet
9. April 14, 1980
10. Koch Oil Co

1. 80–26771/221
2. 33–053–00762–0000–
3. 102 000 000
4. Belco Petroleum Corp
5. BN 8–21 00762
6. Roughrider
7. McKenzie ND
8. 29.0 million cubic feet
9. April 14, 1980
10. Koch Oil Co

1. 80–26772/222
2. 33–053–00737–0000–
3. 102 000 000
4. Belco Petroleum Corp
5. Edgar BN 2–13 00737
6. Roughrider
7. McKenzie ND
8. 201.0 million cubic feet
9. April 14, 1980
10. Koch Oil Co

1. 80–26773/223
2. 33–053–00666–0000–
3. 102 000 000

4. Belco Petroleum Corp
5. Burlington Northern 7-21 00666
6. Roughrider
7. McKenzie ND
8. 60.0 million cubic feet
9. April 14, 1980
10. Koch Oil Co

Ohio Department of Natural Resources

Division of Oil and Gas

1. Control number (F.E.R.C./State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80-26421/06380
2. 34-121-21477-0014-
3. 108 000 000
4. Mid-Atlantic Oil Co
5. John McFerren #1
6.
7. Noble OH
8. 4.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80-26422/06382
2. 34-121-21374-0014-
3. 108 000 000
4. Mid-Atlantic Oil Company
5. Elizabeth Buckey #1
6.
7. Noble OH
8. 13.0 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80-26423/06383
2. 34-121-21379-0014-
3. 108 000 000
4. Mid-Atlantic Oil Company
5. John Wargo #1
6.
7. Noble OH
8. 15.0 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80-26424/07531
2. 34-157-20995-0014-
3. 108 000 000
4. Scott T Lutz
5. Roy Rice #1
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26425/07532
2. 34-157-20988-0014-
3. 108 000 000
4. Scott T Lutz
5. Slabaugh #1
6.
7. Tuscarawas OH
8. 7.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26426/07533
2. 34-157-21009-0014-
3. 108 000 000
4. Scott T Lutz
5. Roy Rice #2
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26427/07534
2. 34-157-22444-0014-
3. 108 000 000
4. Scott T Lutz
5. Roy Rice #3
6.
7. Tuscarawas OH
8. 4.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26428/07535
2. 34-157-21199-0014-
3. 108 000 000
4. Scott T Lutz
5. Roy Rice B
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26429/07536
2. 34-157-21269-0014-
3. 108 000 000
4. Scott T Lutz
5. McDade #1
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26430/07537
2. 34-157-21370-0014-
3. 108 000 000
4. Scott T Lutz
5. McDade #2
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26431/07538
2. 34-157-22138-0014-
3. 108 000 000
4. Scott T Lutz
5. Kennedy #1
6.
7. Tuscarawas OH
8. 6.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26432/07540
2. 34-157-23143-0014-
3. 108 000 000
4. Scott T Lutz
5. Kramer A-1
6.
7. Tuscarawas OH
8. 10.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26433/07541
2. 34-023-22651-0014-
3. 108 000 000
4. Scott T Lutz
5. Roof #1
6.
7. Clark OH
8. 1.4 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26434/07542
2. 34-023-22292-0014-
3. 108 000 000
4. Scott T Lutz
5. Hackett #2
6.
7. Clark OH
8. 19.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26435/07543
2. 34-023-22291-0014-
3. 108 000 000
4. Scott T Lutz
5. Hackett #1
6.
7. Clark OH
8. 10.3 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26436/07544
2. 34-157-21139-0014-
3. 108 000 000
4. Scott T Lutz
5. Slabaugh #2
6.
7. Tuscarawas OH
8. 7.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80-26437
2. 34-007-20070-0014-
3. 108 000 000
4. Clarence K Tussel Jr
5. P Olekshuk #1
6.
7. Ashtabula OH
8. 5.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80-26438
2. 34-007-20224-0014-
3. 108 000 000
4. Chanse Petroleum Corp
5. S & N Burko #1
6.
7. Ashtabula OH
8. 1.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80-26439
2. 34-007-20228-0014-
3. 108 000 000
4. Chanse Petroleum Corp
5. C & M Kurt #1
6.
7. Ashtabula OH
8. 4.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80-26440
2. 34-007-20272-0014-
3. 108 000 000
4. Chanse Petroleum Corp
5. Claude & Alice Kenyon #2
6.
7. Ashtabula OH
8. 15.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80-26441
2. 34-007-20283-0014-
3. 108 000 000

4. Chanse Petroleum Corp
5. A D Kehres #1
6.
7. Ashtabula OH
8. 2.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26442
2. 34–007–20292–0014–
3. 108 000 000
4. Chanse Petroleum Corp
5. H & I Carter #1–A
6.
7. Ashtabula OH
8. 1.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26443
2. 34–007–20295–0014–
3. 108 000 000
4. Chanse Petroleum Corp
5. J & A Congdon #1
6.
7. Ashtabula OH
8. 11.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26444
2. 34–007–20297–0014–
3. 108 000 000
4. Chanse Petroleum Corp
5. Anderson Brockway #1
6.
7. Ashtabula OH
8. 1.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26445
2. 34–007–20298–0014–
3. 108 000 000
4. Chanse Petroleum Corp
5. J & A Trenchan #1A
6.
7. Ashtabula OH
8. 10.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26446
2. 34–007–20300–0014–
3. 108 000 000
4. Chanse Petroleum Corp
5. Andrew & Albina Lesko #2
6.
7. Ashtabula OH
8. 4.1 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26447
2. 34–007–20303–0014–
3. 108 000 000
4. Chanse Petroleum Corp
5. John & Nellie Harnist #1
6.
7. Ashtabula OH
8. 2.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26448
2. 34–007–20309–0014–
3. 108 000 000
4. Chanse Petroleum Corp
5. Hamilton Fall #1
6.
7. Ashtabula OH
8. 1.7 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26449
2. 34–007–20325–0014–
3. 108 000 000
4. Chanse Petroleum Corp
5. H & A Smith #1
6.
7. Ashtabula OH
8. 6.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26450
2. 34–007–20395–0014
3. 108 000 000
4. Chanse Petroleum Corp
5. H F Bouse #1
6.
7. Ashtabula OH
8. 9.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26451
2. 34–007–20453–0014
3. 108 000 000
4. J P White
5. Brown-Shook #1
6.
7. Ashtabula OH
8. 4.0 million cubic feet
9. April 11, 1980
10.

1. 80–26452
2. 34–019–20220–0014
3. 108 000 000
4. MB Operating Co Inc
5. Steele #1
6.
7. Carroll OH
8. 5.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26453
2. 34–019–20222–0014
3. 108 000 000
4. MB Operating Co Inc
5. J Stotzer #1
6.
7. Carroll OH
8. 4.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26454
2. 34–019–20327–0014
3. 108 000 000
4. MB Operating Co Inc
5. Shaw #1
6.
7. Carroll OH
8. .8 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26455
2. 34–019–20328–0014
3. 108 000 000
4. MB Operating Co Inc
5. Shaw #2
6.
7. Carroll OH
8. .8 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26456
2. 34–031–22597–0014
3. 108 000 000
4. The Oxford Oil Co
5. Reo Davis #1
6. N-R
7. Coshocton OH
8. 6.0 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26457
2. 34–031–22843–0014
3. 108 000 000
4. The Oxford Oil Co
5. Quentin Elder #1
6.
7. Coshocton OH
8. 2.5 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26458
2. 34–031–22916–0014
3. 108 000 000
4. The Oxford Oil Co
5. Norman Cullison #1
6.
7. Coshocton OH
8. 11.0 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26459
2. 34–059–20926–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Edwards #1
6.
7. Guernsey OH
8. 6.0 million cubic feet
9. April 11, 1980
10.

1. 80–26460
2. 34–059–20977–0014
3. 108 000 000
4. MB Operating Co Inc
5. Mallett #1
6.
7. Guernsey OH
8. 1.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26461
2. 34–059–21134–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. King #1
6.
7. Guernsey OH
8. 3.2 million cubic feet
9. April 11, 1980
10.

1. 80–26462
2. 34–059–21050–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Toth #1
6.
7. Guernsey OH
8. 5.0 million cubic feet
9. April 11, 1980
10.

1. 80–26463
2. 34–059–21159–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Ruby #1
6.
7. Guernsey OH

8. 7.0 million cubic feet
9. April 11, 1980
10.

1. 80–26464
2. 34–059–21488–0014
3. 108 000 000
4. Davis Frac Tanks & Supply
5. D B Braniger #1
6.
7. Guernsey OH
8. 4.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26465
2. 34–059–21558–0014
3. 108 000 000
4. Tiger Oil Inc
5. Tooms #2
6.
7. Guernsey OH
8. 3.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26466
2. 34–059–22643–0014
3. 103 000 000
4. Consolidated Resources of America
5. K D Hall & Brice Keller #2
6. Senecaville
7. Guernsey OH
8. 43.8 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80–26467
2. 34–059–22647–0014
3. 103 000 000
4. Consolidated Resources of America I
5. Walter & Mary Dziedzic #1
6. Senecaville
7. Guernsey OH
8. 73.0 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80–26468
2. 34–059–22649–0014
3. 103 000 000
4. Consolidated Resources of America I
5. Hall-Keller-Shira Unit #1
6. Senecaville
7. Guernsey OH
8. 43.8 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80–26469
2. 34–059–22651–0014
3. 103 000 000
4. Consolidated Resources of America I
5. George Lasko #1
6. Senecaville
7. Guernsey OH
8. 43.8 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80–26470
2. 34–059–22667–0014
3. 103 000 000
4. Consolidated Resources of America I
5. Irene & Charles Warehime #1
6. Senecaville
7. Guernsey OH
8. 43.8 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80–26471
2. 34–075–22242–0014
3. 103 000 000
4. Edco Drilling & Producing Inc
5. 1B Johnson Et Al
6.
7. Homes OH
8. 18.0 million cubic feet
9. April 11, 1980
10.

1. 80–26472
2. 34–099–20197–0014
3. 108 000 000
4. MB Operating Co Inc
5. Johnson Unit #1
6.
7. Mahoning OH
8. 5.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26473
2. 34–099–20218–0014
3. 108 000 000
4. MB Operating Co Inc
5. Martin #1
6.
7. Mahoning OH
8. 6.2 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26474
2. 34–099–20220–0014
3. 108 000 000
4. MB Operating Co nc
5. Hawkins #C–1
6.
7. Mahoning OH
8. 2.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26475
2. 34–099–20226–0014
3. 108 000 000
4. Wiser Oil Co
5. C Y Davis Comm #1
6.
7. Mahoning OH
8. 18.0 million cubic feet
9. April 11, 1980
10. The East Ohio Gas Company

1. 80–26476
2. 34–103–20423–0014
3. 108 000 000
4. Burtner-Morgan-Stephens Co
5. Cleveland Trust No 1
6.
7. Medina OH
8. 1.0 million cubic feet
9. April 11, 1980
10. The East Ohio Gas Co

1. 80–26477
2. 34–115–21280–0014
3. 108 000 000
4. The Oxford Oil Co
5. Gerald Clutter #1
6.
7. Morgan OH
8. 7.0 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26478
2. 34–115–21456–0014
3. 108 000 000
4. The Oxford Oil Co
5. Clarence Crooks #1
6.
7. Morgan OH
8. 12.0 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26479
2. 34–119–20685–0014
3. 108 000 000
4. The Oxford Oil Co
5. B A Dilley #1
6.
7. Muskingum OH
8. 2.0 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26480
2. 34–119–22067–0014
3. 108 000 000
4. Noble Gas Co
5. Lester Prouty
6.
7. Muskingum OH
8. 7.0 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80–26481
2. 34–119–22102–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Blackstone #1
6.
7. Muskingum OH
8. .6 million cubic feet
9. April 11, 1980
10.

1. 80–26482
2. 34–119–22119–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Caldwell #2
6.
7. Muskingum OH
8. 2.4 million cubic feet
9. April 11, 1980
10.

1. 80–26483
2. 34–119–22128–0014
3. 108 000 000
4. MB Operating Co Inc
5. Cunningham #1
6.
7. Muskingum OH
8. 3.1 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26484
2. 34–119–22163–0014
3. 108 000 000
4. MB Operating Co Inc
5. Cunningham #2
6.
7. Muskingum OH
8. 8.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26485
2. 34–119–22225–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Quinn #1
6.
7. Muskingum OH
8. 1.1 million cubic feet
9. April 11, 1980
10.

1. 80–26486

2. 34–119–22511–0014
3. 108 000 000
4. The Oxford Oil Co
5. Raymond Elson #2
6.
7. Muskingum OH
8. 1.5 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26487
2. 34–119–22556–0014
3. 108 000 000
4. Tiger Oil nc
5. Thomas Barr #1
6.
7. Muskingum OH
8. 12.0 million cubic feet
9. April 11, 1980
10.

1. 80–26488
2. 34–119–22564–0014
3. 108 000 000
4. Tiger Oil Inc
5. Fulton #1
6.
7. Muskingum OH
8. 1.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26489
2. 34–119–22723–0014
3. 108 000 000
4. The Oxford Oil Co
5. Dilley Heirs #2
6.
7. Muskingum OH
8. 2.5 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26490
2. 34–119–23374–0014
3. 108 000 000
4. The Oxford Oil Co
5. Leonard Bell #1
6.
7. Muskingum OH
8. 9.0 million cubic feet
9. April 11, 1980
10. Natural Gas & Oil Corp

1. 80–26491
2. 34–119–23544–0014
3. 108 000 000
4. The Oxford Oil Co
5. John Dickson #1
6.
7. Muskingum OH
8. 12.0 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26492
2. 34–119–23594–0014
3. 108 000 000
4. The Oxford Oil Co
5. Dilley Heirs #1
6.
7. Muskingum OH
8. 2.5 million cubic feet
9. April 11, 1980
10. National Gas & Oil Corp

1. 80–26493
2. 34–119–23929–0014
3. 108 000 000
4. The Oxford Oil Co
5. Larry Cover #1
6.
7. Muskingum OH
8. 9.0 million cubic feet
9. April 11, 1980
10. National Gas & Oil

1. 80–26494
2. 34–121–21373–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Lorey #1
6.
7. Noble OH
8. 2.0 million cubic feet
9. April 11, 1980
10.

1. 80–26495
2. 34–121–21387–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Lorey #2
6.
7. Noble OH
8. 2.3 million cubic feet
9. April 11, 1980
10.

1. 80–26496
2. 34–121–21434–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Pickenpaugh #1
6.
7. Noble OH
8. 7.3 million cubic feet
9. April 11, 1980
10.

1. 80–26497
2. 34–121–21502–0014
3. 108 000 000
4. Davis Frac Tanks & Supply
5. Franklin Real Estate #3
6.
7. Noble OH
8. 1.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26498
2. 34–133–20166–0014
3. 108 000 000
4. Okmar Oil Co
5. Smith Community No 1
6. Ravenna
7. Portage OH
8. 3.1 million cubic feet
9. April 11, 1980
10. The East Ohio Gas Co

1. 80–26499
2. 34–133–20202–0014
3. 108 000 000
4. Okmar Oil Co
5. R G Gless Community #1
6. Ravenna
7. Portage OH
8. 3.1 million cubic feet
9. April 11, 1980
10. The East Ohio Gas Company

1. 80–26500
2. 34–133–20269–0014
3. 108 000 000
4. MB Operating Co Inc
5. Mesaros #1
6.
7. Portage OH
8. 11.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26501
2. 34–133–20285–0014
3. 108 000 000
4. MB Operating Co Inc
5. Pimlott Comm #1
6.
7. Portage OH
8. 2.9 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26502
2. 34–133–20310–0014
3. 108 000 000
4. MB Operating Co Inc
5. Moff #1
6.
7. Portage OH
8. 2.9 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26503
2. 34–133–20307–0014
3. 108 000 000
4. MB Operating Co Inc
5. Ries #1
6.
7. Portage OH
8. 3.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26504
2. 34–133–20334–0014
3. 108 000 000
4. MB Operating Co Inc
5. Uhrig #1–A
6.
7. Portage OH
8. 2.2 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26505
2. 34–133–20346–0014
3. 108 000 000
4. MB Operating Co Inc
5. Miller #1
6.
7. Portage OH
8. 2.4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26506
2. 34–133–20347–0014
3. 108 000 000
4. MB Operating Co Inc
5. Ricks #1
6.
7. Portage OH
8. 3.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26507
2. 34–133–20354–0014
3. 108 000 000
4. MB Operating Co Inc
5. Dobrilovic #1
6.
7. Portage OH
8. .3 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26508
2. 34–133–20356–0014
3. 108 000 000
4. MB Operating Co Inc
5. Craig #1
6.

7. Portage OH
8. .3 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26509
2. 34–133–20357–0014
3. 108 000 000
4. MB Operating Co Inc
5. Kommel #1
6.
7. Portage OH
8. 3.8 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26510
2. 34–133–20370–0014
3. 108 000 000
4. MB Operating Co Inc
5. Jacobs-Harrington #1
6.
7. Portage OH
8. 1.1 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26511
2. 34–133–20379–0014
3. 108 000 000
4. MB Operating Co Inc
5. Sapp #2
6.
7. Portage OH
8. 1.1 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26512
2. 34–133–20390–0014
3. 108 000 000
4. MB Operating Co Inc
5. Black #1
6.
7. Portage OH
8. 1.9 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26513
2. 34–133–20409–0014
3. 108 000 000
4. MB Operating Co Inc
5. Dorflinger #1
6.
7. Portage OH
8. 7.3 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26514
2. 34–133–21132–0014
3. 108 000 000
4. Stark Oilfield Services Inc
5. Adams #1
6. Freedom TWP & Windham TWP
7. Portage OH
8. 8.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26515
2. 34–151–20367–0014
3. 108 000 000
4. MB Operating Co Inc
5. Canton Board of Education #1
6.
7. Stark OH
8. .8 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26516
2. 34–151–21118—14
3. 108 000 000
4. Zenith Exploration Co
5. Crawford #1
6.
7. Stark OH
8. 20.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26517
2. 34–151–21327–0014
3. 108 000 000
4. MB Operating Co Inc
5. Kuhn #1
6.
7. Stark OH
8. 2.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26518
2. 34–151–21335–0014
3. 108 000 000
4. MB Operating Co Inc
5. Duncan-Bowman #1
6.
7. Stark OH
8. 2.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26519
2. 34–151–21431–0014
3. 108 000 000
4. MB Operating Co Inc
5. East Canton High #1
6.
7. Stark OH
8. 3.1 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26520
2. 34–151–21519–0014
3. 108 000 000
4. MB Operating Co Inc
5. Mains #1
6.
7. Stark OH
8. 2.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26521
2. 34–151–21520–0014
3. 108 000 000
4. Arthur D Smith
5. Smith #1
6.
7. Stark OH
8. 4.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26522
2. 34–151–21574–0014
3. 108 000 000
4. MB Operating Co Inc
5. Leon Construction #1
6.
7. Stark OH
8. 2.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26523
2. 34–151–21738–0014
3. 108 000 000
4. MB Operating Co Inc
5. Sturrett #1
6.
7. Stark OH
8. 4.9 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26524
2. 34–151–21766–0014
3. 108 000 000
4. MB Operating Co Inc
5. Halter #1
6.
7. Stark OH
8. 2.4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26525
2. 34–151–21774–0014
3. 108 000 000
4. MB Operating Co Inc
5. Garaux #1A
6.
7. Stark OH
8. 2.3 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26526
2. 34–151–21806–0014
3. 108 000 000
4. MB Operating Co Inc
5. Baum #1
6.
7. Stark OH
8. 10.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26527
2. 34–151–21809–0014
3. 108 000 000
4. MB Operating Co Inc
5. Harbold #1
6.
7. Stark OH
8. 5.9 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26528
2. 34–151–21836–0014
3. 108 000 000
4. MB Operating Co Inc
5. Deremer Unit #1
6.
7. Stark OH
8. .4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26529
2. 34–151–21841–0014
3. 108 000 000
4. MB Operating Co Inc
5. Deremer #2
6.
7. Stark OH
8. .4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26530
2. 34–151–21843–0014
3. 108 000 000
4. MB Operating Co Inc
5. C Blend #1
6.
7. Stark OH
8. 1.1 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co
1. 80–26531

2. 34–151–21855–0014
3. 108 000 000
4. MB Operating Co Inc
5. Hall-McCollum Unit #1
6.
7. Stark OH
8. 2.4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26532
2. 34–151–21870–0014
3. 108 000 000
4. MB Operating Co Inc
5. Nauman #2
6.
7. Stark OH
8. .8 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26533
2. 34–151–21876–0014
3. 108 000 000
4. MB Operating Co Inc
5. Sponseller #2
6.
7. Stark OH
8. 2.4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26534
2. 34–151–21929–0014
3. 108 000 000
4. MB Operating Co Inc
5. Adelman #1
6.
7. Stark OH
8. 2.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26535
2. 34–151–21934–0014
3. 108 000 000
4. MB Operating Co Inc
5. Adelman #2
6.
7. Stark OH
8. 2.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26536
2. 34–151–21935–0014
3. 108 000 000
4. MB Operating Co Inc
5. Adelman-Hall-McCollum U #1
6.
7. Stark OH
8. 1.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26537
2. 34–151–21940–0014
3. 108 000 000
4. MB Operating Co Inc
5. Garaux #2A
6.
7. Stark OH
8. 2.3 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26538
2. 34–151–21946–0014
3. 108 000 000
4. MB Operating Co Inc
5. Miller-Heinbuch Unit #1
6.
7. Stark OH
8. 5.7 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26539
2. 34–151–21949–0014
3. 108 000 000
4. MB Operating Co Inc
5. B & M Sickafoose #1–A
6.
7. Stark OH
8. 2.3 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26540
2. 34–151–21975–0014
3. 108 000 000
4. MB Operating Co Inc
5. Bachtel Unit #1
6.
7. Stark OH
8. .8 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26541
2. 34–151–21976–0014
3. 108 000 000
4. MB Operating Co Inc
5. Adelman-Thouvenin #3
6.
7. Stark OH
8. 3.4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26542
2. 34–151–21985–0014
3. 108 000 000
4. MB Operating Co Inc
5. V Sheatzley Unit #1
6.
7. Stark OH
8. 7.3 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26543
2. 34–151–21988–0014
3. 108 000 000
4. MB Operating Co Inc
5. Hoobler Unit #1
6.
7. Stark OH
8. 1.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26544
2. 34–151–21990–0014
3. 108 000 000
4. MB Operating Co Inc
5. Kiko-Dittmar Unit #1
6.
7. Stark OH
8. 2.4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26545
2. 34–151–2207–0014
3. 108 000 000
4. MB Operating Co Inc
5. Thouvenin-Hall Unit #1
6.
7. Stark OH
8. 1.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26546
2. 34–151–22008–0014
3. 108 000 000
4. MB Operating Co Inc
5. Kiko-Dittmar #2
6.
7. Stark OH
8. 2.4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26547
2. 34–151–22017–0014
3. 108 000 000
4. MB Operating Co Inc
5. Thouvenin-Rodocker Unit #1
6.
7. Stark OH
8. 2.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26548
2. 34–151–22018–0014
3. 108 000 000
4. MB Operating Co Inc
5. Sickafoose-Morris Unit #1
6.
7. Stark OH
8. 2.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26549
2. 34–151–22019–0014
3. 108 000 000
4. MB Operating Co Inc
5. Thouvenin-Hall Unit #2
6.
7. Stark OH
8. 1.7 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26550
2. 34–151–22031–0014
3. 108 000 000
4. MB Operating Co Inc
5. Mortenson Unit #1
6.
7. Stark OH
8. 1.7 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26551
2. 34–151–22038–0014
3. 108 000 000
4. MB Operating Co Inc
5. Mayer Unit #1
6.
7. Stark OH
8. 2.4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26552
2. 34–151–22043–0014
3. 108 000 000
4. MB Operating Co Inc
5. Garner #1
6.
7. Stark OH
8. 18.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26553
2. 34–151–22046–0014
3. 108 000 000
4. MB Operating Co Inc
5. Edwards Unit #1
6.

7. Stark OH
8. 1.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26554
2. 34–151–22053–0014
3. 108 000 000
4. MB Operating Co Inc
5. Burrow-Rodocker Unit #1
6.
7. Stark OH
8. 7.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26555
2. 34–151–22057–0014
3. 108 000 000
4. MB Operating Co Inc
5. Brenner Unit #1
6.
7. Stark OH
8. 3.1 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26556
2. 34–151–22060–0014
3. 108 000 000
4. MB Operating Co Inc
5. W Hall Unit #1
6.
7. Stark OH
8. 7.3 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26557
2. 34–151–22069–0014
3. 108 000 000
4. MB Operating Co Inc
5. F Foit Unit #1
6.
7. Stark OH
8. 7.3 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26558
2. 34–151–22071–0014
3. 108 000 000
4. MB Operating Co Inc
5. E Gill Unit #1
6.
7. Stark OH
8. 4.5 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26559
2. 34–151–22075–0014
3. 108 000 000
4. MB Operating Co Inc
5. D & M Pattison Unit #1
6.
7. Stark OH
8. 3.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26560
2. 34–151–22077–0014
3. 108 000 000
4. MB Operating Co Inc
5. Spiker Unit #3
6.
7. Stark OH
8. 4.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26561
2. 34–151–22648–0014
3. 108 000 000
4. MB Operating Co Inc
5. P Lattavo #1
6.
7. Stark OH
8. 10.4 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80–26562
2. 34–151–22843–0014
3. 108 000 000
4. MB Operating Co Inc
5. C Blend #2
6.
7. Stark OH
8. 1.1 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26563
2. 34–153–20148–0014
3. 108 000 000
4. Wiser Oil Co
5. Wm Smith #1
6.
7. Summit OH
8. 19.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26564
2. 34–153–00167–0014
3. 108 000 000
4. Wiser Oil Co
5. H J Steiner #1
6.
7. Summit OH
8. 7.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26565
2. 34–153–20346–0014
3. 108 000 000
4. Wiser Oil Co
5. D L Derr #2
6.
7. Summit OH
8. 5.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26566
2. 34–153–20386–0014
3. 108 000 000
4. Wiser Oil Co
5. Roy Eckart #2
6.
7. Summit OH
8. 9.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26567
2. 34–153–20404–0014
3. 108 000 000
4. Wiser Oil Co
5. Wm Smith #2
6.
7. Summit OH
8. 5.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26568
2. 34–155–21291–0014
3. 102 000 000
4. Berea Oil and Gas Corp
5. Bielobockie #2
6.
7. Trumbull OH
8. 15.0 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80–26569
2. 34–157–20040–0014
3. 108 000 000
4. Wiser Oil co
5. C & M Swank #1
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26570
2. 34–157–20492–0014
3. 108 000 000
4. William N Tipka
5. Smith C #1
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26571
2. 34–157–20919–0014
3. 108 000 000
4. MB Operating Co Inc
5. J Levengood #1
6.
7. Tuscarawas OH
8. 1.6 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26572
2. 34–157–20920–0014
3. 108 000 000
4. MB Operating Co Inc
5. D Levengood #1
6.
7. Tuscarawas OH
8. 2.2 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26573
2. 34–157–20935–0014
3. 108 000 000
4. MB Operating Co Inc
5. Gribi #1
6.
7. Tuscarawas OH
8. 2.7 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26574
2. 34–157–20936–0014
3. 108 000 000
4. MB Operating Co Inc
5. W Stotzer #1
6.
7. Tuscarawas OH
8. 1.7 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26575
2. 34–157–20943–0014
3. 108 000 000
4. MB Operating Co Inc
5. Hale #1
6.
7. Tuscarawas OH
8. .8 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26576

2. 34–157–20948–0014
3. 108 000 000
4. MB Operating Co Inc
5. Hale #3
6.
7. Tuscarawas OH
8. .7 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26577
2. 34–157–20950–0014
3. 108 000 000
4. MB Operating Co Inc
5. Herron Estate #1
6.
7. Tuscarawas OH
8. 3.4 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26578
2. 34–157–20985–0014
3. 108 000 000
4. MB Operating Co Inc
5. Duren #1
6.
7. Tuscarawas OH
8. 2.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80–26579
2. 34–157–21051–0014
3. 108 000 000
4. MB Operating Co Inc
5. Nixon #1
6.
7. Tuscarawas OH
8. .8 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80–26580
2. 34–157–21050–0014
3. 108 000 000
4. MB Operating Co Inc
5. Nixon #2
6.
7. Tuscarawas OH
8. .8 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80–26581
2. 34–157–21059–0014
3. 108 000 000
4. MB Operating Co Inc
5. Duren #3
6.
7. Tuscarawas OH
8. 2.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80–26582
2. 34–157–21096–0014
3. 108 000 000
4. MB Operating Co Inc
5. Wm Sattler #1
6.
7. Tuscarawas OH
8. 5.3 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80–26583
2. 34–157–21103–0014
3. 108 000 000
4. H D Collins Trust
5. Roth #1
6.
7. Tuscarawas OH
8. 4.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26584
2. 34–157–21127–0014
3. 108 000 000
4. MB Operating Co Inc
5. Markley #4
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80–26585
2. 34–157–21132–0014
3. 108 000 000
4. H D Collins Trust
5. Kinsey #1
6.
7. Tuscarawas OH
8. 2.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26586
2. 34–157–21164–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Buck #1
6.
7. Tuscarawas OH
8. 3.2 million cubic feet
9. April 11, 1980
10.

1. 80–26587
2. 34–157–21182–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. R Dietrick #1
6.
7. Tuscarawas OH
8. 2.9 million cubic feet
9. April 11, 1980
10.

1. 80–26588
2. 34–157–21187–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Poland-Lorenz #1
6.
7. Tuscarawas OH
8. 3.1 million cubic feet
9. April 11, 1980
10.

1. 80–26589
2. 34–157–21195–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. L A Mizer #1
6.
7. Tuscarawas OH
8. 1.2 million cubic feet
9. April 11, 1980
10.

1. 80–26590
2. 34–157–21196–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Wallace-Green #1
6.
7. Tuscarawas OH
8. 3.1 million cubic feet
9. April 11, 1980
10.

1. 80–26591
2. 34–167–24615–0014
3. 103 000 000
4. Lauderman Oil & Gas Drilling
5. Kenneth Ward #1–A
6. Newport
7. Washington OH
8. 1.8 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80–26592
2. 34–169–21088–0014
3. 108 000 000
4. Dalton and Hanna Co
5. Lester Beyeler #1
6.
7. Wayne OH
8. 1.0 million cubic feet
9. April 11, 1980
10. Columbia Gas Transmission Corp

1. 80–26593
2. 34–157–21197–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. B&E Wallace #1
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10.

1. 80–26594
2. 34–157–21214–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Artr #2
6.
7. Tuscarawas OH
8. 2.0 million cubic feet
9. April 11, 1980
10.

1. 80–26595
2. 34–157–21215–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Arth #3
6.
7. Tuscarawas OH
8. 1.4 million cubic feet
9. April 11, 1980
10.

1. 80–26596
2. 34–157–21216–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Arth #1
6.
7. Tuscarawas OH
8. 9.0 million cubic feet
9. April 11, 1980
10.

1. 80–26597/121700
2. 34–157–21187–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Deibel Gintz #1
6.
7. Tuscarawas OH
8. .5 million cubic feet
9. April 11, 1980
10.

1. 80–26598
2. 34–157–21218–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Kandell-Sherretts #1
6.

7. Tuscarawas OH
8. 3.1 million cubic feet
9. April 11, 1980
10.

1. 80–26599
2. 34–157–21230–0014
3. 108 000 000
4. H D Collins Trustee
5. M Wright #1
6.
7. Tuscarawas OH
8. 8.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26600
2. 34–157–21232–0014
3. 108 000 000
4. H D Collins Trustee
5. Shipton #1
6.
7. Tuscarawas OH
8. 16.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26601
2. 34–157–21243–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Wherley-Haines #1
6.
7. Tuscarawas OH
8. 8.0 million cubic feet
9. April 11, 1980
10.

1. 80–26602
2. 34–157–21244–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Wherley-Gross #1
6.
7. Tuscarawas OH
8. 3.5 million cubic feet
9. April 11, 1980
10.

1. 80–26603
2. 34–157–21245–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. J S Wherley #1
6.
7. Tuscarawas OH
8. 1.3 million cubic feet
9. April 11, 1980
10.

1. 80–26604
2. 34–157–21246–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Ever Hart #1
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. April 11, 1980
10.

1. 80–26605
2. 34–157–21247–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Geiogue-Vanica #1
6.
7. Tuscarawas OH
8. 1.5 million cubic feet
9. April 11, 1980
10.

1. 80–26606
2. 34–157–21248–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Johns #1
6.
7. Tuscarawas OH
8. .9 million cubic feet
9. April 11, 1980
10.

1. 80–26607
2. 34–157–21249–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. R Dietrick #2
6.
7. Tuscarawas OH
8. 2.5 million cubic feet
9. April 11, 1980
10.

1. 80–26608
2. 34–157–21250–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Johns #2
6.
7. Tuscarawas OH
8. 3.2 million cubic feet
9. April 11, 1980
10.

1. 80–26609
2. 34–157–21251–0014
3. 108 000 000
4. H D Collins Trustee
5. True #1
6.
7. Tuscarawas OH
8. 15.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26610
2. 34–157–21255–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Hinds #1
6.
7. Tuscarawas, OH
8. 2.3 million cubic feet
9. April 11, 1980
10.

1. 80–26611
2. 34–157–21256–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Lahmers #1
6.
7. Tuscarawas, OH
8. 1.5 million cubic feet
9. April 11, 1980
10.

1. 80–26612
2. 34–157–21257–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Landis #1
6.
7. Tuscarawas, OH
8. 2.9 million cubic feet
9. April 11, 1980
10.

1. 80–26613
2. 34–157–21258–0014
3. 108 000 000
4. Enney Oilfield Rental Co
5. Atkinson #1
6.
7. Tuscarawas, OH
8. 1.3 million cubic feet
9. April 11, 1980
10.

1. 80–26614
2. 34–157–21383–0014
3. 108 000 000
4. H D Collins
5. Heddleston #1
6.
7. Tuscarawas, OH
8. 5.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26615
2. 34–157–21396–0014
3. 108 000 000
4. H D Collins
5. Peter #1
6.
7. Tuscarawas, OH
8. 6.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26616
2. 34–157–21397–0014
3. 108 000 000
4. H D Collins Trust
5. Randall #1
6.
7. Tuscarawas, OH
8. 3.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26617
2. 34–157–21408–0014
3. 108 000 000
4. Wiser Oil Co
5. Pancher-Space Unit #1
6.
7. Tuscarawas, OH
8. 16.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26618
2. 34–157–21442–0014
3. 108 000 000
4. Wiser Oil Co
5. Frank Bender Etal Unit #1
6.
7. Tuscarawas, OH
8. 18.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26619
2. 34–157–21463–0014
3. 108 000 000
4. H D Collins Trust
5. T J Anderson #1
6.
7. Tuscarawas, OH
8. 9.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26620
2. 34–157–21469–0014
3. 108 000 000
4. Phoenix National Petroleum Co
5. Guspyt-Huebner A Unit #1
6.
7. Tuscarawas, OH
8. 20.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26621

2. 34–157–21471–0014
3. 108 000 000
4. H D Collins Trust
5. Kendall #1
6.
7. Tuscarawas, OH
8. 5.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26622
2. 34–157–21506–0014
3. 108 000 000
4. H D Collins Trust
5. Henry #1
6.
7. Tuscarawas, OH
8. 4.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26623
2. 34–157–21510–0014
3. 108 000 000
4. H D Collins Trust
5. Rainsberger #1
6.
7. Tuscarawas, OH
8. 11.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26624
2. 34–157–21517–0014
3. 108 000 000
4. H D Collins Trust
5. Besozzi #1
6.
7. Tuscarawas, OH
8. 8.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26625
2. 34–157–21617–0014
3. 108 000 000
4. H D Collins Trust
5. Duso #1
6.
7. Tuscarawas, OH
8. 5.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26626
2. 34–157–21619–0014
3. 108 000 000
4. H D Collins Trust
5. Malterer #1
6.
7. Tuscarawas, OH
8. 14.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26627
2. 34–157–21699–0014
3. 108 000 000
4. H D Collins Trust
5. Wright-Insley #1
6.
7. Tuscarawas, OH
8. 15.0 million cubic feet
9. April 11, 1980
10. East Ohio Gas Co

1. 80–26628
2. 34–157–22268–0014
3. 108 000 000
4. MB Operating Co Inc
5. Markley Estate #7
6.
7. Tuscarawas, OH
8. 15.7 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80–26629
2. 34–157–22414–0014
3. 108 000 000
4. MB Operating Co Inc
5. E Waltz #2
6.
7. Tuscarawas, OH
8. 12.4 million cubic feet
9. April 11, 1980
10. Buckeye-Franklin Co

1. 80–26630
2. 34–167–23847–0014
3. 103 000 000
4. Lauderman Oil & Gas Drilling
5. American Growers #2
6. Flamming
7. Washington, OH
8. 1.4 million cubic feet
9. April 11, 1980
10. River Gas Co

1. 80–26631
2. 34–167–24498–0014
3. 103 000 000
4. L&M Petroleum Co
5. Bernard Strahler #10
6.
7. Washington, OH
8. 12.8 million cubic feet
9. April 11, 1980
10. Gas Transport Inc

1. 80–26632
2. 34–167–24614–0014
3. 103 000 000
4. Lauderman Oil & Gas Drilling
5. Kenneth Ward #2–A
6. Newport
7. Washington, OH
8. 1.3 million cubic feet
9. April 11, 1980
10. Columbia Gas Transport Corp

Utah Division of Oil, Gas, and Mining

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well Name
6. Field or OCS area name
7. County, State of block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–26633/K–104–3
2. 43–019–15106–0000
3. 108 000 000
4. Frank B Adams
5. Frank B Adams No 1 Cabeen-State
6. Cisco Dome
7. Grand, UT
8. 4.0 million cubic feet
9. April 11, 1980
10. Northwest Pipeline Corp

1. 80–26634/K–120–1(B)
2. 43–047–30260–0000
3. 102 000 000
4. Mapco Production Co
5. RBU 11–16E
6. Island Field
7. Uinta, UT
8. 130.0 million cubic feet
9. April 11, 1980
10. Pacific Gas & Electric Co

1. 80–26635/K–121–1(A)
2. 43–043–30110–0000
3. 102 000 000
4. Amoco Production Co
5. Island Ranching #2
6. Anschutz Ranch
7. Summit, UT
8. 2700.0 million cubic feet
9. April 11, 1980
10. Mountain Fuel Supply Co

1. 80–26636/K–121–1(B)
2. 43–043–30096–0000
3. 102 000 000
4. Amoco Production Co
5. Bountiful Livestock #1
6. Unnamed
7. Summit, UT
8. 300.0 million cubic feet
9. April 11, 1980
10. Mountain Fuel Supply Co

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. Countty, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–26643
2. 47–039–03434–0000
3. 108 000 000
4. Cabot Corp
5. Cannelton Coal 2–1468
6.
7. Kanawha WV
8. 13.1 million cubic feet
9. April 14, 1980
10.

1. 80–26644
2. 47–039–03440–0000
3. 108 000 000
4. Cabot Corp
5. Cannelton Coal 3–1469
6.
7. Kanawha WV
8. 18.5 million cubic feet
9. April 14, 1980
10.

1. 80–26645
2. 47–039–02026–0000
3. 108 000 000
4. Cabot Corp
5. Raymond City 6–1556
6.
7. Kanawha WV
8. 14.1 million cubic feet
9. April 14, 1980
10.

1. 80–26646
2. 47–047–00035–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas-Ford 7–1268
6.
7. McDowell WV
8. 3.4 million cubic feet
9. April 14, 1980
10.

1. 80–26647
2. 47–013–01243–0000
3. 108 000 000

4. Cabot Corp
5. Allen Hardman 14–1421
6.
7. Calhoun WV
8. 6.5 million cubic feet
9. April 14, 1980
10.

1. 80–26648
2. 47–019–00080–0000
3. 108 000 000
4. Cabot Corp
5. A L Jackson 1–1374
6.
7. Fayette WV
8. .5 million cubic feet
9. April 14, 1980
10.

1. 80–26649
2. 47–019–00087–0000
3. 108 000 000
4. Cabot Corp
5. Newman 4–1407
6.
7. Fayette WV
8. 19.1 million cubic feet
9. April 14, 1980
10.

1. 80–26650
2. 47–019–00107–0000
3. 108 000 000
4. Cabot Corp
5. E G & F 2–1502
6.
7. Fayette WV
8. 5.7 million cubic feet
9. April 14, 1980
10.

1. 80–26651
2. 47–019–00109—0000
3. 108 000 000
4. Cabot Corp
5. Angus McDonald 1–1505
6.
7. Fayette WV
8. 16.5 million cubic feet
9. April 14, 1980
10.

1. 80–26652
2. 47–019–00165–0000
3. 108 000 000
4. Cabot Corp
5. A McDonald 3–1579
6.
7. Fayette WV
8. 17.6 million cubic feet
9. April 14, 1980
10.

1. 80–26653
2. 47–019–00172–0000
3. 108 000 000
4. Cabot Corp
5. E F & G 3–1596
6.
7. Fayette WV
8. 7.3 million cubic feet
9. April 14, 1980
10.

1. 80–26654
2. 47–035–00524–0000
3. 108 000 000
4. Cabot Corp
5. Putnam Co 41–1211
6. Sissonville Oriskany
7. Jackson WV
8. 4.0 million cubic feet
9. April 14, 1980
10.

1. 80–26655
2. 47–035–00547–0000
3. 108 000 000
4. Cabot Corp
5. T D Casto 1–1234
6. Sissonville Oriskany
7. Jackson WV
8. 2.2 million cubic feet
9. April 14, 1980
10.

1. 80–26656
2. 47–035–00548–0000
3. 108 000 000
4. Cabot Corp
5. Lucy Boswell 1–1235
6. Sissonville Oriskany
7. Jackson WV
8. 4.7 million cubic feet
9. April 14, 1980
10.

1. 80–26657
2. 47–079–00408–0000
3. 108 000 000
4. Cabot Corp
5. Whitehouse 2–1303
6.
7. Putnam WV
8. .8 million cubic feet
9. April 14, 1980
10. Devon Corp

1. 80–26658
2. 47–079–00300–0000
3. 108 000 000
4. Cabot Corp
5. Sum Quarrier 1–1162
6.
7. Putnam WV
8. .8 million cubic feet
9. April 14, 1980
10. Union Oil & Gas Inc

1. 80–26659
2. 47–067–00041–0000
3. 108 000 000
4. Cabot Corp
5. Federal Coal Co 4–1167
6.
7. Nicholas WV
8. 15.0 million cubic feet
9. April 14, 1980
10.

1. 80–26660
2. 47–067–00042–0000
3. 108 000 000
4. Cabot Corp
5. Backus 1–1176
6.
7. Nicholas WV
8. 6.7 million cubic feet
9. April 14, 1980
10.

1. 80–26661
2. 47–067–00050–0000
3. 108 000 000
4. Cabot Corp
5. Federal Coal Co 6–1183
6.
7. Nicholas WV
8. 19.6 million cubic feet
9. April 14, 1980
10.

1. 80–26662
2. 47–067–00155–0000
3. 108 000 000
4. Cabot Corp
5. Amick 1–1425
6.
7. Nicholas WV
8. 3.5 million cubic feet
9. April 14, 1980
10.

1. 80–26663
2. 47–079–00304–0000
3. 108 000 000
4. Cabot Corp
5. Sum Quarrier 1–1174
6.
7. Putnam WV
8. 3.4 million cubic feet
9. April 14, 1980
10. Union Oil & Gas Inc

1. 80–26664
2. 47–079–00334–0000
3. 108 000 000
4. Cabot Corp
5. Poca Coal Land 13–1207
6.
7. Putnam WV
8. 9.3 million cubic feet
9. April 14, 1980
10.

1. 80–26665
2. 47–079–00347–0000
3. 108 000 000
4. Cabot Corp
5. Poca Coal Land 14–1213
6. Sissonville Oriskany
7. Putnam WV
8. 5.6 million cubic feet
9. April 14, 1980
10.

1. 80–26666
2. 47–079–00348–0000
3. 108 000 000
4. Cabot Corp
5. J L McLean 30–1214
6. Sissonville Oriskany
7. Putnam WV
8. 7.9 million cubic feet
9. April 14, 1980
10.

1. 80–26667
2. 47–079–00362–0000
3. 108 000 000
4. Cabot Corp
5. Poca Coal Land 15–1232
6. Sissonville Oriskany
7. Putnam WV
8. 7.8 million cubic feet
9. April 14, 1980
10.

1. 80–26668
2. 47–079–00363–0000
3. 108 000 000
4. Cabot Corp
5. J L McLean 33–1233
6. Sissonville Oriskany
7. Putnam WV
8. 7.1 million cubic feet
9. April 14, 1980
10.

1. 80–26669
2. 47–079–00377–0000
3. 108 000 000
4. Cabot Corp
5. J L McLean 36–1255
6.
7. Putnam WV

8. 2.6 million cubic feet
9. April 14, 1980
10.

1. 80–26670
2. 47–079–00380–0000
3. 108 000 000
4. Cabot Corp
5. J L McLean 37–1259
6. Sissonville Oriskany
7. Putnam WV
8. 9.3 million cubic feet
9. April 14, 1980
10.

1. 80–26671
2. 47–079–00454–0000
3. 108 000 000
4. Cabot Corp
5. F Hardy 4–1515
6. Sissonville Oriskany
7. Jackson WV
8. 5.2 million cubic feet
9. April 14, 1980
10.

1. 80–26672
2. 47–079–00465–0000
3. 108 000 000
4. Cabot Corp
5. Whitehouse 3–1348
6.
7. Putnam WV
8. 5.8 million cubic feet
9. April 14, 1980
10. Devon Corporation

1. 80–26673
2. 47–079–00469–0000
3. 108 000 000
4. Cabot Corp
5. F Hardy 4–1516
6. Sissonville Oriskany
7. Putnam WV
8. 3.4 million cubic feet
9. April 14, 1980
10.

1. 80–26674
2. 47–079–00507–0000
3. 108 000 000
4. Cabot Corp
5. J L McLean 47–1381
6.
7. Putnam WV
8. 6.5 million cubic feet
9. April 14, 1980
10. Union Oil & Gas Inc

1. 80–26675
2. 47–079–00508–0000
3. 108 000 000
4. Cabot Corp
5. J L McLean 48–1382
6.
7. Putnam WV
8. 7.8 million cubic feet
9. April 14, 1980
10. Union Oil & Gas Inc

1. 80–26676
2. 47–079–00531–0000
3. 108 000 000
4. Cabot Corp
5. Amherst 7–1394
6. Sissonville Oriskany
7. Putnam WV
8. 5.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26677
2. 47–079–00532–0000
3. 108 000 000
4. Cabot Corp
5. Black Betsey 4–1396
6.
7. Putnam WV
8. 7.6 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26678
2. 47–079–00533–0000
3. 108 000 000
4. Cabot Corp
5. Black Betsey 5–1397
6. Sissonville Oriskany
7. Putnam WV
8. .9 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26679
2. 47–079–00538–0000
3. 108 000 000
4. Cabot Corp
5. Putnam Co 46–1401
6.
7. Putnam WV
8. 7.8 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26680
2. 47–079–00541–0000
3. 108 000 000
4. Cabot Corp
5. Black Betsey 6–1402
6.
7. Putnam WV
8. 5.2 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26681
2. 47–079–00544–0000
3. 108 000 000
4. Cabot Corp
5. Black Betsey 7–1404
6. Sissonville Oriskany
7. Putnam WV
8. 4.3 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26682
2. 47–079–00545–0000
3. 108 000 000
4. Cabot Corp
5. J J Sigman 1–1405
6. Sissonville Oriskany
7. Putnam WV
8. 14.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26683
2. 47–079–00562–0000
3. 108 000 000
4. Cabot Corp
5. Raymond City 3–1420
6. Sissonville Oriskany
7. Putnam WV
8. 10.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26684
2. 47–079–00570–0000
3. 108 000 000
4. Cabot Corp
5. A Coney 1–1428
6. Sissonville Oriskany
7. Putnam WV
8. 19.1 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26685
2. 47–079–00577–0000
3. 108 000 000
4. Cabot Corp
5. R T Trout 1–1436
6. Sissonville Oriskany
7. Putnam WV
8. 14.3 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26686
2. 47–021–02303–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Harry Whisman #2
6.
7. Gilmer WV
8. 16.0 million cubic feet
9. April 14, 1980
10. Columbia Gas Transmission Corp

1. 80–26687
2. 47–001–00126–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Lodge-King Knob—K G Lodge #1
6.
7. Barbour WV
8. 6.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80–26688
2. 47–001–00146–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Lodge-King Knob—K G Lodge #2
6.
7. Barbour WV
8. 6.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80–26689
2. 47–001–00154–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Lodge-King Knob—Martha Post #2
6.
7. Barbour WV
8. 6.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80–26690
2. 47–013–02399–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Charles S Despard Jr A #1
6.
7. Calhoun WV
8. 15.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80–26691
2. 47–013–02449–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Charles S Despard Jr A #2
6.
7. Calhoun WV
8. 15.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80–26692

2. 47-021-01620-0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Drexell Frame #1
6.
7. Gilmer WV
8. 2.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80-26693
2. 47-021-01838-0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Drexell Frame #2
6.
7. Gilmer WV
8. 2.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80-26694
2. 47-021-02159-0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Thomas R Hendrick A #1
6.
7. Gilmer WV
8. 3.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80-26695
2. 47-021-02169-0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Drexell Frame #3
6.
7. Gilmer WV
8. 2.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80-26696
2. 47-021-02174-0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Thomas R Hendrick A #2
6.
7. Gilmer WV
8. 3.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80-26697
2. 47-021-02800-0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Geneva Stout #1
6.
7. Gilmer WV
8. 11.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80-26698
2. 47-021-03025-0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Geneva Stout #2
6.
7. Gilmer WV
8. 11.0 million cubic feet
9. April 14, 1980
10. Consolidated Gas Supply Corp

1. 80-26699
2. 47-067-00040-0000
3. 108 000 000
4. Cabot Corp
5. Federal Coal Co 3-1166
6.
7. Nicholas WV
8. 20.9 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26700
2. 47-067-00029-0000
3. 108 000 000
4. Cabot Corp
5. Allie Jarrett 1-1160
6.
7. Nicholas WV
8. 8.0 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26701
2. 47-047-00327-0000
3. 108 000 000
4. Cabot Corp
5. Tug Fork 2-1575
6.
7. McDowell WV
8. 18.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26702
2. 47-047-00306-0000
3. 108 000 000
4. Cabot Corp
5. S R Vance 1-1566
6.
7. McDowell WV
8. 3.2 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26703
2. 47-047-00243-0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 92-1541
6.
7. McDowell WV
8. 5.2 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26704
2. 47-047-00235-0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 90-1528
6.
7. McDowell WV
8. 6.1 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26705
2. 47-047-00232-0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 91-1532
6.
7. McDowell WV
8. 12.8 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26706
2. 47-047-00224-0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 89-1527
6.
7. McDowell WV
8. 16.3 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26707
2. 47-047-00218-0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 88-1525
6.
7. McDowell WV
8. 13.2 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26708
2. 47-047-00202-0000
3. 108 000 000
4. Cabot Corp
5. Litz Harman 1-1511
6.
7. McDowell WV
8. 21.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26709
2. 47-047-00199-0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 86-1510
6.
7. McDowell WV
8. 4.9 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26710
2. 47-047-00188-0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 85-1491
6.
7. McDowell WV
8. 12.1 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26711
2. 47-047-00187-0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 42-1331
6.
7. McDowell WV
8. 8.0 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26712
2. 47-109-00430-0000
3. 108 000 000
4. Cabot Corp
5. Big Huff Coal 7-1432
6.
7. Wyoming WV
8. 13.1 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26713
2. 47-109-00453-0000
3. 108 000 000
4. Cabot Corp
5. Big Huff Coal 8-1444
6.
7. Wyoming WV
8. 1.5 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26714
2. 47-109-00454-0000
3. 108 000 000
4. Cabot Corp
5. Big Huff Coal 9-1446
6.

7. Wyoming WV
8. 1.9 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26715
2. 47–109–00485–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 21–1464
6.
7. Wyoming WV
8. 9.8 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26716
2. 47–109–00504–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 22–1480
6.
7. Wyoming WV
8. 2.2 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26717
2. 47–109–00518–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 24–1486
6.
7. Wyoming WV
8. 3.0 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26718
2. 47–109–00522–0000
3. 108 000 000
4. Cabot Corp
5. C C Sharp 8–1488
6.
7. Wyoming WV
8. 9.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26719
2. 47–109–00546–0000
3. 108 000 000
4. Cabot Corp
5. Big Huff Coal 10–1501
6.
7. Wyoming WV
8. 20.7 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26720
2. 47–109–00652–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 26–1551
6.
7. Wyoming WV
8. 17.0 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26721
2. 47–109–00654–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 27–1552
6.
7. Wyoming WV
8. 15.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26722
2. 47–109–00666–0000
3. 108 000 000
4. Cabot Corp
5. Jennings 1–1559
6.
7. Wyoming WV
8. 17.8 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26723
2. 47–109–00670–0000
3. 108 000 000
4. Cabot Corp
5. Red Ash Pocah 1–1564
6.
7. Wyoming WV
8. 18.3 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26724
2. 47–109–00671–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 29–1563
6.
7. Wyoming WV
8. 17.87 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26725
2. 47–109–00674–0000
3. 108 000 000
4. Cabot Corp
5. Worrell & Worrell 1–1565
6.
7. Wyoming WV
8. 10. 8 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26726
2. 47–109–00425–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 20–1431
6.
7. Wyoming WV
8. 3.8 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26727
2. 47–109–00395–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 15–1411
6.
7. Wyoming WV
8. 4.0 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26728
2. 47–109–00401–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 17–1417
6.
7. Wyoming WV
8. 13.5 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26729
2. 47–109–00248–0000
3. 108 000 000
4. Cabot Corp
5. Big Huff Coal 5–1273
6.
7. Wyoming WV
8. 1.2 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26730
2. 47–109–00274–0000
3. 108 000 000
4. Cabot Corp
5. Big Huff Coal 6–1284
6.
7. Wyoming WV
8. 3.6 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26731
2. 47–109–00276–0000
3. 108 000 000
4. Cabot Corp
5. Murphy 4–1285
6.
7. Wyoming WV
8. 15.6 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26732
2. 47–109–00384–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 13–1403
6.
7. Wyoming WV
8. 16.3 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26733
2. 47–109–00208–0000
3. 108 000 000
4. Cabot Corp
5. J K Brown 1–1251
6.
7. Wyoming WV
8. 3.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26734
2. 47–109–00230–0000
3. 108 000 000
4. Cabot Corp
5. W H Walker 1–1263
6.
7. Wyoming WV
8. 4.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26735
2. 47–109–00238–0000
3. 108 000 000
4. Cabot Corp
5. Big Huff 3–1267
6.
7. Wyoming WV
8. 5.2 million cubic feet
9. April 14, 1980
10. Oceana Gas Co

1. 80–26736
2. 47–109–00131–0000
3. 108 000 000
4. Cabot Corp
5. S M Burgess 2–1205
6.
7. Wyoming WV
8. 5.3 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80–26737

2. 47-109-00150-0000
3. 108 000 000
4. Cabot Corp
5. David Short 2-1170
6.
7. Wyoming WV
8. 4.8 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26738
2. 47-109-00158-0000
3. 108 000 000
4. Cabot Corp
5. Lusk-Short 1-1224
6.
7. Wyoming WV
8. 7.6 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26739
2. 47-109-00166-0000
3. 108 000 000
4. Cabot Corp
5. Big Huff Coal 2-1216
6.
7. Wyoming WV
8. 13.9 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26740
2. 47-035-01037-0000
3. 108 000 000
4. Cabot Corp
5. G W Parsons 2-1534
6. Sissonville Oriskany
7. Jackson WV
8. 5.0 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26741
2. 47-035-00566-0000
3. 108 000 000
4. Cabot Corp
5. D Casto 1-1254
6. Sissonville Oriskany
7. Jackson WV
8. 5.0 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26742
2. 47-035-00990-0000
3. 108 000 000
4. Cabot Corp
5. H F Brotherton 1-1494
6. Sissonville Oriskany
7. Jackson WV
8. 4.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26743
2. 47-035-00993-0000
3. 108 000 000
4. Cabot Corp
5. C E Brotherton 1-1498
6. Sissonville Oriskany
7. Jackson WV
8. 3.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26744
2. 47-035-01003-0000
3. 108 000 000
4. Cabot Corp
5. G W Carney 2-1500
6. Sissonville Oriskany
7. Jackson WV
8. 1.0 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26745
2. 47-035-01006-0000
3. 108 000 000
4. Cabot Corp
5. G W Vance 1-01507
6. Sissonville Oriskany
7. Jackson WV
8. 6.1 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26746
2. 47-035-01007-0000
3. 108 000 000
4. Cabot Corp
5. J T Moore 1-1508
6. Sissonville Oriskany
7. Jackson WV
8. 4.9 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26747
2. 47-035-01012-0000
3. 108 000 000
4. Cabot Corp
5. Raymond Kay 1-1512
6. Sissonville Oriskany
7. Jackson WV
8. 1.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26748
2. 47-035-01022-0000
3. 108 000 000
4. Cabot Corp
5. Ray Smith 1-1524
6. Sissonville Oriskany
7. Jackson WV
8. 19.7 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26749
2. 47-035-01030-0000
3. 108 000 000
4. Cabot Corp
5. G W Parsons 1-1531
6. Sissonville Oriskany
7. Jackson WV
8. 4.6 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26750
2. 47-039-01249-0000
3. 108 000 000
4. Cabot Corp
5. Cannelton Coal 15-1471
6.
7. Kanawha WV
8. 3.3 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26751
2. 47-039-01800-0000
3. 108 000 000
4. Cabot Corp
5. Huntington 53-1529
6.
7. Kanawha WV
8. 9.7 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26752
2. 47-039-01998-0000
3. 108 000 000
4. Cabot Corp
5. N B Tompkins 8-1546
6.
7. Kanawha WV
8. 4.3 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26753
2. 47-039-02019-0000
3. 108 000 000
4. Cabot Corp
5. N B Tompkins 9-1554
6.
7. Kanawha WV
8. 9.9 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26754
2. 47-039-02916-0000
3. 108 000 000
4. Cabot Corp
5. Cannelton Coal 1-1467
6.
7. Kanawha WV
8. 4.8 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26755
2. 47-047-00029-0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR
6.
7. McDowell WV
8. 4.4 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26756
2. 47-047-00032-0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas-Ford 6-1261
6.
7. McDowell WV
8. 4.9 million cubic feet
9. April 14, 1980
10. Cabot Corp

1. 80-26757
2. 47-017-01728-0000
3. 108 000 000
4. Ramco Oil & Gas Corp
5. H A Clines #3
6. Big Injun
7. Doddridge WV
8. 12.0 million cubic feet
9. April 1, 1980
10. Columbia Gas Transmission Corp

1. 80-26778
2. 47-021-02613-0000
3. 108 000 000
4. Fossil Petroleum Corp
5. Frame No 1 Fossil No 4301
6. Glenville South
7. Gilmer WV
8. 2.3 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80-26779
2. 47-021-02611-0000
3. 108 000 000
4. Fossil Petroleum Corp
5. Lorentz No 2 Fossil No 4202
6. Glenville South

7. Gilmer WV
8. 3.0 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26780
2. 47–021–02610–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. Lorentz No 1 Fossil No 4201
6. Glenville South
7. Gilmer WV
8. .7 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26781
2. 47–021–02602–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. J W Wright No 2 Fossil No 4402
6. Glenville South
7. Gilmer WV
8. 3.5 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26782
2. 47–021–02589–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. Lazar No 1 Fossil No 4001
6. Glenville South
7. Gilmer WV
8. 5.9 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26783
2. 47–021–02585–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. E Stoneking No 3 Fossil No 3803
6. Glenville South
7. Gilmer WV
8. .2 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26784
2. 47–021–02584–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. E Stoneking No 2 Fossil No 3802
6. Glenville South
7. Gilmer WV
8. 12.0 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26785
2. 47–021–02583–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. E Stoneking No 1 Fossil No 3801
6. Glenville South
7. Gilmer WV
8. .0 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26786
2. 47–021–02581–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. Lola McGinnis No 2 Fossil No 3602
6. Glenville South
7. Gilmer WV
8. 1.8 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26787
2. 47–021–02580–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. Lola McGinnis No 1 Fossil No 3601
6. Glenville South
7. Gilmer WV
8. 6.5 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26788
2. 47–021–02576–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. I P Martin No 1–B Fossil No 3201
6. Sand Fork
7. Gilmer WV
8. 8.1 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26789
2. 47–021–02575–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. I P Martin No 2 Fossil No 3002
6. Glenville South
7. Gilmer WV
8. 3.5 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26790
2. 47–021–02573–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. I P Martin No 1–A Fossil No 3101
6. Sand Fork
7. Gilmer WV
8. 13.1 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26791
2. 47–021–02569–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. Townsend No 2 Fossil No 2702
6. Sand Fork
7. Gilmer WV
8. 1.8 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26792
2. 47–021–02567–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. Sheets No 2 Fossil No 2102
6. Sand Fork
7. Gilmer WV
8. .9 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26793
2. 47–021–02558–0000
3. 108 000 000
4. Fossil Petroleum Corp
5. L D Edwards No 1 Fossil No 2401
6. Sand Fork
7. Gilmer WV
8. 3.3 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80–26794
2. 47–047–00209–0000
3. 108 000 000
4. Cabot Corp
5. Roy Smokeless 1–1521
6.
7. McDowell WV
8. 16.1 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26795
2. 47–109–00122–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 7–1201
6.
7. Wyoming WV
8. .9 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26796
2. 47–109–00119–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas-Ford 3–1200
6.
7. Wyoming WV
8. 3.7 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26797
2. 47–109–00118–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 19–1199
6.
7. Wyoming WV
8. 6.6 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26798
2. 47–109–00175–0000
3. 108 000 000
4. Cabot Corp
5. Murphy 1–1227
6.
7. Wyoming WV
8. 6.1 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26799
2. 47–109–00110–0000
3. 108 000 000
4. Cabot Corp
5. Toney Cook 1–1198
6.
7. Wyoming WV
8. .3 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26800
2. 47–109–00101–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 6–1190
6.
7. Wyoming WV
8. 5.8 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26801
2. 47–109–00098–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 17–1189
6.
7. Wyoming WV
8. 11.3 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26802

2. 47–109–00092–0000
3. 108 000 000
4. Cabot Corp
5. Lon Byrd 1–1184
6.
7. Wyoming WV
8. 8.4 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26803
2. 47–109–00087–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 1–1181
6.
7. Wyoming WV
8. 3.1 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26804
2. 47–109–00081–0000
3. 108 000 000
4. Cabot Corp
5. S M Burgess 1–1172
6.
7. Wyoming WV
8. 2.2 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26805
2. 47–109–00079–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 14–1171
6.
7. Wyoming WV
8. 1.6 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26806
2. 47–109–00074–0000
3. 108 000 000
4. Cabot Corp
5. David Short 1–1168
6.
7. Wyoming WV
8. 16.5 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26807
2. 47–109–00073–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 8–1153
6.
7. Wyoming WV
8. 1.0 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26808
2. 47–109–00071–0000
3. 108 000 000
4. Cabot Corp
5. John Gilbert TR 5–1164
6.
7. Wyoming WV
8. 2.3 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26809
2. 47–079–00601–0000
3. 108 000 000
4. Cabot Corp
5. Rome Melton 1–1452
6. Sissonville Oriskany
7. Putnam WV
8. 10.7 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26810
2. 47–079–00606–0000
3. 108 000 000
4. Cabot Corp
5. Black Betsey 9–1455
6.
7. Putnam WV
8. 5.9 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26811
2. 47–079–00614–0000
3. 108 000 000
4. Cabot Corp
5. Black Betsey 10–1461
6.
7. Putnam WV
8. 21.4 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26812
2. 47–079–00700–0000
3. 108 000 000
4. Cabot Corp
5. Putnam Co 48–1545
6. Sissonville Oriskany
7. Putnam WV
8. 4.8 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26813
2. 47–079–00714–0000
3. 108 000 000
4. Cabot Corp
5. Raymond City 9–1562
6. Sissonville Oriskany
7. Putnam WV
8. 16.9 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26814
2. 47–081–00056–0000
3. 108 000 000
4. Cabot Corp
5. Piney Coking Coal 3–1178
6.
7. Raleigh WV
8. 6.7 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26815
2. 47–081–00063–0000
3. 108 000 000
4. Cabot Corp
5. Piney Coking Coal 5–1194
6.
7. Raleigh WV
8. 9.6 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26816
2. 47–081–00066–0000
3. 108 000 000
4. Cabot Corp
5. Piney Coking Coal 6–1203
6.
7. Raleigh WV
8. 15.5 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26817
2. 47–081–00067–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 20–1204
6.
7. Raleigh WV
8. 4.5 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26818
2. 47–081–00068–0000
3. 108 000 000
4. Cabot Corp
5. Geo Smith 1–1238
6.
7. Raleigh WV
8. 6.3 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26819
2. 47–081–00212–R000
3. 108 000 000
4. Cabot Corp
5. Beaver Coal 28–1474
6.
7. Raleigh WV
8. 4.1 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26820
2. 47–081–00217–0000
3. 108 000 000
4. Cabot Corp
5. Beaver Coal 31–1477
6.
7. Raleigh WV
8. 2.8 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26821
2. 47–081–00220–0000
3. 108 000 000
4. Cabot Corp
5. Beaver Coal 33–1482
6.
7. Raleigh WV
8. 11.0 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26822
2. 47–109–00057–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 9–1154
6.
7. Wyoming WV
8. 8.3 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26823
2. 47–109–00064–0000
3. 108 000 000
4. Cabot Corp
5. Pocahontas Land 10–1155
6.
7. Wyoming WV
8. 4.7 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26824
2. 47–021–22806–0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. Spicer-Bishop #2
6. Glenville District

7. Gilmer WV
8. 14.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26825
2. 47–021–22807–0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. Spicer-Bishop #3
6. Glenville District
7. Gilmer WV
8. 14.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26826
2. 47–007–01148–0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. Linger 1–A
6. Salt Lick District
7. Braxton WV
8. 12.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26827
2. 47–007–01164–0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. McPherson #1
6. Salt Lick District
7. Braxton WV
8. .0 million cubic feet
9. April 15, 1980
10. Equitable Gas Co

1. 80–26828
2. 47–041–02131–0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. Nellie Barbarow #4
6. Freemans Creek District
7. Lewis WV
8. 10.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26829
2. 47–021–02805–0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. Spicer-Bishop #1
6. Glenville District
7. Gilmer WV
8. 14.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26830
2. 47–021–02209–0000
3. 108 000 000
4. Roybal Oil & Gas Corp
5. Harold Stout #2
6.
7. Gilmer WV
8. 5.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26831
2. 47–015–27020–0000
3. 108 000 000
4. Big Buck Energy Oil & Gas Inc
5. Swartz No 6
6. Union District
7. Clay County WV
8. .1 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26832
2. 47–015–26730–0000
3. 108 000 000
4. Big Buck Energy Oil & Gas Inc
5. Swartz No 4
6. Union District
7. Clay County WV
8. .1 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26833
2. 47–015–07160–0000
3. 108 000 000
4. Big Buck Energy Oil & Gas Inc
5. Swartz No 8
6. Union District
7. Clay County WV
8. .1 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26834
2. 47–015–00701–0000
3. 108 000 000
4. Big Buck Energy Oil & Gas Inc
5. Swartz No 5
6. Union District
7. Clay County WV
8. .1 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26835
2. 47–021–20178–0000
3. 108 000 000
4. Dennis D Blauser
5. Arthur Divers #2–VD–1
6. Glenville
7. Gilmer WV
8. 2.0 million cubic feet
9. April 15, 1980
10. Equitable Gas Co

1. 80–26836
2. 47–007–00902–0000
3. 108 000 000
4. Roybal Oil & Gas Corp
5. Fred Gerwig #1
6.
7. Braxton WV
8. 14.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26837
2. 47–021–21801–0000
3. 108 000 000
4. Dennis D Blauser
5. MJ Gainer #3–VG–1 AKA H H Gainer
6. Glenville
7. Gilmer WV
8. 4.0 million cubic feet
9. April 15, 1980
10. Equitable Gas Co

1. 80–26838
2. 47–007–00951–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Albert Gerwig B #1
6.
7. Braxton WV
8. 10.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26839
2. 47–007–00981–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Fred Gerwig #2
6.
7. Braxton WV
8. 14.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26840
2. 47–007–01039–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Albert Gerwig B #2
6.
7. Braxton WV
8. 10.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26841
2. 47–021–02133–0000
3. 108 000 000
4. Royal Oil & Gas Corp
5. Harry Whisman #1
6.
7. Gilmer WV
8. 16.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26842
2. 47–039–22033–0000
3. 108 000 000
4. Spartan Gas Co
5. J Q Dickinson 1–S–123
6. Campbells Creek
7. Kanawha WV
8. 2.9 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26843
2. 47–039–22046–0000
3. 108 000 000
4. Spartan Gas Co
5. J Q Dickinson 2–S–125
6. Cambells Creep
7. Kanawha WV
8. 6.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26844
2. 47–039–22471–0000
3. 108 000 000
4. Spartan Gas Co
5. Kanawha Hocking C&C 1–S–155
6. Malden
7. Kanawha WV
8. 9.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26845
2. 47–039–22482–0000
3. 108 000 000
4. Spartan Gas Co
5. Kanawha Hocking C&C 3–S–158
6. Malden
7. Kanawha WV
8. 17.5 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26846
2. 47–039–22507–0000
3. 108 000 000
4. Spartan Gas Co
5. Kanawha Hocking C&C 4–S–160
6. Malden
7. Kanawha WV
8. 9.1 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80–26847

2. 47-039-02655-0000
3. 108 000 000
4. Spartan Gas Co
5. Kanawha Hocking C&C 8-S-167
6. Malden
7. Kanawha WV
8. 18.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80-26848
2. 47-039-02690-0000
3. 108 000 000
4. Spartan Gas Co
5. Kanawha Hocking C&C 9-S-169
6. Malden
7. Kanawha WV
8. 18.0 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80-26849
2. 47-039-02692-0000
3. 108 000 000
4. Spartan Gas Co
5. Kanawha Hockings C&C 10-S-170
6. Malden
7. Kanawha WV
8. 17.8 million cubic feet
9. April 15, 1980
10. Columbia Gas Transmission Corp

1. 80-26850
2. 47-079-20808-0000
3. 108 000 000
4. Spartan Gas Co
5. The Putnam Company 1-S-173
6. Midway-Extra
7. Putnam WV
8. 10.5 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80-26851
2. 47-079-20815-0000
3. 108 000 000
4. Spartan Gas Co
5. Putnam Company 2-S-179
6. Union
7. Putnam County WV
8. 20.6 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80-26852
2. 47-017-21640-0000
3. 108 000 000
4. Hugh Spencer
5. Polan #1 Well
6.
7. Doddridge WV
8. 1.5 million cubic feet
9. April 15, 1980
10. Carnegie Natural Gas Co

1. 80-26853
2. 47-021-22803-0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. Marsh #2
6. Glenville District
7. Gilmer WV
8. 12.0 million cubic feet
9. April 15, 1980
10. Consoldiated Gas Supply Corp

1. 80-26854
2. 47-021-02851-0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. Robert R Jones #2
6. Glenville District
7. Gilmer WV
8. 5.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80-26855
2. 47-021-22854-0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. R R Marshall 1-A
6. Glenville District
7. Gilmer WV
8. 10.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80-26856
2. 47-021-22855-0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. R R Marshall 2-A
6. Glenville District
7. Gilmer WV
8. 10.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corporation

1. 80-26857
2. 47-007-01149-0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. Steele 1-A
6. Copen
7. Braxton WV
8. .0 million cubic feet
9. April 15, 1980
10. Equitable Gas Co

1. 80-26858
2. 47-007-01153-0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. R Hopkins 86A
6. Salt Lick District
7. Braxton WV
8. 10.0 million cubic feet
9. April 15, 1980
10. Equitable Gas Co

1. 80-26859
2. 47-021-92651-0000
3. 108 000 000
4. Ro-Jo Industries Inc
5. Charley Thompson #4
6. Glenville District
7. Gilmer WV
8. 9.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80-26860
2. 47-013-22487-0000
3. 108 000 000
4. Franklin Adkins
5. Bennett #2
6. Washington
7. Calhoun WV
8. 5.4 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80-26861
2. 47-013-22498-0000
3. 108 000 000
4. Franklin Adkins
5. Cottrell #1
6. Washington
7. Calhoun WV
8. 8.1 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80-26862
2. 47-013-22500-0000
3. 108 000 000
4. Franklin Adkins
5. Bennett #8
6. Washington
7. Calhoun WV
8. 12.7 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80-26863
2. 47-021-21926-0000
3. 108 000 000
4. Franklin Adkins
5. Stalnaker #1
6. DeKalb
7. Gilmer WV
8. 8.5 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply

1. 80-26864
2. 47-013-02620-0000
3. 108 000 000
4. Minuteman Drilling Fund Ltd
5. Louis Bennett No I-379
6. Orma
7. Calhoun WV
8. 15.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80-26865
2. 47-013-02614-0000
3. 108 000 000
4. Minuteman Drilling Fund Ltd
5. Louis Bennett No I-375
6. Orma
7. Calhoun WV
8. 15.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80-26866
2. 47-013-02131-0000
3. 108 000 000
4. Arlen Carpenter
5. Carl Knotts #1
6.
7. Calhoun WV
8. 8.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80-26867
2. 47-021-01621-0000
3. 108 000 000
4. Pacific States Gas Oil Inc
5. Hannigan-Smith #1
6.
7. Gilmer WV
8. 1.8 million cubic feet
9. April 15, 1980
10. Equitable Gas Co

1. 80-26868
2. 47-007-00817-0000
3. 108 000 000
4. Yale Oil Association Inc
5. Lands of Linger #1
6. Heaters
7. Braxton WV
8. 13.0 million cubic feet
9. April 15, 1980
10. Equitable Gas Co

1. 80-26869
2. 47-001-00692-0000
3. 108 000 000
4. Patrick Petroleum Corp of Michigan
5. M V Trimble No 1 W V 84690
6. Grasslands

7. Barbour WV
8. 15.1 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26870
2. 47–039–03431–0000
3. 108 000 000
4. Cabot Corp
5. Quincy Coal 7–660
6.
7. Kanawha WV
8. 2.0 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26871
2. 47–085–20092–0000
3. 108 000 000
4. R & S Gas Co
5. A D Riddle No 1
6. Murphy District
7. Ritchie WV
8. 18.0 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26873
2. 47–085–20431–0000
3. 108 000 000
4. R & S Gas Co
5. A D Riddle No 2
6. Murphy District
7. Ritchie WV
8. 18.0 million cubic feet
9. April 15, 1980
10. Cabot Corp

1. 80–26874
2. 47–007–01134–0000
3. 108 000 000
4. Edwin T. Stitt
5. Edwin T Stitt #1 T Singleton
6. Thomas R Singleton #1
7. Braxton WV
8. 19.1 million cubic feet
9. April 15, 1980
10. Equitable Gas Co

1. 80–26875
2. 47–043–21815–0000
3. 108 000 000
4. Franklin Adkins
5. 1–A
6. Sheridan District
7. Lincoln WV
8. 10.5 million cubic feet
9. April 15, 1980
10. Columbia Gas Trans Corp

1. 80–26876
2. 47–043–21816–0000
3. 108 000 000
4. Franklin Adkins
5. 1–B
6. Sheridan District
7. Lincoln WV
8. .0 million cubic feet
9. April 15, 1980
10. Columbia Gas Trans Corp

1. 80–26877
2. 47–013–01950–0000
3. 108 000 000
4. Lendol and Ernest Rogers
5. Dorse Jarvis No 1
6.
7. Calhoun WV
8. 3.0 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26878
2. 47–013–01965–0000
3. 108 000 000
4. Lendol Rogers et al
5. Walter Siers No 1
6.
7. Calhoun WV
8. .6 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26879
2. 47–013–02156–0000
3. 108 000 000
4. Lendol Rogers et al
5. Walter Siers No 2
6.
7. Calhoun WV
8. .5 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26880
2. 47–013–02395–0000
3. 108 000 000
4. Scull and Rogers Lendol Rogers Agen
5. Earl Conley No 1
6.
7. Calhoun WV
8. .3 million cubic feet
9. April 15, 1980
10. Consolidated Gas Supply Corp

1. 80–26881
2. 47–021–22775–0000
3. 108 000 000
4. Franklin Adkins
5. Maxwell #2
6. DeKalb
7. Gilmer WV
8. 8.0 million cubic feet
9. April 15, 1980
10. Carnegie Nat Gas Co

1. 80–26882
2. 47–021–22776–0000
3. 108 000 000
4. Franklin Adkins
5. Maxwell #3
6. DeKalb
7. Gilmer WV
8. 8.0 million cubic feet
9. April 15, 1980
10. Carnegie Nat Gas Co

1. 80–26883
2. 47–043–21618–0000
3. 108 000 000
4. Franklin Adkins
5. W Cremeans #1
6. Sheridan District
7. Lincoln WV
8. 10.7 million cubic feet
9. April 15, 1980
10. Columbia Gas Trans Corp

1. 80–26884
2. 47–099–21592–0000
3. 108 000 000
4. Franklin Adkins
5. Napier #1
6. Lincoln District
7. Wayne WV
8. 13.9 million cubic feet
9. April 15, 1980
10. Columbia Gas Trans Corp

1. 80–26885
2. 47–099–21596–0000
3. 108 000 000
4. Franklin Adkins
5. Atkins #1
6. Lincoln District
7. Wayne County WV
8. 18.3 million cubic feet
9. April 15, 1980
10. Columbia Gas Trans Corp

1. 80–26886
2. 47–099–21602–0000
3. 108 000 000
4. Franklin Adkins
5. Brown #1
6. Lincoln Dist
7. Wayne County WV
8. 14.1 million cubic feet
9. April 15, 1980
10. Columbia Gas Trans Corp

1. 80–26872/
2. 47–007–01248
3. 108
4. Royal Resources Corp
5. Eva Williams #2
6. Rollyson
7. Braxton WV
8. 17.5 million cubic feet
9. April 15, 1980
10. Equitable Gas Co

U.S. Geological Survey, Metairie, La.

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–26774/G9–636
2. 17–715–40192–00S1–0
3. 102 000 000
4. C & K Marine Production Co
5. South Timbalier 203 No A–3
6. South Timbalier
7. 203
8. 1080.0 million cubic feet
9. April 14, 1980
10. Trunkline Gas Co

1. 80–26775/G9–954
2. 17–706–40329–01S1–0
3. 102 000 000
4. Tenneco Oil Co
5. Vermilion 261 A–4
6. Vermilion
7. 261
8. 190.0 million cubic feet
9. April 14, 1980
10. Tennessee Gas Pipeline Co

1. 80–26776/G9–956
2. 17–706–40354–0000–0
3. 102 000 000
4. Tenneco Oil Co
5. Vermilion 261 A–7
6. Vermilion
7. 261
8. 8912.0 million cubic feet
9. April 14, 1980
10. Tennessee Gas Pipeline Co

1. 80–26777/G9–1004
2. 17–706–40330–0000–0
3. 102 000 000
4. Tenneco Oil Co
5. Vermilion 261 A–2
6. Vermilion
7. 261
8. 7129.0 million cubic feet
9. April 14, 1980

10. Tennessee Gas Pipeline Co

The applications for determination in these proceedings together with a copy or description of other materials in the record on which such determinations were made are available for inspection, except to the extent such material is treated as confidential under 18 CFR 275.206, at the Commission's Office of Public Information, Room 1000, 825 North Capitol Street, NE., Washington, D.C. 20426.

Persons objecting to any of these final determinations may, in accordance with 18 CFR 275.203 and 18 CFR 275.204, file a protest with the Commission on or before June 6, 1980.

Please reference the FERC control number in all correspondence related to these determinations.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15697 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[No. 193]

Determinations by Jurisdictional Agencies Under the Natural Gas Policy Act of 1978

Issued May 15, 1980.

The Federal Energy Regulatory Commission received notices from the jurisdictional agencies listed below of determinations pursuant to 18 CFR 274.104 and applicable to the indicated wells pursuant to the Natural Gas Policy Act of 1978.

Kansas Corporation Commission

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80-28000/K-79-0762
2. 15-055-00000-0000
3. 108 000 000
4. Amoco Production Co
5. Battin Gas Unit #1
6. Hugoton Chase
7. Finney KS
8. 10.0 million cubic feet
9. April 18, 1980
10. Cities Service Gas Co

1. 80-28001/K-79-0798
2. 15-175-20084-0000
3. 108 000 000
4. Mallonee-Mahoney Inc
5. Gram No 1
6. Kismet
7. Seward KS
8. 7.3 million cubic feet
9. April 18, 1980
10. Panhandle Eastern Pipe Line Co

1. 80-28002/K-79-1369
2. 15-055-20269-0000
3. 108 000 000
4. Benson Mineral Group Inc
5. Fuller #1-3
6. Hugoton
7. Finney KS
8. 2.4 million cubic feet
9. April 18, 1980
10. Northern Natural Gas Co

Michigan Department of Natural Resources

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80-27989
2. 21-035-27451-0000
3. 102 000 000
4. Dart Oil & Gas Corp
5. Jackson-Mosher #7-30 (27451)
6. Winterfield—29 Filed
7. Clare MI
8. 20.0 million cubic feet
9. April 18, 1980
10. Consumers Power Co

1. 80-27990
2. 21-137-32158-0000
3. 102 000 000
4. Amoco Production Co
5. State Chester D 1-25
6. Chester 25-20W-2W
7. Otsego MI
8. 35.0 million cubic feet
9. April 18, 1980
10. Consumers Power Co

1. 80-27991
2. 21-079-32532-0000
3. 102 000 000
4. Amoco Production Co
5. Lachinet-State Blue Lake 4-19
6. Coldsprings 25A-28N-6W
7. Kalkaska MI
8. 100.0 million cubic feet
9. April 18, 1980
10. Consumers Power Co

1. 80-27992
2. 21-079-32007-0000
3. 103 000 000
4. Amoco Production Co
5. Ricci Unit Well No 3-19
6. Blue Lake 19-28N-5W
7. Kalkaska MI
8. 150.0 million cubic feet
9. April 18, 1980
10. Consumers Power Co

1. 80-27993
2. 21-101-33107-0000
3. 102 000 000
4. Miller Brothers
5. Miller Bros Cleon-State #2-19A
6. Cleon-19-24N-13W
7. Manistee MI
8. 180.0 million cubic feet
9. April 18, 1980
10. Consumers Power Co

1. 80-27994
2. 21-101-33242-0000
3. 102 000 000
4. Miller Brothers
5. Miller Bros Cleon-State #4-19
6. Cleon-19-24N-13W
7. Manistee Mi
8. 110.0 million cubic feet
9. April 18, 1980
10. Consumers Power Co

1. 80-27995
2. 21-101-32997-0000
3. 102 000 000
4. Miller Brothers
5. Miller Bros Cleon-State #3-20
6. Cleon-20A-24N-13W
7. Manistee MI
8. 540.0 million cubic feet
9. April 18, 1980
10. Consumers Power Co

1. 80-27996
2. 21-101-32845-0000
3. 102 000 000
4. Miller Brothers
5. Walker PCA Et Al #3-32B
6. Cleaon-32-T24N-R13W
7. Manistee Mi
8. 144.0 million cubic feet
9. April 18, 1980
10. Consumers Power Co

New Mexico Department of Energy and Minerals Oil Conservation Division

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80-27997
2. 30-025-00000-0000
3. 108 000 000
4. Southland Royalty Co
5. Carter #1
6. Eumont
7. Lea NM
8. 19.0 million cubic feet
9. April 17, 1980
10. El Paso Natural Gas Co

1. 80-27998
2. 30-025-26040-0000
3. 103 000 000
4. Conoco Inc
5. State E No 10
6. Undes Langley Dev & Ellenburger
7. Lea NM
8. 910.0 million cubic feet
9. April 17, 1980
10. El Paso Natural Gas CoCo

1. 80-27999
2. 30-025-00000-0000
3. 103 000 000
4. Maralo Inc
5. Jalmat Yates Unit #20
6. Undesignated (Jalmat Yates Unit)
7. Lea NM
8. 108.0 million cubic feet
9. April 17, 1980
10. El Paso Natural Gas Co

Oklahoma Corporation Commission

1. Control number (FERC/State)
2. API well number
3. Section of NGPA

4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–28077/03066
2. 35–051–00000–0000
3. 108 000 000
4. Arco Oil and Gas Co
5. Thomas Charlson #9
6. Chickasha
7. Grady OK
8. 9.0 million cubic feet
9. April 21, 1980
10. Arkansas Louisiana Gas Co

1. 80–28078/03054
2. 35–069–00000–0000
3. 108 000 000
4. Charles A Burgett
5. Beaver Lease #10
6. Dillworth
7. Kay OK
8. 4.1 million cubic feet
9. April 21, 1980
10. Eufaula Enterprises

1. 80–28079/03053
2. 35–069–00000–0000
3. 108 000 000
4. Charles A Burgett
5. Beaver Lease #11
6. Dillworth
7. Kay OK
8. 4.1 million cubic feet
9. April 21, 1980
10. Eufaula Enterprises

1. 80–28080/03046
2. 35–007–20540–0000
3. 108 000 000
4. Blaik Oil Co
5. Hilderbrand #1
6. S W Elmwood
7. Beaver OK
8. 5.0 million cubic feet
9. April 21, 1980
10. Phillips Petroleum Co

1. 80–28081/03097
2. 35–087–00000–0000
3. 108 000 000
4. Arco Oil and Gas Co
5. Grace McDaniel #3
6. Golden Trend
7. McClain OK
8. .5 million cubic feet
9. April 21, 1980
10. Warren Petroleum Co

1. 80–28082/03071
2. 35–051–00000–0000
3. 108 000 000
4. Arco Oil and Gas Co
5. Elmer S Pooler A #4
6. Chickasha
7. Grady OK
8. 3.0 million cubic feet
9. April 21, 1980
10. Arkansas Louisiana Gas Co

1. 80–28083/02958
2. 35–059–20421–0000
3. 108 000 000
4. Dyco Petroleum Corp
5. Deweese No 1
6. Fort Supply Northeast
7. Harper OK
8. 8.0 million cubic feet
9. April 21, 1980
10. Delhi Gas Pipeline Corp

1. 80–28084/03083
2. 35–007–00000–0000
3. 108 000 000
4. Sun Oil Co (Delaware)
5. Conner C V No 1
6. Mocane-Laverne
7. Beaver OK
8. 13.0 million cubic feet
9. April 21, 1980
10. Colorado Interstate Gas Co

1. 80–28085/03107
2. 35–019–00000–0000
3. 108 000 000
4. Arco Oil and Gas Co
5. John D Dougherty #1
6. Sho-Vel-Tum
7. Carter OK
8. 3.5 million cubic feet
9. April 21, 1980
10. Aminoil USA Inc

1. 80–28086/03106
2. 35–137–00000–0000
3. 108 000 000
4. Arco Oil and Gas Co
5. Beulah A Warden #1
6. Sho—Vel-Tum
7. Stephens OK
8. 4.0 million cubic feet
9. April 21, 1980
10. Getty Oil Co

1. 80–28087/02616
2. 35–019–00000–0000
3. 108 000 000
4. Mobil Oil Corp
5. Walter Nevstadt #21
6. Sho—Vel-Tum
7. Carter OK
8. 9.4 million cubic feet
9. April 21, 1980
10. Lone Star Gas Co

1. 80–28088/02618
2. 35–019–00000–0000
3. 108 000 000
4. Mobil Oil Corp
5. Hefner-Mills #9
6. Sho—Vel-Tum
7. Carter OK
8. .5 million cubic feet
9. April 21, 1980
10. Lone Star Gas Co

1. 80–28089/02623
2. 35–019–00000–0000
3. 108 000 000
4. Mobil Oil Corp
5. Hefner-Mills #5
6. Sho—Vel-Tum
7. Carter OK
8. .5 million cubic feet
9. April 21, 1980
10. Lone Star Gas Co

1. 80–28090/02621
2. 35–019–00000–0000
3. 108 000 000
4. Mobil Oil Corp
5. Hefner-Mills #7
6. Sho—Vel-Tum
7. Carter OK
8. 1.3 million cubic feet
9. April 21, 1980
10. Lone Star Gas Co

1. 80–28091/03052
2. 35–007–20512–0000
3. 108 000 000
4. Blaik Oil Co
5. Jesse Chaloupek #1
6. S W Elmwood
7. Beaver OK
8. 9.0 million cubic feet
9. April 21, 1980
10. Phillips Petroleum Co

1. 80–28092/03050
2. 35–047–21654–0000
3. 103 000 000
4. Texas American Oil Corp
5. Adolph Litschke No 1
6. S E Waukomis Sooner Trend
7. Garfield OK
8. 328.0 million cubic feet
9. April 21, 1980
10. Union Texas Petroleum

1. 80–28093/03068
2. 35–051–00000–0000
3. 108 000 000
4. Arco Oil and Gas Co
5. Elmer S Pooler A #3
6. Chickasha
7. Grady OK
8. 17.0 million cubic feet
9. April 21, 1980
10. Arkansas Louisiana Gas Co

Utah Division of Oil, Gas and Mining

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS Area name
7. County, State or block no.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–28003/K–111–12
2. 43–047–30574–0000
3. 102 000 000
4. Belco Development Corp
5. NBU 67–30B 30574
6. Natural Buttes Unit
7. Uintah UT
8. 53.0 million cubic feet
9. April 18, 1980
10. Colorado Interstate Gas Co

1. 80–28004/K–111–11
2. 43–047–30441–0000
3. 102 000 000
4. Belco Development Corp
5. NBU 51–31B 30441
6. Natural Buttes Unit
7. Uintah UT
8. 268.0 million cubic feet
9. April 18, 1980
10. Colorado Interstate Gas Co

West Virginia Department of Mines Oil and Gas Division

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS Area name
7. County, State or block no.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–28005
2. 47–041–01749–0000

3. 108 000 000
4. A & A Producers and Operators Co
5. Wava Shoulders 1–S–VA–103
6.
7. Lewis WV
8. 3.0 million cubic feet
9. April 18, 1980
10. Equitable Gas Co

1. 80–28006
2. 47–097–01273–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Nola Lane 1–SP–102
6.
7. Upshur WV
8. .6 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28007
2. 47–097–01269–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Mildred Potter SP–107
6.
7. Upshur WV
8. 2.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28008
2. 47–097–01266–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. R R Colerider at 101
6.
7. Upshur WV
8. 2.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28009
2. 47–043–02331–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. I S Rand #1
6.
7. Lincoln WV
8. 3.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28010
2. 47–043–01459–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Elizabeth Adkins Hrs 1–S–SP–134
6.
7. Lincoln WV
8. 6.5 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28011
2. 47–043–01450–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Leander Spurlock 1–S–SP–105
6.
7. Lincoln WV
8. 11.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28012
2. 47–043–01449–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. E & J Miller 1–S–OH–104
6.
7. Lincoln WV
8. 5.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28013
2. 47–043–01446–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. A Elkins AT–102
6.
7. Lincoln WV
8. 13.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28014
2. 47–043–01445–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Elvira Alstea 1–VA–101
6.
7. Lincoln WV
8. 8.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28015
2. 47–043–01444–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Sylvester Adkins De 3
6.
7. Lincoln WV
8. 4.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28016
2. 47–043–01435–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Early Stowers—UF Gas 5–PA–106
6.
7. Lincoln WV
8. 13.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28017
2. 47–043–01443–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Sylvester Adkins De 2
6.
7. Lincoln WV
8. 14.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28018
2. 47–043–01442–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Sylvester Adkins Hrs De 1
6.
7. Lincoln WV
8. 5.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28019
2. 47–045–00908–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. W B McDonald 4–S–NR–102
6.
7. Logan WV
8. 6.5 million cubic feet
9. April 18, 1980
10. Industrial Gas Corp

1. 80–28020
2. 47–045–00881–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Thomas & Ellis #1
6.
7. Logan WV
8. 2.0 million cubic feet
9. April 18, 1980
10. Industrial Gas Corp

1. 80–28021
2. 47–005–01013–0000
3. 108 000 000
4. A & A Producers & Operators Co
5. Cordelia Hill Hrs 1–S–PA–103
6.
7. Boone WV
8. 6.0 million cubic feet
9. April 18, 1980
10. Industrial Gas Corp

1. 80–28022
2. 47–105–00663–0000
3. 108 000 000
4. Seminole Oil & Gas Co
5. David T Tingley #1
6.
7. Wirt WV
8. 9.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28023
2. 47–105–00662–0000
3. 108 000 000
4. Seminole Oil & Gas Co
5. David T Tingley #1
6.
7. Wirt WV
8. 9.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28024
2. 47–033–01063–0000
3. 108 000 000
4. James F Scott
5. H G Porter (S–211)
6. Clark District
7. Harrison WV
8. 19.0 million cubic feet
9. April 18, 1980
10. Consolidated Gas Supply Corp

1. 80–28025
2. 47–043–21475–0000
3. 108 000 000
4. Leestock Gas Co
5. Ward Anderson #1
6. Jefferson District
7. Lincoln WV
8. 15.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28026
2. 47–043–21352–0000
3. 108 000 000
4. Jonas V Alford #1
5. Jonas V Alford #1
6. Duval District
7. Lincoln WV
8. 2.5 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28027
2. 47–043–21194–0000
3. 108 000 000
4. Workman Gas Co
5. Fred workman #1
6. Harts Creek

7. Lincoln WV
8. 6.9 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28028
2. 47–043–20932–0000
3. 108 000 000
4. Ferdinand Gas Co
5. Frank Vance #1
6. Harts Creek
7. Lincoln WV
8. 7.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28029
2. 47–043–20883–0000
3. 108 000 000
4. Pigeon Creek Gas Co
5. Brad Gill #1
6. Harts Creek
7. Lincoln WV
8. 17.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28030
2. 47–043–20572–0000
3. 108 000 000
4. Lambert Gas Co
5. Martha Lambert #1
6. Jefferson District
7. Lincoln WV
8. 7.4 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28031
2. 47–043–20465–0000
3. 108 000 000
4. Houston Gas Co
5. Huntington Dev & Gas Co #1
6. Jefferson
7. Lincoln WV
8. 3.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28032
2. 47–043–21370–0000
3. 108 000 000
4. Toney Gas Co
5. A J Belcher #1
6. Duval
7. Lincoln WV
8. 13.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28033
2. 47–043–21418–0000
3. 108 000 000
4. Toney Gas co
5. Ezera McCalister #1
6. Duval
7. Lincoln WV
8. 6.0 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28034
2. 47–043–20591–0000
3. 108 000 000
4. Eldon Gas Co
5. Huntington Dev and Gas Co #2
6. Jefferson District
7. Lincoln WV
8. 8.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28035
2. 47–043–20590–0000
3. 108 000 000
4. Eldon Gas Co
5. Huntington Dev and Gas Co #1
6. Jefferson District
7. Lincoln WV
8. 8.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28036
2. 47–043–20784–0000
3. 108 000 000
4. Etta Gas Co
5. Etta Brooks #1
6. Laurel Hill District
7. Lincoln WV
8. 5.5 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28037
2. 47–043–20842–0000
3. 108 000 000
4. Northfork Gas Co
5. United Fuel Gas Co #1
6. Harts Creek
7. Lincoln WV
8. 7.5 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28038
2. 47–087–21861–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Vinyard #7 62040–7
6. Walton District
7. Roane WV
8. 2.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28039
2. 47–087–21858–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Ryan #9 62040–9
6. Walton District
7. Roane WV
8. 3.4 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28040
2. 47–087–21857–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Ryan #2 62040–2
6. Walton District
7. Roane WV
8. 3.4 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28041
2. 47–087–21848–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. L C Swiney #4 62040–4
6. Walton District
7. Roane WV
8. 1.9 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28042
2. 47–087–21847–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. L C Swiney #5 62040–5
6. Walton District
7. Roane WV
8. 1.9 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28043
2. 47–087–21628–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Vinyard #62040–6
6. Walton District
7. Roane WV
8. 2.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28044
2. 47–087–21584–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Shaver #1
6. Walton District
7. Roane WV
8. 3.1 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28045
2. 47–087–21552–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. R Swiney #1 62040–1
6. Walton District
7. Roane WV
8. 5.2 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28046
2. 47–087–21520–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Vinyard #5 62040–5
6. Walton District
7. Roane WV
8. 2.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28047
2. 47–087–21420–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Vinyard #4 62040–4
6. Walton District
7. Roane WV
8. 2.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28048
2. 47–087–21382–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. J Pell #3 62040–3
6. Walton District
7. Roane WV
8. 6.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28049
2. 47–087–21380–0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Schoolcraft #1 62040–1
6. Walton District
7. Roane WV
8. 2.9 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80–28050

2. 47-087-21374-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. J Pell #2 62040-2
6. Walton District
7. Roane WV
8. 6.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28051
2. 47-087-21327-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. S Taylor #1
6. Walton District
7. Roane WV
8. 3.1 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28052
2. 47-087-21317-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. G Marks #1 62040-1
6. Walton District
7. Roane WV
8. 4.5 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28053
2. 47-087-21312-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Ryan #6 62040-6
6. Walton District
7. Roane WV
8. 3.4 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28054
2. 47-087-21311-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Ryan #5 62040-5
6. Walton District
7. Roane WV
8. 3.4 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28055
2. 47-087-21310-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Ryan #4 62040-4
6. Walton District
7. Roane WV
8. 3.4 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28056
2. 47-087-21859-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Ryan #10 62040-10
6. Walton District
7. Roane WV
8. 3.4 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28057
2. 47-087-21309-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Ryan #3 62040-3
6. Walton District
7. Roane WV
8. 3.4 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28058
2. 47-087-21307-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Ryan #1 62040-1
6. Walton District
7. Roane WV
8. 3.4 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28059
2. 47-087-21284-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Vinyard #2 62040-2
6. Walton District
7. Roane WV
8. 2.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28060
2. 47-087-21283-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. Vinyard #1 62040-1
6. Walton District
7. Roane WV
8. 2.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28061
2. 47-087-21269-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. G Moffatt #4 62040-4
6. Walton District
7. Roane WV
8. 2.8 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28062
2. 47-087-21268-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. G Moffatt #3 62040-3
6. Walton District
7. Roane WV
8. 2.8 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28063
2. 47-087-21267-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. G Moffatt #2 62040-2
6. Walton District
7. Roane WV
8. 2.8 million cubic feet
9. April 18, 1980
10. Columbia Gas Trans Corp

1. 80-28064
2. 47-087-21266-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. G Moffatt #1 62040-1
6. Walton District
7. Roane WV
8. 2.8 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80-28065
2. 47-087-21259-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. L C Swiney #3 62040-3
6. Walton District
7. Roane WV
8. 1.9 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80-28066
2. 47-087-21243-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. L C Swiney #2 62040-2
6. Walton District
7. Roane WV
8. 1.9 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80-28067
2. 47-087-21242-0000
3. 108 000 000
4. Quaker State Oil Refining Corp
5. L C Swiney #1 62040-1
6. Walton District
7. Roane WV
8. 1.9 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80-28068
2. 47-059-00102-0000
3. 108 000 000
4. East Kentucky Energy Corp
5. Noah A Stepp #7
6. Kermit District
7. Mingo WV
8. 11.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80-28069
2. 47-059-00089-0000
3. 108 000 000
4. East Kentucky Energy Corp
5. Mamonca #2
6. Kermit District
7. Mingo WV
8. 11.7 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80-28070
2. 47-059-00062-0000
3. 108 000 000
4. East Kentucky Energy Corp
5. Noah A Stepp #6
6. Kermit District
7. Mingo WV
8. .9 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80-28071
2. 47-059-00058-0000
3. 108 000 000
4. East Kentucky Energy Corp
5. Noah A Stepp #5
6. Kermit District
7. Mingo WV
8. 6.8 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80-28072
2. 47-059-00057-0000
3. 108 000 000
4. East Kentucky Energy Corp
5. Noah A Stepp #4
6. Kermit District

7. Mingo WV
8. 6.8 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28073
2. 47–059–00056–0000
3. 108 000 000
4. East Kentucky Energy Corp
5. Noah A Stepp #3
6. Kermit District
7. Mingo WV
8. 6.8 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28074
2. 47–059–00045–0000
3. 108 000 000
4. East Kentucky Energy Corp
5. Noah A Stepp #2
6. Kermit District
7. Mingo WV
8. .9 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

1. 80–28075
2. 47–059–00042–0000
3. 108 000 000
4. East Kentucky Energy Corp
5. Noah A Stepp #1
6. Kermit District
7. Mingo WV
8. .9 million cubic feet
9. April 18, 1980
10. Columbia Gas Transmission Corp

Osage Agency, Bureau of Indian Affairs, Osage County, Okla.

1. Control Number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or Block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–28076
2. 35–113–00000–0000–0
3. 103 000 000
4. James W Wise
5. Plummer #4
6. Plummer-NW/4 Sec 17 Twp 22 N RGE 7E
7. Osage OK
8. 100.0 million cubic feet
9. April 18, 1980
10. Phillips Petroleum Co

The applications for determination in these proceedings together with a copy or description of other materials in the record on which such determinations were made are available for inspection, except to the extent such material is treated as confidential under 18 CFR 275.206, at the Commission's Office of Public Information, room 1000, 825 North Capitol Street, N.E., Washington, D.C. 20426.

Persons objecting to any of these final determinations may, in accordance with 18 CFR 275.203 and 18 CFR 275.204, file a protest with the Commission on or before June 6, 1980.

Please reference the FERC control number in all correspondence related to these determinations.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80–15693 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–01–M

[No. 203]

Determinations by Jurisdictional Agencies Under the Natural Gas Policy Act of 1978

Issued: May 16, 1980.

The Federal Energy Regulatory Commission received notices from the jurisdictional agencies listed below of determinations pursuant to 18 CFR 274.104 and applicable to the indicated wells pursuant to the Natural Gas Policy Act of 1978.

Montana Board of Oil and Gas Conservation

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or Block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31435/1–80–33
2. 25–083–21192–0000
3. 102 000 000
4. Shell Oil Co
5. Ranbur 34–23
6. Mondak West
7. Richland MT
8. 35.0 million cubic feet
9. May 5, 1980
10. Montana Dakota Utilities Co

1. 80–31436/2–8–37
2. 25–091–21210–0000
3. 102 000 000
4. Patrick Petroleum Co
5. Olsen-Rasmussen #1
6. South Clear Lake
7. Sheridan MT
8. 70.0 million cubic feet
9. May 5, 1980
10. True Oil Co

1. 80–31437/1–80–30
2. 25–083–21284–0000
3. 102 000 000
4. Shell Oil Co
5. BN 43X–25
6. Mondak West
7. Richland MT
8. 32.8 million cubic feet
9. May 5, 1980
10. Montana Dakota Utilities Co

1. 80–31438/2–80–35
2. 25–091–21183–0000
3. 102 000 000
4. Patrick Petroleum Co
5. Miller #2
6. Dagmar
7. Sheridan MT
8. 70.0 million cubic feet
9. May 5, 1980
10. True Oil Co

1. 80–31439/2–80–36
2. 25–091–21189–0000
3. 102 000 000
4. Patrick Petroleum Co
5. Guenther-Anderson #1
6. Clear Lake
7. Sheridan MT
8. 70.0 million cubic feet
9. May 5, 1980
10. True Oil Co

1. 80–31440/2–80–69
2. 25–083–21322–0000
3. 102 000 000
4. Shell Oil Co
5. Sweley 31–22
6. Mondak West
7. Richland MT
8. 9.5 million cubic feet
9. May 5, 1980
10. Montana Dakota Utilities Co

1. 80–31441/7–79–227
2. 25–071–21539–0000
3. 108 000 000 Denied
4. Midlands Gas Corp
5. 0270 1–2 Brown
6. Bowdoin
7. Phillips MT
8. 17.0 million cubic feet
9. May 5, 1980
10. Kansas-Nebraska Natural Gas Co Inc

1. 80–31442/3–80–68
2. 25–083–21299–0000
3. 102 000 000
4. Shell Oil Co
5. Hundtoft 12–24
6. Mondak West
7. Richland MT
8. 14.0 million cubic feet
9. May 5, 1980
10. Montana Dakota Utilities Co

1. 80–31443/2–80–56
2. 25–083–21307–0000
3. 102 000 000
4. Shell Oil Co
5. Lassey 34–14
6. Mondak West
7. Richland MT
8. 45.0 million cubic feet
9. May 5, 1980
10. Montana Dakota Utilities Co

1. 80–31444/1–80–32
2. 25–083–21275–0000
3. 102 000 000
4. Shell Oil Co
5. BN 22X–31
6. Mondak West
7. Richland MT
8. 42.0 million cubic feet
9. May 5, 1980
10. Montana Dakota Utilities Co

1. 80–31445/1–80–31
2. 25–083–21243–0000
3. 102 000 000
4. Shell Oil Co
5. BN 24X–19
6. Mondak West
7. Richland MT
8. 4.4 million cubic feet
9. May 5, 1980
10. Montana Dakota Utilities Co

Nebraska Oil and Gas Conservation Commission

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or Block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31434
2. 26–033–21833–0000
3. 102 000 000
4. Clayton Corp
5. No 2 Armstrong
6. Mohatt Field
7. Cheyenne NB
8. 14.6 million cubic feet
9. May 5, 1980
10. Marathon Oil Co

Ohio Department of Natural Resources, Division of Oil and Gas

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or Block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31191/02996
2. 34–169–21894–0014
3. 108 000 000 Denied
4. John C Mason
5. Louis Gruver #3
6.
7. Wayne OH
8. 18.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31192
2. 34–007–20436–0014
3. 108 000 000
4. J P White
5. Chah #1
6.
7. Ashtabula OH
8. 1.3 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31193
2. 34–007–20437–0014
3. 108 000 000
4. J P White
5. Munz #1 Fka Terry #1
6.
7. Ashtabula OH
8. 3.7 million cubic feet
9. May 6, 1980
10.

1. 80–31194
2. 34–007–20438–0014
3. 108 000 000
4. J P White
5. Munz-Ely Unit #1 Fka Terry-Ely #1
6.
7. Ashtabula OH
8. 3.7 million cubic feet
9. May 6, 1980
10.

1. 80–31195
2. 34–007–21294–0014
3. 103 000 000
4. Giant Petroleum Corp
5. Peter & Marie Kosenko #1
6.
7. Ashtabula OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31196
2. 34–007–21303–0014
3. 103 000 000
4. Robert L Craig Sr
5. Palagyi #1
6.
7. Ashtabula OH
8. 24.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31197
2. 34–007–21306–0014
3. 103 000 000
4. Giant Petroleum Corp
5. Frank N Morris—Unit—#1
6.
7. Ashtabula OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31198
2. 34–007–21309–0014
3. 103 000 000
4. Robert L Craig Sr
5. Palagyi #2
6.
7. Ashtabula OH
8. 28.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31199
2. 34–007–21316–0014
3. 103 000 000
4. Giant Petroleum Corp
5. Edward & Pricilla George #1
6.
7. Ashtabula OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Company

1. 80–31200
2. 34–031–23225–0014
3. 103 000 000
4. Kenoil
5. Sullivan De Marco #1
6.
7. Coshocton OH
8. 1.5 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31201
2. 34–031–23412–0014
3. 103 000 000
4. 7th Street Investment Assoc
5. Conkle Trustees #2
6.
7. Coshocton OH
8. 28.0 million cubic feet
9. May 6, 1980
10.

1. 80–31202
2. 34–053–20355–0014
3. 103 000 000
4. R Gene Brasel d.b.a. Brasel & Brasel
5. M Gilman #1
6.
7. Gallia OH
8. 1.5 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31203
2. 34–053–20517–0014
3. 103 000 000
4. Royal Petroleum VIII Ltd
5. Swisher #1
6.
7. Gallia OH
8. 5.0 million cubic feet
9. May 3, 1980
10. Columbia Gas Transmission Corp

1. 80–31204
2. 34–059–21322–0014
3. 108 000 000
4. Big Piney Oil & Gas Co
5. Zinc #2
6.
7. Guernsey OH
8. 3.2 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31205
2. 34–059–21364–0014
3. 108 000 000
4. Big Piney Oil & Gas Co
5. Gadd-McCracken #1
6.
7. Guernsey OH
8. 2.4 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31206
2. 34–059–21369–0014
3. 108 000 000
4. Big Piney Oil & Gas Co
5. Rushie Hall #1
6.
7. Guernsey OH
8. 3.9 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31207
2. 34–059–21480–0014
3. 108 000 000
4. Big Piney Oil & Gas Co
5. Paul Mathers #1
6.
7. Guernsey OH
8. 1.6 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31208
2. 34–059–22307–0014
3. 103 000 000
4. Buckeye Dev Drilling Project Ltd
5. Frank Neuhart #2
6. Senecaville
7. Guernsey OH
8. 13.0 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31209
2. 34–073–22250–0014
3. 103 000 000
4. Petro Oil Co
5. Donahey Well #1
6.
7. Hocking OH
8. 4.0 million cubic feet
9. May 6, 1980
10.

1. 80–31210
2. 34–075–22210–0014
3. 103 000 000
4. Future Energy Corp
5. Emerson Giauque #2
6.
7. Holmes OH
8. .0 million cubic feet
9. May 6, 1980
10.

1. 80–31211
2. 34–075–22218–0014
3. 103 000 000
4. M C F Oil Co
5. Ralph Schrock #1
6.
7. Holmes OH
8. 5.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31212
2. 34–075–22303–0014
3. 103 000 000
4. Bands Co Inc
5. Van Sickle #1
6.
7. Holmes OH
8. 90.0 million cubic feet
9. May 6, 1980
10.

1. 80–31213
2. 34–075–22328–0014
3. 103 000 000
4. Bands Co Inc
5. Potts #1
6.
7. Holmes OH
8. 100.0 million cubic feet
9. May 6, 1980
10.

1. 80–31214
2. 34–075–22359–0014
3. 103 000 000
4. H I Smith Oil & Gas Inc
5. Abe Miller #1
6.
7. Holmes OH
8. 12.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31215
2. 34–075–22406–0014
3. 103 000 000
4. Edco Drilling & Producing Inc
5. 3A Thomas Evans Foundation
6.
7. Holmes OH
8. 18.0 million cubic feet
9. May 6, 1980
10.

1. 80–31216
2. 34–089–23786–0014
3. 103 000 000
4. LBJ Drilling dba Jeff Moran
5. Carl W & Barbara Baker #1
6.
7. Licking OH
8. .0 million cubic feet
9. May 6, 1980
10.

1. 80–31217
2. 34–099–20216–0014
3. 108 000 000 denied
4. MB Operating Co Inc
5. Hawkins #B–1
6.
7. Mahoning OH
8. .0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31218
2. 34–103–22199–0014
3. 103 000 000
4. Bartlo Oil and Gas Co
5. Meeker unit #1
6.
7. Medina OH
8. 30.0 million cubic feet
9. May 6, 1980
10. Libbey-Owens-Ford Co

1. 80–31219
2. 34–117–23303–0014
3. 103 000 000
4. Hortin & Huffman
5. David Harruff #1
6.
7. Morrow OH
8. 6.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31220
2. 34–117–23327–0014
3. 103 000 000
4. Hortin & Huffman
5. Hugh Fogle #1
6.
7. Morrow OH
8. 6.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31221
2. 34–117–23330–0014
3. 103 000 000
4. Hortin & Huffman
5. Eston Bachelder #2
6.
7. Morrow OH
8. 10.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31222
2. 34–117–23335–0014
3. 103 000 000
4. Hortin & Huffman
5. Willard Frey #1
6.
7. Morrow OH
8. 20.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31223
2. 34–119–22141–0014
3. 108 000 000 denied
4. MB Operating Co Inc
5. Patton #1
6.
7. Muskingum OH
8. .0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31224
2. 34–119–23184–0014
3. 108 000 000
4. Chris Oil Co Inc
5. Binion #1
6.
7. Muskingum OH
8. 12.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31225
2. 34–119–24931–0014
3. 103 000 000
4. W J Lydic Inc
5. Gorley #2
6.
7. Muskingum OH
8. 18.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31226
2. 34–119–24935–0014
3. 103 000 000
4. W J Lydic Inc
5. Gorley #1
6.
7. Muskingum OH
8. 18.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31227
2. 34–119–25163–0014
3. 103 000 000
4. Leader Equities Inc
5. Ferquson #1
6.
7. Muskingum OH
8. 15.0 million cubic feet
9. May 6, 1980
10. American Energy Services Inc

1. 80–31228
2. 34–119–25179–0014
3. 103 000 000
4. Leader Equities Inc
5. Ross #4
6.
7. Muskingum OH
8. 15.0 million cubic feet
9. May 6, 1980
10. American Energy Services Inc

1. 80–31229
2. 34–127–24607–0014
3. 103 000 000
4. Petro Oil Co
5. Kopis #1
6.
7. Perry OH
8. 4.0 million cubic feet
9. May 6, 1980
10.

1. 80–31230
2. 34–127–24610–0014
3. 103 000 000
4. Thomas L Spohn
5. Woodrow & Margaret Riser #1
6.
7. Perry OH
8. 8.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31231
2. 34–133–20250–0014
3. 108 000 000 denied
4. MB Operating Co Inc
5. Brown #1
6.
7. Portage OH
8. .0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31232
2. 34–133–20252–0014
3. 108 000 000 denied
4. MB Operating Co Inc
5. Amlin #1

6.
7. Portage OH
8. .1 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31233
2. 34–133–20287–0014
3. 108 000 000 denied
4. MB Operating Co Inc
5. Jacobs #1
6.
7. Portage OH
8. .0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31234
2. 34–133–20314–0014
3. 108 000 000 denied
4. MB Operating Co Inc
5. Twark #1
6.
7. Portage OH
8. .8 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31235
2. 34–133–20321–0014
3. 108 000 000 denied
4. MB Operating Co Inc
5. Freeman #1
6.
7. Portage OH
8. .4 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31236
2. 34–133–21343–0014
3. 103 000 000
4. Dart Oil Co
5. Weingart #2
6.
7. Portage OH
8. 60.0 million cubic feet
9. May 6, 1980
10.

1. 80–31237
2. 34–133–22061–0014
3. 103 000 000
4. Jud Noble and Associates Inc
5. Canter #1
6.
7. Portage OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31238
2. 34–133–22062–0014
3. 103 000 000
4. Jud Noble and Associates Inc
5. Canter #2
6.
7. Portage OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31239
2. 34–151–23150–0014
3. 103 000 000
4. Viking Resources Corp
5. Hidden Valley unit #1
6.
7. Stark OH
8. 30.0 million cubic feet
9. May 6, 1980
10.

1. 80–31240
2. 34–155–21413–0014
3. 103 000 000
4. J P White
5. Newcomb Lumber #2
6.
7. Trumball, OH
8. 50.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp.

1. 80–31241
2. 34–157–20946–0014
3. 108 000 000 denied
4. MB Operating Co Inc
5. Hale #2
6.
7. Tuscarawas, OH
8. 1.4 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co.

1. 80–31242
2. 34–157–23431–0014
3. 103 000 000
4. The Mutual Oil & Gas Co
5. Glass 7–A
6.
7. Tuscarawas, OH
8. 50.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co.

1. 80–31243
2. 34–157–23450–0014
3. 103 000 000
4. The Mutual Oil & Gas Co
5. Edwards 1W
6.
7. Tuscarawas, OH
8. 30.0 million cubic feet
9. May 6, 1980
10. American Energy Service Inc.

1. 80–31244
2. 34–167–25079–0014
3. 103 000 000
4. Zenith Exploration Co
5. Elmer N Jarvis #1
6.
7. Washington, OH
8. 36.0 million cubic feet
9. May 6, 1980
10.

1. 80–31245
2. 34–167–25282–0014
3. 103 000 000
4. Thunderbird Petroleum Devel Co
5. Raymond & Caroline Bostaph #1
6.
7. Washington, OH
8. million cubic feet
9. May 6, 1980
10.

1. 80–31246
2. 34–169–21914–0014
3. 103 000 000
4. Kenoil
5. Chester Stellar #1
6.
7. Wayne, OH
8. 2.5 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp.

1. 80–31247/01384
2. 34–083–22295–0014
3. 108 000 000
4. Lew Bates Jr
5. Gorsuch #1
6.
7. Knox, OH
8. .4 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp.

1. 80–31248/01387
2. 34–031–22468–0014
3. 108 000 000
4. Lew Bates Jr
5. McCoy #2
6.
7. Coshocton, OH
8. 2.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp.

1. 80–31249/01389
2. 34–083–22352–0014
3. 108 000 000
4. Bates Oil & Gas Inc
5. Simpson #1
6.
7. Knox, OH
8. 2.6 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp.

1. 80–31250/03006
2. 34–127–23999–0014
3. 108 000 000
4. George W Sharp
5. R E Beard #6
6.
7. Perry, OH
8. 7.2 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp.

1. 80–31251/03367
2. 34–119–25770–0014
3. 108 000 000
4. George W Sharp
5. Ohio Power Co #7
6.
7. Muskingum, OH
8. 2.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp.

1. 80–31252/03368
2. 34–119–25130–0014
3. 108 000 000
4. George W Sharp
5. Ohio Power Co #6
6.
7. Muskingum, OH
8. 2.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp.

1. 80–31253/03369
2. 34–119–21792–0014
3. 108 000 000
4. George W Sharp
5. Ohio Power-Lee West MR71– #1
6.
7. Muskingum, OH
8. 5.4 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp.

1. 80–31254/03370
2. 34–119–26140–0014
3. 108 000 000
4. George W Sharp
5. Ohio Power Co #8
6.
7. Muskingum, OH
8. 1.8 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp.

1. 80–31255/03371
2. 34–119–27500–0014
3. 108 000 000
4. George W Sharp
5. Ohio Power Co #11
6.
7. Muskingum, OH
8. 1.8 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp.

1. 80–31256/03372
2. 34–119–27880–0014
3. 108 000 000
4. George W Sharp
5. Ohio Power Co #12
6.
7. Muskingum, OH
8. 1.8 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corporation.

1. 80–31257/03522
2. 34–151–22166–0014
3. 108 000 000
4. Belden & Blake Oil Production
5. T E Meyers #1–577
6.
7. Stark, OH
8. .1 million cubic feet
9. May 6, 1980
10. East Ohio Gas Company.

1. 80–31258/03549
2. 34–151–22355–0014
3. 108 000 000
4. Belden & Blake Oil Production
5. C Snyder #1–658
6.
7. Stark, OH
8. .1 million cubic feet
9. May 6, 1980
10. East Ohio Gas Company.

1. 80–31259/03641
2. 34–151–22471–0014
3. 108 000 000
4. Belden & Blake Oil Production
5. J Stempleski Comm #1–691
6.
7. Stark, OH
8. .1 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co.

1. 80–31260/03643
2. 34–151–22378–0014
3. 108 000 000
4. Belden & Blake Oil Production
5. E & M Schlegel Comm #2–685
6.
7. Stark, OH
8. .1 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co.

1. 80–31261/03813
2. 34–157–22403–0014
3. 108 000 000
4. Belden & Blake Oil Production
5. R Smith et al #1–748
6.
7. Tuscarawas, OH
8. .1 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co.

1. 80–31262/03871
2. 34–151–22297–0014
3. 108 000 000
4. Belden & Blake Oil Production
5. B Williams et al Comm #2–631
6.
7. Stark, OH
8. .1 million cubic feet
9. May 6, 1980
10. Belden & Blake Corp.

1. 80–31263/04321
2. 34–019–20611–0014
3. 108 000 000
4. Belden & Blake Oil Production
5. R & O Smith #4–698
6.
7. Carroll, OH
8. .1 million cubic feet
9. May 6, 1980
10. MB Operating Co Inc.

1. 80–31264/04332
2. 34–019–20511–0014
3. 108 000 000
4. Belden & Blake Oil Production
5. G Dowell #1–557
6.
7. Carroll, OH
8. .1 million cubic feet
9. May 6, 1980
10. MB Operating Co Inc.

1. 80–31265/04333
2. 34–157–21108–0014
3. 108 000 000
4. Belden & Blake Oil Production
5. M & V Rice #2–517
6.
7. Tuscarawas, OH
8. .1 million cubic feet
9. May 6, 1980
10. Buckeye-Franklin C.

1. 80–31266/06299
2. 34–031–22422–0014
3. 108 000 000
4. Lew Bates Jr
5. McCoy #1
6.
7. Coshocton, OH
8. 7.0 million cubic feet
9. May 3, 1980
10. Columbia Gas Transmission Corp.

1. 80–31267
2. 34–005–22214–0014
3. 103 000 000
4. Fred R Ingram
5. Sam Jacobs #1
6.
7. Ashland, OH
8. 80.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp.

1. 80–31268
2. 34–005–23154–8000
3. 108 000 000
4. Ohio Natural Fuel Co
5. Gibbons #1
6.
7. Ashland, OH
8. 2.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp.

1. 80–31269
2. 34–031–23052–0014
3. 108 000 000
4. The Oxford Oil Co
5. James Lee #1
6.
7. Coshocton, OH
8. 12.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil.

1. 80–31270
2. 34–031–23079–0014
3. 108 000 000
4. The Oxford Oil Co
5. James Lee #2
6.
7. Coshocton, OH
8. 12.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil.

1. 80–31271
2. 34–059–21177–0014
3. 108 000 000
4. David A Waldron DBA Bkt Oil Co
5. Hickenbottom #1
6.
7. Guernsey, OH
8. 4.5 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co.

1. 80–31272
2. 34–059–22079–0014
3. 108 000 000 Denied
4. Consol Resources of Amer Inc
5. Robert & Moyra S Culbertson #1
6. Knox
7. Guernsey, OH
8. 5.1 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co.

1. 80–31273
2. 34–059–22080–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. William & James Douglas #1
6. Knox
7. Guernsey, OH
8. 11.0 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co.

1. 80–31274
2. 34–059–22081–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. William & James Douglas #2
6. Knox
7. Guernsey, OH
8. 7.3 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co.

1. 80–31275
2. 34–059–27082–0014
3. 108 000 000
4. Consol Resources of America Inc
5. John & Mary Nelson #2
6. Knox
7. Guernsey, OH
8. 12.8 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co.

1. 80–31276
2. 34–059–22083–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. John & Mary Nelson #1
6. Knox
7. Guernsey, OH
8. 5.5 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co.

1. 80–31277
2. 34–059–20840–0140
3. 108 000 000
4. Consolidated Resources of Amer Inc
5. Charles R Smith #1

6. Knox
7. Guernsey, OH
8. 12.8 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co.

1. 80–31278
2. 34–059–22140–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Glenn & Mildred Kohl #2
6. Knox
7. Guernsey, OH
8. 7.3 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co.

1. 80–31279
2. 34–059–22143–0014
3. 108 000 000
4. Consol Resources of Amer Inc.
5. Jesse & Laura Weber #1
6. Knox
7. Guernsey, OH
8. 9.1 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co.

1. 80–31280
2. 34–059–22144–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Jessee & Laura Weber #2
6. Knox
7. Guernsey, OH
8. 11.0 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31281
2. 34–059–21450–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Jessee & Laura Weber #3
6. Knox
7. Guernsey, OH
8. 9.1 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31282
2. 34–059–22146–0014
3. 108 000 000 Denied
4. Consolidated Resources of Amer Inc
5. Goldie Bell #1
6. Knox
7. Guernsey, OH
8. 45.6 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31283
2. 34–059–22153–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Glenn & Mildred Kohl #1
6. Knox
7. Guernsey, OH
8. 7.3 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31284
2. 34–059–22302–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Earl & Adah Weber #1
6. Knox
7. Guernsey, OH
8. 11.0 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31285
2. 34–059–22303–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Earl & Adah Weber #2
6. Knox
7. Guernsey, OH
8. 3.0 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31286
2. 34–059–22304–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Joe & Evelyn Tracy #1
6. Knox
7. Guernsey, OH
8. 3.5 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31287
2. 34–059–22305–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Willard Minigh #1
6. Knox
7. Guernsey, OH
8. 11.0 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31288
2. 34–059–22306–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Tracy-Rose Unit #1
6. Knox
7. Guernsey, OH
8. 9.1 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31289
2. 34–059–22308–0014
3. 103 000 000
4. Buckeye Dev Drilling Project Ltd
5. Frank Neuhart #1
6. Senecaville
7. Guernsey, OH
8. 73.0 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31290
2. 34–059–22311–0014
3. 108 000 000
4. Buckeye Dev Drilling Project Ltd
5. Elmer & Mary Lou Bishard #1
6. Knox
7. Guernsey, OH
8. 6.0 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31291
2. 34–059–22365–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Kenneth Neal #2
6. Knox
7. Guernsey, OH
8. 3.5 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31292
2. 34–059–22366–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Kenneth Neal #1
6. Knox
7. Guernsey, OH
8. 3.5 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31293
2. 34–059–22368–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Neal-Thompson Unit #1
6. Knox
7. Guernsey, OH
8. 7.3 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31294
2. 34–059–22371–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Kenneth Neal #3
6. Knox
7. Guernsey, OH
8. 18.3 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31295
2. 34–059–22373–0014
3. 108 000 000
4. Buckeye Dev Drilling Project Ltd
5. CRA Fee #1
6. Knox
7. Guernsey, OH
8. 7.3 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31296
2. 34–059–22406–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Clarence Lamson #1
6. Knox
7. Guernsey, OH
8. 7.3 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31297
2. 34–059–22407–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. W Allen Warne #1
6. Knox
7. Guernsey, OH
8. 3.6 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31298
2. 34–059–22421–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Joseph & Loretta Goggin #1
6. Knox
7. Guernsey, OH
8. 3.6 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31299
2. 34–059–22473–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. William L Tallichet #1
6. Knox
7. Guernsey, OH
8. 9.1 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31300
2. 34–059–22474–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Jesse Weber #6
6. Knox
7. Guernsey, OH
8. 9.1 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31301
2. 34–059–22475–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Ellsworth & Ruby Heston #1
6. Knox
7. Guernsey, OH
8. 12.8 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31302
2. 34–059–22487–0014
3. 108 000 000
4. Consol Resources of Amer Inc
5. Stephen Dotson #1
6. Knox
7. Guernsey, OH
8. 5.5 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31303
2. 34–059–22559–0014
3. 103 000 000
4. Consol Resources of Amer Inc
5. K D Hall-Brice Keller #1
6. Senecaville
7. Guernsey, OH
8. 55.0 million cubic feet
9. May 6, 1980
10. Cincinnati Gas & Electric Co

1. 80–31304
2. 34–067–20146–0014
3. 108 000 000
4. The Clinton Oil Company
5. Edie #1
6.
7. Harrison, OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31305
2. 34–067–20154–0014
3. 108 000 000
4. Clinton Oil Co
5. Edie #2
6.
7. Harrison, OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31306
2. 34–073–22205–0014
3. 103 000 000
4. The Oxford Oil Co
5. Greenhill #16
6.
7. Hocking, OH
8. 10.0 million cubic feet
9. May 6, 1980
10.

1. 80–31307
2. 34–075–22038–0014
3. 108 000 000
4. Buckeye Oil Producing Co
5. Wolgamot 38 #1
6.
7. Holmes, OH
8. 3.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31308
2. 34–075–22056–0014
3. 108 000 000
4. Buckeye Oil Producing Co
5. Wolgamot 38 #2
6.
7. Holmes, OH
8. 3.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31309
2. 34–075–22223–0014
3. 103 000 000
4. R D Curry Production Co
5. Clarence & Lillian Starner #2
6.
7. Holmes, OH
8. 5.0 million cubic feet
9. May 6, 1980
10. The Columbia Gas Transmission Corp

1. 80–31310
2. 34–075–22311–0014
3. 103 000 000
4. Bands Co Inc
5. Potts #2
6.
7. Holmes, OH
8. 100.0 million cubic feet
9. May 6, 1980
10.

1. 80–31311
2. 34–075–22380–0014
3. 103 000 000
4. William F Hill
5. Roger J Dennerll #2
6.
7. Holmes, OH
8. 8.0 million cubic feet
9. May 6, 1980
10.

1. 80–31312
2. 34–075–22441–0014
3. 103 000 000
4. Buckhorn Oil Company Inc
5. Brumme #1
6.
7. Holmes, OH
8. 20.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Trans

1. 80–31313
2. 34–083–22706–0014
3. 103 000 000
4. Akron Petroleum Co Inc
5. Calun Davis #1
6.
7. Knox, OH
8. .0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31314
2. 34–089–22941–0014
3. 108 000 000
4. The Oxford Oil Co
5. Doris Folk #1
6.
7. Licking, OH
8. 2.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31315
2. 34–089–23310–0014
3. 108 000 000
4. The Oxford Oil Co
5. Doris White Folk #2
6.
7. Licking, OH
8. 1.5 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31316
2. 34–089–23697–0014
3. 103 000 000
4. Johnson Drilling Co
5. William Martin #1
6.
7. Licking, OH
8. .5 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31317
2. 34–103–22203–0000
3. 103 000 000
4. Steve Gnatovich
5. Mugrage #1
6.
7. Medina, OH
8. 25.0 million cubic feet
9. May 6, 1980
10. Columbia Gas of Ohio

1. 80–31318
2. 34–111–21971–0014
3. 103 000 000
4. Drillers Petroleum Corp
5. George Evert West #1–A
6.
7. Monroe, OH
8. 60.0 million cubic feet
9. May 6, 1980
10.

1. 80–31319
2. 34–115–21404–0014
3. 108 000 000
4. The Oxford Oil Co
5. Calvin Fisher #1
6.
7. Morgan, OH
8. 4.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31320
2. 34–115–21591–0014
3. 108 000 000
4. The Oxford Oil Co
5. Robert Foley #1
6.
7. Morgan OH
8. .4 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31321
2. 34–115–21594–0014
3. 108 000 000
4. The Oxford Oil Co
5. Robert Foley #2
6.
7. Morgan OH
8. .4 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31322
2. 34–115–21597–0014
3. 108 000 000
4. The Oxford Oil Co
5. Robert Foley #3

6.
7. Morgan OH
8. .4 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31323
2. 34–115–21690–0014
3. 108 000 000
4. The Oxford Oil Co
5. William Goode #1
6.
7. Morgan OH
8. 1.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31324
2. 34–115–21794–0014
3. 108 000 000
4. The Oxford Oil Co
5. William Goode #2
6.
7. Morgan OH
8. 1.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31325
2. 34–115–21998–0014
3. 103 000 000
4. American Well Management Co
5. Price No 1
6.
7. Morgan OH
8. 18.0 million cubic feet
9. May 6, 1980
10.

1. 80–31326
2. 34–119–20423–0014
3. 108 000 000
4. The Oxford Oil Co
5. Minnie Maclaine #1
6.
7. Muskingum OH
8. 1.5 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31327
2. 34–119–20706–0014
3. 108 000 000
4. The Oxford Oil Co
5. Margaret McCoid #1
6.
7. Muskingum OH
8. 4.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31328
2. 34–119–20930–0014
3. 108 000 000
4. The Oxford Oil Co
5. Frank Gardner #1
6.
7. Muskingum OH
8. 3.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31329
2. 34–119–21020–0014
3. 108 000 000
4. The Oxford Oil Co
5. Chestina Fauber #3
6.
7. Muskingum OH
8. 7.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31330
2. 34–119–21522–0014
3. 108 000 000
4. The Oxford Oil Co
5. Pearl Lantz #1
6.
7. Muskingum OH
8. 13.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31331
2. 34–119–21731–0014
3. 108 000 000
4. The Oxford Oil Co
5. Emma Karnes #1
6.
7. Muskingum OH
8. 3.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31332
2. 34–119–22034–0014
3. 108 000 000
4. Mammoth Producing Corp
5. Blackwood #1
6.
7. Muskingum OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Company

1. 80–31333
2. 34–119–22041–0014
3. 108 000 000
4. The Oxford Oil Co
5. Forrest Headley #1
6.
7. Muskingum OH
8. 10.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31334
2. 34–119–22350–0014
3. 108 000 000
4. The Oxford Oil Co
5. Richard Gill #1
6.
7. Muskingum OH
8. 3.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31335
2. 34–119–22911–0014
3. 108 000 000
4. The Oxford Oil Co
5. William Harper #1
6.
7. Muskingum OH
8. 5.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31336
2. 34–119–22965–0014
3. 108 000 000
4. The Oxford Oil Co
5. Earl Harmon #1
6.
7. Muskingum OH
8. 2.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31337
2. 34–119–23064–0014
3. 108 000 000
4. The Oxford Oil Co
5. John Mahon #1
6.
7. Muskingum OH
8. 10.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31338
2. 34–119–23363–0014
3. 108 000 000
4. The Oxford Oil Co
5. Fred Lenhart #1
6.
7. Muskingum OH
8. 5.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31339
2. 34–119–23422–0014
3. 108 000 000
4. The Oxford Oil Co
5. Millard Grear #1
6.
7. Muskingum OH
8. 5.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31340
2. 34–119–23491–0014
3. 108 000 000
4. The Oxford Oil Co
5. Donald Hobbs #1
6.
7. Muskingum OH
8. 5.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31341
2. 34–119–23582–0014
3. 108 000 000
4. The Oxford Oil Co
5. Frank Gardner #3
6.
7. Muskingum OH
8. 3.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31342
2. 34–119–23583–0014
3. 108 000 000
4. The Oxford Oil Co
5. Frank Gardner #2
6.
7. Muskingum OH
8. 3.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31343
2. 34–119–23763–0014
3. 108 000 000
4. The Oxford Oil Co
5. Chalmer Gatewood #1
6.
7. Muskingum OH
8. 5.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31344
2. 34–119–23781–0014
3. 108 000 000
4. The Oxford Oil Co
5. R H Gibson #1
6.
7. Muskingum OH
8. 14.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31345
2. 34–119–23789–0014
3. 108 000 000
4. The Oxford Oil Co
5. Rowena Fraunfelter #2
6.
7. Muskingum OH
8. 20.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31346
2. 34–119–23955–0014
3. 108 000 000
4. The Oxford Oil Co
5. Fred Lenhart #2
6.
7. Muskingum OH
8. 5.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31347
2. 34–119–23968–0014
3. 108 000 000
4. The Oxford Oil Co
5. Alpine Farms #2
6.
7. Muskingum OH
8. 15.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Trans Corp

1. 80–31348
2. 34–119–24089–0014
3. 108 000 000
4. The Oxford Oil Co
5. Fred Lenhart #3
6.
7. Muskingum OH
8. 5.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31349
2. 34–119–24795–0014
3. 103 000 000
4. The Clinton Oil Co
5. Hittle #2
6.
7. Muskingum OH
8. 25.0 million cubic feet
9. May 6, 1980
10. Timken Co

1. 80–31350
2. 34–119–24877–0014
3. 103 000 000
4. The Oxford Oil Co
5. Maurice Hartley #1
6.
7. Muskingum OH
8. 15.0 million cubic feet
9. May 6, 1980
10.

1. 80–31351
2. 34–119–24956–0014
3. 103 000 000
4. Berea Oil and Gas Corp
5. Cain #2
6.
7. Muskingum OH
8. 120.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission

1. 80–31352
2. 34–119–25006–0014
3. 103 000 000
4. The Clinton Oil Co
5. Madden #1
6.
7. Muskingum OH
8. 25.0 million cubic feet
9. May 6, 1980
10.

1. 80–31353
2. 34–121–22238–0014
3. 103 000 000
4. Thunderbird Petroleum Co
5. Thompson Well #1
6.
7. Noble OH
8. 50.0 million cubic feet
9. May 6, 1980
10.

1. 80–31354
2. 34–121–22257–0014
3. 103 000 000
4. Thunderbird Petroleum Corp
5. Rogers Well #1
6.
7. Noble OH
8. 50.0 million cubic feet
9. May 6, 1980
10.

1. 80–31355
2. 34–121–22261–0014
3. 103 000 000
4. Thunderbird Petroleum Develop
5. Beulah Kehl #1
6.
7. Noble OH
8. 50.0 million cubic feet
9. May 6, 1980
10.

1. 80–31356
2. 34–127–20393–0014
3. 108 000 000
4. The Oxford Oil Co
5. J W Ford #2
6.
7. Perry OH
8. 1.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil

1. 80–31357
2. 34–127–23122–0014
3. 108 000 000
4. The Oxford Oil Co
5. David Lewis #2
6.
7. Perry OH
8. 4.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31358
2. 34–127–23151–0014
3. 108 000 000
4. The Oxford Oil Co
5. Raymond Jones #1
6.
7. Perry OH
8. 1.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31359
2. 34–127–24515–0014
3. 103 000 000
4. Irvin Producing Co
5. Walter Pettet #3
6.
7. Perry OH
8. 10.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31360
2. 34–127–24581–0014
3. 103 000 000
4. Altheirs Oil Inc
5. Edgar Newlon #1–A
6. Pike Twp
7. Perry OH
8. .0 million cubic feet
9. May 6, 1980
10.

1. 80–31361
2. 34–127–24613–0014
3. 103 000 000
4. Altheirs Oil Inc
5. Altheirs Oil Inc #1
6. Saltlick Twp
7. Perry OH
8. 5.0 million cubic feet
9. May 6, 1980
10. Nico-Fibers Inc

1. 80–31362
2. 34–127–24614–0014
3. 103 000 000
4. Altheirs Oil Inc
5. Altheirs Oil Inc #2
6. Saltlick Twp
7. Perry OH
8. 5.0 million cubic feet
9. May 6, 1980
10. Nico-Fibers Inc

1. 80–31363
2. 34–127–24617–0014
3. 103 000 000
4. Altheirs Oil Inc
5. Altheirs Oil Inc #7
6. Saltlick Twp
7. Perry OH
8. 5.0 million cubic feet
9. May 6, 1980
10. Nico-Fibers Inc

1. 80–31364
2. 34–133–21324–0014
3. 103 000 000
4. The Clinton Oil Co
5. Siegenthaler #1
6.
7. Portage OH
8. 75.0 million cubic feet
9. May 6, 1980
10. Timken Co

1. 80–31365
2. 34–133–21342–0014
3. 103 000 000
4. Dart Oil Co
5. Weingart #1
6.
7. Portage OH
8. 50.0 million cubic feet
9. May 6, 1980
10.

1. 80–31366
2. 34–153–20722–0014
3. 103 000 000
4. Bartlo Oil & Gas Co
5. Wesche #1
6.
7. Summit OH
8. 20.0 million cubic feet
9. May 6, 1980
10. Libbey-Owens-Ford Co

1. 80–31367
2. 34–157–21052–0014
3. 108 000 000
4. M B Belden Jr
5. B G Handy #1

6.
7. Tuscarawas OH
8. 1.5 million cubic feet
9. May 6, 1980
10. Buckeye-Franklin Co

1. 80–31368
2. 34–157–21335–0014
3. 108 000 000
4. David A Waldron
5. Simmers-Wolford #1
6.
7. Tuscarawas OH
8. 65.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31369
2. 34–157–21437–0014
3. 108 000 000
4. H D Collins Trust
5. Gastaldo #1
6.
7. Tuscarawas OH
8. 3.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31370
2. 34–157–21578–0014
3. 108 000 000
4. The Clinton Oil Co
5. Guthrie Unit #1
6.
7. Tuscarawas OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31371
2. 34–157–21763–0014
3. 108 000 000
4. Texas Ponderosa Oil & Gas Inc
5. Glass #1
6.
7. Tuscarawas OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31372/1988
2. 34–157–21988–0014
3. 108 000 000
4. Texas Ponderosa Oil & Gas Co
5. McClintock Unit #1
6. Lawrence 23 SW Qtr
7. Tuscarawas OH
8. 20.0 million cubic feet
9. May 6, 1980
10. East Ohio Gas Co

1. 80–31373
2. 34–157–23466–0014
3. 103 000 000
4. New Frontier Exploration Inc
5. James Fisher #1
6.
7. Tuscarawas OH
8. 28.0 million cubic feet
9. May 6, 1980
10.

1. 80–31374
2. 34–167–24389–0014
3. 103 000 000
4. W J Lydic Inc
5. Fort Frye Boe #1
6.
7. Washington OH
8. 15.0 million cubic feet
9. May 6, 1980
10. Columbia Gas of Ohio

1. 80–31375
2. 34–169–21186–0014
3. 108 000 000
4. Buckeye Oil Producing Co
5. Wilson #1
6.
7. Wayne OH
8. 3.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Transmission Corp

1. 80–31376
2. 34–169–22063–0014
3. 108 000 000
4. Buckeye Oil Producing Co
5. Armstrong #1
6.
7. Wayne OH
8. 14.0 million cubic feet
9. May 6, 1980
10. Pominex Inc

1. 80–31377/03366
2. 34–127–23834–0014
3. 108 000 000
4. George W Sharp
5. Dale & Mabel Garey #6
6.
7. Perry OH
8. 2.2 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31378
2. 34–115–21485–0014
3. 108 000 000
4. The Oxford Oil Co
5. Wayne Horner #1
6.
7. Morgan OH
8. 5.0 million cubic feet
9. May 6, 1980
10. National Gas & Oil Corp

1. 80–31379
2. 34–019–21069–0014
3. 103 000 000
4. Clay County Productions Co Inc
5. Conotton Quarries #1
6.
7. Carroll OH
8. 5.0 million cubic feet
9. May 6, 1980
10. Bonanza Gas Line

Oklahoma Corporation Commission

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or Block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31446/01208
2. 35–003–00000–0000
3. 108 000 000
4. Conoco Inc
5. Ikhard Hague No 1
6. N E Cherokee
7. Alfalfa OK
8. 16.4 million cubic feet
9. May 5, 1980
10. Oklahoma Natural Gas Co

1. 80–31447/01210
2. 35–003–35268–0000
3. 108 000 000
4. Conoco Inc
5. A B Hague No 1
6. N E Cherokee
7. Alfalfa OK
8. 3.9 million cubic feet
9. May 5, 1980
10. Oklahoma Natural Gas Co

1. 80–31448/02840
2. 35–111–00000–0000
3. 108 000 000
4. James W Wise
5. Smith C #1
6. Smith Ranch (E½ NW¼ 19–13–N–11E)
7. Okmulgee OK
8. 5.0 million cubic feet
9. May 5, 1980
10. Phillips Petroleum Co

1. 80–31449/02967
2. 35–019–21747–0000
3. 103 000 000
4. Kingery Drilling Co Inc
5. Isbell #1
6.
7. Carter OK
8. 103.4 million cubic feet
9. May 5, 1980
10. Aminoil USA

1. 80–31450/02841
2. 35–111–00000–0000
3. 108 000 000
4. James W Wise
5. Smith A #1
6. Smith Ranch (E½ NE¼ 19–13N–11E)
7. Okmulgee OK
8. 4.0 million cubic feet
9. May 5, 1980
10. Phillips Petroleum Co

1. 80–31451/02968
2. 35–003–20614–0000
3. 103 000 000
4. Union Texas Petroleum
5. J F Curry No 2
6. Chaney Dell East
7. Alfalfa OK
8. 288.0 million cubic feet
9. May 5, 1980
10. Panhandle Eastern Pipeline Co

1. 80–31452/06179
2. 35–129–20416–0000
3. 107 000 000
4. L G Williams Oil Co Inc
5. Bessire 32–1
6. Unnamed
7. Roger Mills OK
8. .0 million cubic feet
9. May 5, 1980
10. Michigan Wisconsin Pipeline Co

1. 80–31453/03558
2. 35–093–21482–0000
3. 103 000 000
4. Al McCord Inc
5. W Jantz 1–28
6. Meno-Ringwood
7. Major OK
8. 38.0 million cubic feet
9. May 5, 1980
10. Union Texas Petroleum

1. 80–31454/03554
2. 35–047–21801–0000
3. 103 000 000
4. Cummings Oil Co
5. Havlik 1–19
6. Bison Area
7. Garfield OK
8. 8.0 million cubic feet

9. May 5, 1980
10. Panhandle Eastern Pipeline Co
1. 80-31455/02949
2. 35-047-21303-0000
3. 103 000 000
4. Peninsula Resources Corp
5. Gerken No 1
6. Sooner Trend
7. Garfield County OK
8. 182.5 million cubic feet
9. May 5, 1980
10. Grace Petroleum Corp
1. 80-31456/03118
2. 35-003-20675-0000
3. 103 000 000
4. Petroleum Reserve Corp
5. Penner B 4-1
6. Ringwood
7. Alfalfa OK
8. 120.0 million cubic feet
9. May 5, 1980
10. Union Texas Petroleum
1. 80-31457/03488
2. 35-085-00000-0000
3. 108 000 000
4. Lincoln Rock Corp
5. Westheimer B-1
6. Northeast Marietta
7. Love OK
8. .0 million cubic feet
9. May 5, 1980
10. Cimarron Transmission Co
1. 80-31458/02950
2. 35-047-21484-0000
3. 103 000 000
4. Peninsula Resources Corp
5. Eggers No 1
6. Sooner Trend
7. Garfield OK
8. 109.5 million cubic feet
9. May 5, 1980
10. Grace Petroleum Corp
1. 80-31459/02947
2. 35-047-21485-0000
3. 103 000 000
4. Peninsula Resources Corp
5. Mittlesteadt 1-34 A
6. Sooner Trend
7. Garfield OK
8. 182.5 million cubic feet
9. May 5, 1980
10. Grace Petroleum Corp
1. 80-31460/02514
2. 35-123-00000-0000
3. 108 000 000
4. Rockwell Petroleum Corp
5. William-Gilmore #2
6. Allen District
7. Pontotoc OK
8. 2.0 million cubic feet
9. May 5, 1980
10. Arkansas-Louisiana Gas Co
1. 80-31461/03489
2. 35-085-00000-0000
3. 108 000 000
4. Lincoln Rock Corp
5. Daube #3
6. Northeast Marietta
7. Love OK
8. 9.4 million cubic feet
9. May 5, 1980
10. Cimarron Transmission Co
1. 80-31462/03593
2. 35-073-22146-0000
3. 103 000 000
4. E Lyle Johnson Inc
5. Burshik #2-5
6. Sooner Trend
7. Kingfisher OK
8. 36.5 million cubic feet
9. May 5, 1980
10. Panhandle Eastern Pipe Line Co
1. 80-31463/02701
2. 35-137-00000-0000
3. 108 000 000
4. Mobil Oil Corp
5. Myrtle Dillard #84
6. Sho Vel Tum
7. Stephens OK
8. 5.4 million cubic feet
9. May 5, 1980
10. Getty Oil Co
1. 80-31464/03193
2. 35-007-00000-0000
3. 108 000 000
4. Mobil Oil Corp
5. Gustin Well #3
6. Logan S W
7. Beaver OK
8. 1.9 million cubic feet
9. May 5, 1980
10. Phillips Petroleum Co
1. 80-31465/02508
2. 35-123-00000-0000
3. 108 000 000
4. Rockwell Petroleum Corp
5. William-Gilmore #1
6. Allen District
7. Pontotoc OK
8. 2.0 million cubic feet
9. May 5, 1980
10. Arkansas-Louisiana Gas Co

Wyoming Oil and Gas Conservation Commission

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)
1. 80-31466/NG-26-80
2. 49-003-20149-0000
3. 108 000 000
4. James T Cliburn
5. Ten Sleep Cattle Co 1
6. Manderson
7. Big Horn WY
8. 14.2 million cubic feet
9. May 6, 1980
10. Montana-Dakota Utilities Co
1. 80-31467/NG-37-80
2. 49-007-20065-0000
3. 108 000 000
4. El Paso Products Co
5. Monell Unit No 105
6. Patrick Draw
7. Sweetwater WY
8. .7 million cubic feet
9. May 6, 1980
10. Colorado Interstate Gas Co
1. 80-31468/NG-36-80
2. 49-007-05391-0000
3. 108 000 000
4. El Paso Products Co
5. Monell Unit #82
6. Patrick Draw
7. Sweetwater WY
8. .0 million cubic feet
9. May 6, 1980
10. Colorado Interstate Gas Co
1. 80-31469/NG-268-79
2. 49-009-21497-0000
3. 102 000 000
4. Chinook Resources Inc
5. Jack Morton 1-6 21496
6. Scott
7. Converse WY
8. 7.0 million cubic feet
9. May 6, 1980
10. McCulloch Gas Processing Corp
1. 80-31470/NG-267-79
2. 49-009-21486-0000
3. 102 000 000
4. Chinook Resources Inc
5. Morton 1-32 21486
6. Scott
7. Converse WY
8. 9.0 million cubic feet
9. May 6, 1980
10. McCulloch Gas Processing Corp

U.S. Geological Survey, Metairie

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)
1. 80-31382/G0-1309
2. 17-700-40417-0000-0
3. 102 000 000
4. Natomas Offshore Exploration Inc
5. West Cameron Blk 281 No A-7
6. West Cameron
7. 281
8. 2920.0 million cubic feet
9. May 6, 1980
10. Mid Louisiana Gas Co; Michigan Wisconsin P L Co
1. 80-31383/G0-1312
2. 17-700-40310-0000-0
3. 102 000 000
4. Natomas Offshore Exploration Inc
5. West Cameron Blk 281 No A-1
6. West Cameron
7. 281
8. 2920.0 million cubic feet
9. May 6, 1980
10. Mid Louisiana Gas Co; Michigan Wisconsin PL Co
1. 80-31384/G0-1313
2. 17-700-40389-0000-0
3. 102 000 000
4. Natomas Offshore Exploration Inc
5. West Cameron Blk 281 No A-2
6. West Cameron
7. 281
8. 2920.0 million cubic feet
9. May 6, 1980
10. Mid Louisiana Gas Co; Michigan Wisconsin P L Co
1. 80-31386/9-1038
2. 17-711-40430-0051-0
3. 102 000 000
4. Ocean Production Company

5. OCS–G 038 No 4A
6. Ship Shoal 113 Field
7. 120
8. 2200.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas PL Corp

1. 80–31387/G9–1132
2. 17–715–40155–0100–0
3. 102 000 000
4. C & K Offshore Co
5. South Timbalier 190 No A–2
6. South Timbalier
7. 190
8. 1200.0 million cubic feet
9. May 6, 1980
10. Trunkline Gas Co

1. 80–31389/G9–1182
2. 17–705–40285–0052–0
3. 102 000 000
4. Mobil Oil Exploration & Producing
5. Vermilion Block 215 #6B
6. Vermilion
7. 215
8. 450.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipe Line Corp

1. 80–31390/G9–1177
2. 17–711–40382–0103–0
3. 102 000 000
4. Mobil Oil Exploration & Producing
5. Ship Shoal 72 No 14–C
6. Ship Shoal
7. 72
8. 427.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipe Line Corp

1. 80–31391/G9–1083
2. 17–703–40159–0000–0
3. 102 000 000
4. Sonat Exploration Co
5. OCS G–3288 No A–2
6. East Cameron
7. 46
8. 1095.0 million cubic feet
9. May 6, 1980
10. Southern Natural Gas Co

1. 80–31392/G9–1084
2. 17–703–40176–0000–0
3. 102 000 000
4. Sonat Exploration Co
5. OCS G–3288 No A–3
6. East Cameron
7. 46
8. 1095.0 million cubic feet
9. May 6, 1980
10. Southern Natural Gas Co

1. 80–31393/G9–1115
2. 17–715–40230–0051–0
3. 102 000 000
4. Gulf Oil Corp
5. OCS G–2625 No C–2
6. South Timbalier Blk 37
7. 37
8. 365.0 million cubic feet
9. May 6, 1980
10. Texas Eastern Trans Corp; Tennessee Gas P L Co; Southern Natural Gas Co; Columbia Gas Transmission Co

1. 80–31394/G9–1106
2. 17–709–40350–00S1–0
3. 102 000 000
4. Gulf Oil Corp
5. OCS–G 0983 #G–9
6. Eugene Island
7. 252
8. 1095.0 million cubic feet
9. May 6, 1980
10. Sea Robin Pipeline Co; Texas Eastern Transmission Corp

1. 80–31395/G9–1110
2. 17–705–40363–0000–0
3. 102 000 000
4. McMoran Offshore Exploration Co
5. OCS–G–3390 #9
6. Vermilion
7. 25
8. 5475.0 million cubic feet
9. May 6, 1980
10. Transco Gas Pipeline Co; Public Service Electric & Gas Co

1. 80–31397/G0–1272
2. 17–720–40066–0000–0
3. 107 000 000
4. Anadarko Production Co
5. West Delta 138 No A–4
6. West Delta
7. 138
8. 100.0 million cubic feet
9. May 6, 1980
10. Northern Natural Gas Co

1. 80–31398/G0–1302
2. 17–711–40358–0000–1
3. 102 000 000
4. Amoco Production Co
5. OCS–G–3160 No A–3
6. Ship Shoal
7. 84
8. 3650.0 million cubic feet
9. May 6, 1980
10.

1. 80–31399/G0–1303
2. 17–711–40358–0000–2
3. 102 000 000
4. Amoco Production Co
5. OCS–G–3160 No A–3D
6. Ship Shoal
7. 84
8. 3650.0 million cubic feet
9. May 6, 1980
10.

1. 80–31400/G0–1301
2. 17–711–40357–0000–0
3. 102 000 000
4. Amoco Production Co
5. OCS–G–3160 No A–2
6. Ship Shoal
7. 84
8. 3650.0 million cubic feet
9. May 6, 1980
10.

1. 80–31401/9–1039
2. 17–711–40434–0051–0
3. 102 000 000
4. Ocean Production Company
5. OCS–G 038 No 5A
6. Ship Shoal 113 Field
7. 120
8. 2200.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipeline Corp

1. 80–31402/9–1037
2. 17–711–40448–0051–0
3. 102 000 000
4. Ocean Production Company
5. OCS–G 3164 No 1A
6. Ship Shoal
7. 135
8. 1500.0 million cubic feet
9. May 6, 1980
10. Michigan-Wisconsin Pipeline Co

1. 80–31403/G0–1297
2. 17–707–40329–0000–0
3. 102 000 000
4. Shell Oil Co
5. OCS G–0789 #A–12
6. South Marsh Island
7. 48
8. 1726.0 million cubic feet
9. May 6, 1980
10. Michigan Wisconsin Pipeline Co

1. 80–31404/G0–1296
2. 17–707–40311–0000–0
3. 102 000 000
4. Shell Oil Company
5. OCS G–0789 #A–8
6. South Marsh Island
7. 51
8. .0 million cubic feet
9. May 6, 1980
10. Michigan-Wisconsin Pipeline Co

1. 80–31405/G0–1292
2. 17–711–40477–0051–0
3. 102 000 000
4. Ocean Production Co
5. OCS–G–042 No 17 A (ST #3)
6. Ship Shoal 113 Field
7. 94
8. 110.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipeline Corp

1. 80–31406/G9–1184
2. 17–715–40310–0051–0
3. 102 000 000
4. Exxon Corp
5. OCS–G 1251 No C–5
6. South Timbalier
7. 165
8. 1800.0 million cubic feet
9. May 6, 1980
10. Trunkline Gas Co

1. 80–31407/G9–1130
2. 17–707–40331–0000–0
3. 107 000 000
4. Placid Oil Co
5. OCS–G–2600 #E–8
6. South Marsh Island
7. 281
8. 2745.0 million cubic feet
9. May 6, 1980
10. Trunkline Gas Co Southern Natural Gas Co

1. 80–31408/9–1041
2. 17–711–40440–0051–0
3. 102 000 000
4. Ocean Production Company
5. OCS–G 038 No 7A
6. Ship Shoal 113 Field
7. 120
8. 2200.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipeline Corp

1. 80–31409/G0–1251
2. 17–700–40275–0000–0
3. 102 000 000
4. The Superior Oil Co
5. OCS–0244 No 17
6. West Cameron
7. 71
8. 1929.0 million cubic feet
9. May 6, 1980
10. Michigan-Wisconsin Pipeline Co

1. 80–31410/G9–1202
2. 17–711–40468–0000–0
3. 102 000 000
4. Kerr-McGee Corp

5. OCS 0346 No 37
6. Ship Shoal
7. 28
8. 396.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipeline Corp

1. 80-31411/G9-1129
2. 17-702-40491-0000-0
3. 102 000 000
4. Marathon Oil Co
5. OCS G-2233 #B-1
6. West Cameron South Addition
7. 619
8. 4380.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipeline Corp

1. 80-31412/G0-1304
2. 17-711-40479-0000-1
3. 102 000 000
4. Amoco Production Co
5. OCS-G-3160 No A-5
6. Ship Shoal
7. 84
8. 3650.0 million cubic feet
9. May 6, 1980
10.

1. 80-31413/9-1040
2. 17-711-40442-0051-0
3. 102 000 000
4. Ocean Production Company
5. OCS-G 038 No 6A
6. Ship Shoal 113 Field
7. 120
8. 2200.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipeline Corp

1. 80-31414/G0-1305
2. 17-711-40479-0000-2
3. 102 000 000
4. Amoco Production Co
5. OCS-G-3160 No A-5D
6. Ship Shoal
7. 84
8. 3650.0 million cubic feet
9. May 6, 1980
10.

1. 80-31415/G9-1201
2. 17-708-40191-0000-0
3. 102 000 000
4. Pennzoil Co
5. Pennzoil Company No A-9
6. South Marsh Island SA
7. 128
8. .0 million cubic feet
9. May 6, 1980
10. Sea Robin Pipeline Co Florida Gas Transmission Co Florida Power & Light Co

1. 80-31416/G0-1263
2. 17-723-40057-0000-0
3. 102 000 000
4. Shell Oil Co
5. OCS G-1614 #C-45
6. South Pass
7. 70
8. 35.0 million cubic feet
9. May 6, 1980
10. Southern Natural Gas Co

1. 80-31420/G9-1185
2. 17-705-40375-0000-0
3. 102 000 000
4. McMoran Offshore Exploration Co
5. OCS-G 3390 #13
6. Vermilion
7. 25
8. 5475.0 million cubic feet
9. May 6, 1980
10. Transco Gas Pipeline Co

1. 80-31422/G0-1261
2. 17-707-40320-0000-0
3. 102 000 000
4. Aminoil USA Inc
5. OCS-G-1198 No D-4
6. South Marsh Island
7. 66
8. 1200.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipeline Corp

1. 80-31423/G9-1128
2. 17-702-40513-0051-0
3. 102 000 000
4. Exxon Corp
5. OCS-G 2560 No A-3
6. West Cameron
7. Parrish LA
8. 500.0 million cubic feet
9. May 6, 1980
10. Columbia Gas Trans Corp Northern Natural Gas Co Trunkline Gas Co Natural Gas PL Co

1. 80-31424/G0-1314
2. 17-700-40398-0000-0
3. 102 000 000
4. Natomas Offshore Exploration Inc
5. West Cameron Blk 281 No A-3
6. West Cameron
7. 281
8. 2920.0 million cubic feet
9. May 6, 1980
10. Mid Louisana Gas Co Michigan Wisconsin PL Co

1. 80-31425/G0-1270
2. 17-703-40199-0000-0
3. 102 000 000
4. Sonat Exploration Co
5. G-3288 No A-6D
6. East Cameron
7. 46
8. 51.0 million cubic feet
9. May 6, 1980
10. Southern Natural Gas Co

1. 80-31426/G9-1197
2. 17-701-40029-0000-1
3. 102 000 000
4. Transocean Oil Inc
5. OCS G-3275 #A-1
6. West Cameron Area W A
7. 331
8. 1278.0 million cubic feet
9. May 6, 1980
10. Southern Natural Gas Co United Gas PL Co

1. 80-31427/G9-1131
2. 17-715-40158-0000-0
3. 107 000 000
4. C&K Marine Production Co
5. OCS-G-1960 No A-3
6. South Timbalier
7. 148
8. 1300.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipeline Corp

1. 80-31428/G0-1315
2. 17-700-40406-0000-0
3. 102 000 000
4. Natomas Offshore Exploration Inc
5. West Cameron Blk 281 No A-5
6. West Cameron
7. 281
8. 2920.0 million cubic feet
9. May 6, 1980
10. Mid Louisiana Gas Co Michigan Wisconsin PL Co

1. 80-31429/G9-1082
2. 17-703-40144-0000-0
3. 102 000 000
4. Sonat Exploration Co
5. G-3288 No A-1
6. East Cameron
7. 46
8. 1825.0 million cubic feet
9. May 6, 1980
10. Southern Natural Gas Co

1. 80-31430/G0-1308
2. 17-700-40408-0000-0
3. 102 000 000
4. Natomas Offshore Exploration Inc
5. West Cameron Blk 281 No A-6
6. West Cameron
7. 281
8. 2920.0 million cubic feet
9. May 6, 1980
10. Mid Louisiana Gas Co Michigan Wisconsin PL Co

1. 80-31431/G9-412
2. 17-711-40365-00D2-0
3. 102 000 000
4. Sun Oil Co
5. OCS-G 1023 No B-14E
6. Ship Shoal Block
7. 224
8. 2100.0 million cubic feet
9. May 6, 1980
10. Transcontinental Pipeline Co

1. 80-31432/G9-1198
2. 17-701-40029-0000-2
3. 102 000 000
4. Transocean Oil Inc
5. OCS G-3275 #A-1-D
6. West Cameron Area W A
7. 331
8. .0 million cubic feet
9. May 6, 1980
10. Southern Natural Gas Co United Gas PL Co

1. 80-31433/G9-1199
2. 17-701-40070-0000-0
3. 102 000 000
4. Transocean Oil Inc
5. OCS G-3275 #A-2
6. West Cameron Area WA
7. 331
8. 1095.0 million cubic feet
9. May 6, 1980
10. Southern Natural Gas Co United Gas PL Co

1. 80-31396/G0-1271
2. 17-720-40064-0000-0
3. 107
4. Anadarko Production Co
5. West Delta 137 #A-2
6. West Delta
7. 137
8.
9. May 6, 1980
10. Northern Natural Gas Co

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31380/G9–1187
2. 42–711–40452–0000–0
3. 102 000 000
4. Transco Exploration Co
5. OCS G–3951 No. 1
6. High Island
7. A–284
8. 2200.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipe Line Corp; Public Service Electric & Gas Co

1. 80–31381/G9–1189
2. 42–711–40456–0000–0
3. 102 000 000
4. Transco Exploration Co
5. OCS G–3951 No. 4
6. High Island
7. A–284
8. 2200.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipe Line Corp

1. 80–31385/G9–1188
2. 42–711–40460–0000–0
3. 102 000 000
4. Transco Exploration Co
5. OCS G–3951 No. 3
6. High Island
7. A–284
8. 2200.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipe Line Corp

1. 80–31388/G9–1155
2. 42–709–40182–0000–0
3. 102 000 000
4. Mobil Oil Co
5. OCS G–2392 C–6
6. High Island South Addition
7. A–572
8. 183.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipe Line Corp; Texas Gas Transmission Corp; Michigan Wisconsin P L Co; Natural Gas Pipeline Co of America

1. 80–31417/G0–1262
2. 42–708–40064–0000–0
3. 102 000 000
4. Shell Oil Co
5. OCS G–3236 #A–10
6. High Island
7. 179
8. .0 million cubic feet
9. May 6, 1980
10. United Gas Pipeline Co; Transcontinental Gas P L Corp

1. 80–31418/G0–1268
2. 42–711–40442–0000–2
3. 102 000 000
4. Aminoil Development Inc
5. OCS–G–2412 No. A–16
6. High Island
7. A–317
8. 1460.0 million cubic feet
9. May 6, 1980
10. Natural Gas Pipeline Co of America; Trunkline Gas Co; Panhandle Eastern P L Co; Transcontinental Gas P L Corp

1. 80–31419/G0–1267
2. 42–714–04420–0000–1
3. 102 000 000
4. Aminoil Development Inc
5. OCS–G–2412 No. A–16
6. High Island
7. A–317
8. 2190.0 million cubic feet
9. May 6, 1980
10. Natural Gas Pipeline Co of America; Trunkline Gas Co; Transcontinental Gas P L Corp Panhandle Eastern P L Co

1. 80–31421/G9–1196
2. 42–711–40400–0000–0
3. 102 000 000
4. Transocean Oil Inc
5. OCS G–2404 #A–3
6. High Island East E A SE
7. A–283
8. 1825.0 million cubic feet
9. May 6, 1980
10. Transcontinental Gas Pipeline Corp

U.S. Geological Survey, Casper, Wyo.

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31471/CC–1051–9B
2. 05–103–08058–0000–0
3. 108 000 000
4. Northwest Exploration Co
5. Philadelphia Creek #10
6. Cathedral
7. Rio Blanco Co
8. 6.0 million cubic feet
9. May 6, 1980
10. Northwest Pipeline Corp

1. 80–31472/CC–1154–9
2. 05–103–08224–0000–0
3. 103 000 000
4. Northwest Exploration Co
5. Philadelphia Creek #12X
6. Cathedral
7. Rio Blanco Co
8. 28.0 million cubic feet
9. May 6, 1980
10. Northwest Pipeline Corp

1. 80–31473/CC–1155–9
2. 05–103–08064–0000–0
3. 103 000 000
4. Northwest Exploration Co
5. Philadelphia Creek #16
6. Cathedral
7. Rio Blanco Co
8. 28.0 million cubic feet
9. May 6, 1980
10. Northwest Pipeline Corp

1. 80–31474/CC–1156–9
2. 05–103–08066–0000–0
3. 103 000 000
4. Northwest Exploration Co
5. Philadelphia Creek #17
6. Cathedral
7. Rio Blanco Co
8. 31.0 million cubic feet
9. May 6, 1980
10. Northwest Pipeline Corp

1. 80–31475/CC–1157–9
2. 05–103–08076–0000–0
3. 103 000 000
4. Northwest Exploration Co
5. Philadelphia Creek #19
6. Cathedral
7. Rio Blanco Co
8. 6.0 million cubic feet
9. May 6, 1980
10. Northwest Pipeline Corp

1. 80–31476/CC–837–9
2. 05–081–06287–0000–0
3. 102 000 000
4. Rainbow Resources Inc
5. Federal 1–19
6. State Line
7. Moffat Co
8. 365.0 million cubic feet
9. May 6, 1980
10. Northwest Pipeline Corp

1. 80–31480/CC–1151–9
2. 05–103–07823–0000–0
3. 108 000 000
4. Northwest Exploration Co
5. Philadelphia Creek #7
6. Cathedral
7. Rio Blanco Co
8. 16.0 million cubic feet
9. May 6, 1980
10. Northwest Pipeline Corp

1. 80–31481/CC–836–9
2. 05–081–06287–0000–0
3. 102 000 000
4. Rainbow Resources Inc
5. Federal 1–19
6. State Line
7. Moffat Co
8. 365.0 million cubic feet
9. May 6, 1980
10. Northwest Pipeline Corp

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31477/UC–488–9
2. 43–047–30261–0000–0
3. 102 000 000
4. Gas Producing Enterprises Inc.
5. NBU 1–78 30261
6. Natural Buttes Unit
7. Uintah UT
8. 100.0 million cubic feet
9. May 6, 1980
10. Colorado Interstate Gas Co

1. 80–31478/UC–482–9B
2. 43–047–30363–0000–0
3. 102 000 000
4. Gas Producing Enterprises Inc.
5. NBU 25–208 30363
6. Natural Buttes Unit
7. Uintah UT
8. 5.0 million cubic feet
9. May 6, 1980
10. Colorado Interstate Gas Co

1. 80–31479/UC–484–9B
2. 43–047–30359–0000–0
3. 102 000 000 Denied
4. Gas Producing Enterprises Inc.
5. NBU 21–20B 30359
6. Natural Buttes Unit
7. Uintah UT
8. 125.0 million cubic feet
9. May 6, 1980
10. Colorado Interstate Gas Co

1. 80–31483/UC–458–9B
2. 43–047–30399–0000–0
3. 102 000 000

4. Gas Producing Enterprises Inc.
5. NBU 36–7B 30399
6. Natural Buttes Unit
7. Uintah UT
8. 30.0 million cubic feet
9. May 6, 1980
10. Colorado Interstate Gas Co

1. Control number (FERC/State)
2. API well number
3. Section of NGPA
4. Operator
5. Well name
6. Field or OCS area name
7. County, State or block No.
8. Estimated annual volume
9. Date received at FERC
10. Purchaser(s)

1. 80–31482/W–59–9
2. 49–013–20721–0000–0
3. 102 000 000
4. Monsanto Co
5. MDU Chevron #1–1
6. Madden
7. Fremont WY
8. 540.0 million cubic feet
9. May 6, 1980
10. Colorado Interstate Gas Co; Kansas-Nebraska Natural Gas Co

The applications for determination in these proceedings together with a copy or description of other materials in the record on which such determinations were made are available for inspection, except to the extent such material is treated as confidential under 18 CFR 275.206, at the Commission's Office of Public Information, Room 1000, 825 North Capitol Street, N.E., Washington, D.C. 20426.

Persons objecting to any of these final determinations may, in accordance with 18 CFR 275.203 and 18 CFR 275.204, file a protest with the Commission on or before June 6, 1980.

Please reference the FERC control number in all correspondence related to these determinations.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80–15694 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–85–M

[Docket No. GP80–31]

Cities Service Gas Co.; Third-Party Protests [1]

May 16, 1980.

Take notice that in accordance with the procedures established by the Federal Energy Regulatory Commission (Commission) in Order No. 23–B [2], and "Order on Rehearing of Order No. 23–B," [3] the Kansas State Corporation Commission (Kansas) protested on February 25, 1980, the assertion by the Cities Service Gas Company (Cities Service) and certain producers that the contracts identified in its protest constitute contractual authority for the producers to charge and collect any applicable maximum lawful price under the Natural Gas Policy Act of 1978 (NGPA).

Kansas stated that the language of the following contracts does not constitute authority for the producer to increase prices to the extent claimed by Cities Service in its evidentiary submission:

Producer	Contract No.	Contract date	Rate schedule
Coastal States	2036	11/25/60	57
Coastal States	1384	11/25/60	57
Continental Oil	1313	2/03/61	104
Lee Dring	1191	12/08/58	Cham 76
Messman Rinehart	0914	1/14/55	S71160
Tema Oil	2045	1/20/75	112
Aminoil USA Inc	1491	7/23/63	10
A Plack Carr	0866	11/20/53	1
James E. Ely	1147	3/03/58	2
John A. Hairford	1838	3/01/54	6
Koch Industries	1792	11/01/57	OSB 14
Don D. Montgomery	1807	3/31/66	S71726
Woods Petroleum Corp.	2026	8/10/70	S71647
Woods Petroleum Corp.	2146	8/10/70	S71647
Amerada Hess Corp	2436	4/06/78	107
Amer Public Energy	2557	2/12/79	
Andover Oil Co	2517	10/09/78	S73603
Andover Oil Co	2350	11/21/77	S73603
Andover Oil Co	2412	3/01/78	S73603
Andover Oil Co	2413	2/15/78	S73603
Andover Oil Co	2457	5/25/78	S73603
Arco Oil & Gas Co	2437	10/04/62	470
Arco Oil & Gas Co	1405	10/04/62	470
Beren Corporation	2505	9/21/78	S71704
Best & Sherman Oil	2494	8/31/78	78–732
Bluebell Oil & Gas Co	2417	3/13/78	S76325
CMC Energies Co	2464	6/22/78	S78534
Chase Gath System	2503	9/12/78	78–175
Chase Gath System	2522	10/10/78	S78175
Cimarron Pet. Co	2508	9/28/78	
Colo. Gas Co., Inc	2448	5/04/78	S77419
Consolidated Oil & Gas	2470	7/17/78	S72694
Cotton Petroleum Co	2549	8/09/78	
Craig Morris Oil Co	2495	8/28/78	
El Grande Pl. Corp	2430	3/01/78	S71291
El Grande Pl. Corp	2477	8/10/78	S71291
Energy Reserves Group	2415	3/01/78	2
Flynn Energy Corp	2416	3/09/78	S73382
Gill Mac Inc	2402	2/08/78	S77 38
Gill Mac Inc	2402	2/08/78	S77 38
Great Yellowstone	2378	1/05/78	78–727
Great Yellowstone	2478	8/11/78	78–727
Great Yellowstone	2479	8/11/78	78–727
Great Yellowstone	2480	8/11/78	78–727
Herndon Drilling Co	2544	8/16/78	S78760
Herndon Drilling Co	2493	8/16/78	S78760
Herndon Drilling Co	2484	8/16/78	S78760
George R. Jones	2375	12/28/77	S78155
Kennedy & Mitchl Inc	2395	10/05/60	S76199
W.E. Kirkpatrick	2531	2/22/78	S78297
M & A Petroleum Co	2460	6/19/78	S78488
MP&R Production Co	2438	4/27/78	S78406
Mackellar Inc	2405	2/15/78	S72198
Mackellar Inc	2408	2/28/78	78–603
Mackellar Inc	2435	5/09/78	78–603
Mc McClure	2421	3/23/78	S78298
Al McCord	2357	11/22/77	S74158
Al McCord	2474	8/09/78	S74158
Mel-Ray Oil Co	2376	12/28/77	S78223
Mel-Ray Oil Co	2459	5/12/78	78–223
Mel-Ray Oil Co	2542	7/24/78	S78223
Mull Drilling Co	2492	8/22/78	S71 60
NFC Petroleum Corp	2434	4/17/78	C578–399
Natural Gas Inc	2473	8/11/78	78–614
Petroleum Energy Inc	2399	2/08/78	S77363
R & M Pipeline Inc	2356	11/28/77	
Range Oil Co	2389	12/15/77	S76 37
Samedon Oil Corp	2631	6/11/79	
Dr. John J. Shea	2534	9/27/78	79–80
Tani Tarns	2465	6/23/78	C578–671
Texaco Inc	2490	8/21/78	
Thetic Energy Corp	2496	9/05/78	S78426
Tideway Oil Programs	2475	8/09/78	C575410
Tower Oil & Gas Co	2444	5/01/78	S78433
Verdigiris Gath Sys	2418	3/01/78	S78333
Walker Withrow, Inc	2384	1/05/78	S78215
Walter D. Wells Jr	2462	6/02/78	
Walter D. Wells Jr	2463	5/22/78	
Walter D. Wells Jr	2467	5/22/78	
Wessely Expl. Inc	2443	4/28/78	S78403
Wilson Drilling Co	2445	5/03/78	S77653
Union Texas Pet	2483	9/09/78	CI78–1180
Bettis, Boyle & Stovall	1688	9/28/67	408
Energy Sources Inc	1740	3/31/70	S72 40
Union Gas System	2242	3/07/77	S77562

Any person, other than the pipeline and the seller, desiring to be heard or to make any response to these protests should file with the Commission, on or before May 30, 1980, a petition to intervene in accordance with 18 CFR 1.8. The seller need not file for intervention because under 18 CFR 154.94(j)(4)(ii), the seller in the first sale is automatically joined as a party.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80–15700 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–85–M

[Docket No. ER80–383]

Consumers Power Co.; Filing

May 16, 1980.

The filing company submits the following:

Take notice that on May 9, 1980, Consumers Power Company (Consumers Power) tendered for filing a Wholesale for Resale Electric Service Agreement with the City of Hart, Michigan. Consumers Power states that when construction of certain 46 kV substransmission facilities required for rendition of service is complete, the City of Hart will receive wholesale service under Consumers Power's FERC Electric Service. Tariff First Revised Volume No. 1, under rates and other terms and conditions of service which the Commission permitted to become effective in its order of December 20, 1979 in Docket No. ER80–55, as same may be changed from time to time.

Consumers Power states that service will begin (and the Service Agreement will then become effective under its terms) on or about July 1, 1980 when construction of required facilities is expected to be completed. Consumers Power, accordingly, requests waiver of the Commission's notice requirements.

Any person desiring to be heard or to protest said agreement should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE, Washington, DC 20426, in accordance

[1] The term "third-party protest" refers to a protest filed by a party who is not a party to the contract which is protested.

[2] "Order Adopting Final Regulations and Establishing Protest Procedure," Docket No. RM79–22, issued June 21, 1979.

[3] Docket No. RM79–22, issued August 6, 1979.

with §§ 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8 and 1.10). All such petitions or protests should be filed by or before June 9, 1980. 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 petition to intervene. Copies of said agreement are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15701 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket Nos. TC80-88 and RP76-90]

Kansas-Nebraska Natural Gas Company, Inc.; Order Accepting for Filing and Suspending Revised Tariff Sheet and Vacating Docket Designation

May 15, 1980.

On April 15, 1980, Kansas-Nebraska Natural Gas Company, Inc. (Kansas-Nebraska),[1] submitted for filing in Docket No. TC80-88 Third Revised Sheet No. 24 to amend its FERC Gas Tariff, Third Revised Volume No. 1. This amendment would add a clause to Section 13.b(2) which would permit Kansas-Nebraska to reinstate its ability to provide new natural gas service to standby emergency electric generating facilities of Priority 1 and 2 customers, all as more fully set forth in the revised sheet.

The tariff revision would allow Kansas-Nebraska to provide new or additional natural gas service for emergency standby generating facilities operated by high priority customers and essential agricultural establishments such as schools, hospitals, police and fire installations, correctional facilities, and feed lots. The existing § 13.b(2) of the General Terms and Conditions of Kansas-Nebraska's FERC Gas Tariff prohibits the making of new or additional sales of natural gas for electric generation. However, Kansas-Nebraska does provide natural gas service to a number of standby electric generation facilities which were in existence prior to the effective date of § 13.b(2).[2] Kansas-Nebraska states that, when operated only during emergencies, the consumption of gas by these existing facilities has had no measurable impact on its annual gas supply, and it does not expect the proposed new service will have any impact on its level of service.

After due notice of Kansas-Nebraska's April 15, 1980, tariff filing by publication in the **Federal Register** on April 23, 1980 (45 FR 28459), no petition to intervene, notice of intervention, or protest to the acceptance of the filing has been filed.

The Commission concludes that it shall permit the filing by Kansas-Nebraska of the proposed tariff amendment but shall suspend its effectiveness for one day until May 16, 1980, and thereafter until made effective. This action will result in no new proceeding as the permanency and propriety of the tariff sheet will be determined in the pending curtailment proceeding in Docket No. RP76-90.

The Commission finds:

(1) The question of the lawfulness of Kansas-Nebraska's tariff filings is being addressed in an ongoing proceeding in Docket No. RP76-90. The tariff sheets proposed in that proceeding were accepted for filing, suspended and later put into effect subject to refund upon motion filed by Kansas-Nebraska.

(2) The amended tariff sheet tendered for filing in the instant docket is to replace Second Revised Sheet No. 24, previously suspended.

(3) The tariff sheet filed by Kansas-Nebraska on April 15, 1980, hereinbefore described may be unjust, unreasonable, unduly discriminatory, preferential, or otherwise unlawful under the Natural Gas Act.

The Commission orders:

(A) The amended tariff sheet tendered by Kansas-Nebraska, as hereinbefore described, is accepted for filing and suspended until May 16, 1980, and thereafter until it is made effective in the manner prescribed by the Natural Gas Act.

(B) Docket No. TC80-88 is vacated.

By the Commission.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15702 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

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[1] Kansas-Nebraska, a Kansas corporation having its principal place of business in Phillipsburg, Kansas, is a "Natural-gas company" within the meaning of the Natural Gas Act as heretofore found by order issued April 6, 1943, in Docket No. G-259 (3 FPC 966).

[2] On March 14, 1976, the Section 13.b(2) electric generation prohibition was into effect subject to a suspension proceeding in Docket No. RP76-8. On April 22, 1976, the Commission consolidated the issue concerning the effectiveness of the curtailment procedures in Docket No. RP76-8 with other curtailment related issues from Docket No. CP75-334 and instituted a single curtailment proceeding in Docket No. RP76-90. The curtailment proceeding in Docket No. RP76-90 is currently before the Commission on exception from an Initial Decision issued on March 31, 1979.

[Docket No. RA80-33]

Phillips and Munzel Shell; Filing of Petition for Review

May 16, 1980.

Take notice that Phillips and Munzel Shell on May 2, 1980, filed a Petition for Review under 42 U.S.C. 7194(b) (1977 Supp.) from an order of the Secretary of Energy.

Copies of the petition for review have been served on the Secretary, Department of Energy, and all participants in prior proceedings before the Secretary.

Any person desiring to be heard with reference to such filing should on or before May 30, 1980 file a petition to intervene with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426, in accordance with the Commission's Rules of Practice and Procedure (18 CFR 1.8). Any person wishing to become a party or to participate as a party must file a petition to intervene. Such petition must also be served on the parties of record in this proceeding and the Secretary of Energy through John McKenna, Office of General Counsel, Department of Energy, Room 5142, 12th and Pennsylvania Ave., N.W., Washington, D.C. 20461. Copies of the petition for review are on file with the Commission and are available for public inspection at Room 1000, 825 North Capitol St., N.E., Washington, D.C. 20426.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15703 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Project No. 2790]

Proprietors of the Locks and Canals and Boott Mills; Modifying Prior Notice

May 15, 1980.

The Massachusetts Municipal Wholesale Electric Company (MMWEC) filed an application for rehearing on April 21, 1980, of a Notice Designating Joint Applicants and Dismissing Petition to Intervene in Project No. 2790. The notice joined MMWEC with the Proprietors of the Locks and Canals and Boott Mills as applicants for license for Project No. 2790. The notice also dismissed as being moot MMWEC's petition to intervene in the proceding on the application.

In its petition MMWEC stated that it was not its intention to be a joint applicant at this time, but that it wished to inform the Commission that negotiations were continuing with the Proprietors of the Locks and Canals and

Boott Mills and that it may wish to be a joint applicant in the future. MMWEC requested that it be granted intervention in the proceeding and deleted as a joint applicant for license.

No response to the petition has been received. The request of MMWEC appears to be appropriate and in the public interest to modify the notice of March 27, 1980.

It is ordered:

(A) Paragraphs (A) and (B) of the Notice of March 27, 1980 in Project No. 2790 are deleted.

(B) Pursuant to § 375.302 of the Commission's regulations, 45 FR 21216 (1980), *amending* 18 CFR 3.5(a) (1979), the Massachusetts Municipal Wholesale Electric Company is permitted to intervene in this proceeding subject to the Commission's Rules and Regulations under the Federal Power Act, 16 U.S.C. 791(a)–825(r). Participation of the intervenor shall be limited to matters affecting asserted rights and interests specifically set forth in its petition to intervene. The admission of the intervenor shall not be construed as recognition by the Commission that the intervenor might be aggrieved by any order entered in this proceeding.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80–15704 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–85–M

[Docket No. GP80–84]

Rio Petroleum, Inc.; Application for Recovery of Production Related Costs Under Section 110 of the NGPA

May 16, 1980.

Take notice that on April 1, 1980, Rio Petroleum, Inc. (Rio), 1008 Barfield Building, Amarillo, Texas 79101, filed with the Federal Energy Regulatory Commission (Commission), under Section 110 of the Natural Gas Policy Act of 1978 (NGPA) and § 271.1105 of the Commission's regulations, an application relating to the addition of production-related costs to the maximum lawful price determined under the NGPA.

Specifically, Rio states that it produces natural gas from the #1 State of Texas Well Galveston County, Texas, and sells the natural gas to Houston Pipeline Co. (Houston). By contractual agreement with Rio, Coronado Transmission Co. (Coronado) has agreed to transport the gas to Houston for 30 cents per Mcf. The specific cost which Rio seeks to include in the maximum lawful price are compression costs of 10 cents per MMbtu and gathering costs of 30 cents per MMbtu.

Any person desiring to be heard or to protest this proceeding should, within 30 days after publication of this notice in the **Federal Register**, file with the Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, D.C. 20426, in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 1.8 or 1.10). All protests filed with the Commission will be considered but will not make the protestants parties to the proceeding. Any person wishing to become a party to a proceeding or to participate as a party in any hearing must file a petition to intervene in accordance with the Commission's Rules.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80–15705 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–85–M

[Docket No. ER 80–387]

Southern California Edison Co.; Filing of Initial Rate Schedule and Request for Waiver of Prior Notice Requirements

May 15, 1980.

The filing Company submits the following:

Take notice that on May 12, 1980, Southern California Edison Company (Edison) tendered for filing, as an initial rate schedule, an agreement, dated May 1, 1980, with the Pacific Gas and Electric Company (Pacific). This agreement is entitled "Edison-Pacific Sylmar Midway Transmission Service Agreement".

Under the terms of this Agreement, Edison will provide firm transmission service from Sylmar Converter Station (Sylmar) to the Midway Substation (Midway) and interruptible transmission service from Midway to Sylmar. Edison will charge Pacific for transmission, dispatching and scheduling services, under the conditions and at the rates set forth in the Agreement, and Pacific will reimburse Edison in kind for transmission losses associated with all scheduled deliveries of energy at a rate of 1.78% of hourly scheduled deliveries of energy.

Edison has requested that the prior notice requirement be waived and that the Agreement be made effective as an initial rate schedule no later than July 1, 1980, in order that Pacific may make necessary arrangements to improve its capacity reserve margin during the summer of 1980.

Copies of this filing were served upon the Public Utilities Commission of the State of California and Pacific Gas and Electric Company.

Any person desiring to be heard or to protest this application should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, DC., 20426, in accordance with § 1.8 and § 1.10 of the Commission's rules of practice and procedure (18 CFR 1.8, 1.10). All such petitions or protests should be filed on or before June 9, 1980. 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 petition to intervene. Copies of this application are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc 80–15706 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–85–M

[Docket No. GP80–24]

Transcontinental Gas Pipe Line Corp.; Third-Party Protest[1]

May 16, 1980.

Take notice that in accordance with procedures established by the Federal Energy Regulatory Commission (Commission) in Order No. 23–B, [2] and "Order on Rehearing of Order No. 23–B," [3] the Staff of the Commission protested on April 21, 1980, the assertion by the Transcontinental Gas Pipe Line Corporation (Transcontinental) and certain producers that the contracts identified in its protests constitute contractual authority for the producers to charge and collect any applicable maximum lawful price under the Natural Gas Policy Act of 1978 (NGPA).

Staff stated that the language of the contracts listed in Appendix A of this notice does not constitute authority for the producer to increase prices to the extent claimed by Transcontinental in its evidentiary submission.

Take further notice that the Associated Gas Distributors (AGD) filed a third-party protest on April 22, 1980. AGD protests that the contracts in Appendix B do not constitute contractual authority for the producer to increase prices to the applicable NGPA maximum lawful price.

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[1] The term "third party protest" refers to a protest filed by a party who is not a party to the contract which is protested.

[2] "Order Adopting Final Regulations and Establishing Protest Procedure," Docket No. RM79–22, issued June 21, 1979.

[3] Docket No. RM79–22, issued August 6, 1979.

Any person, other than the pipeline and the seller, desiring to be heard or to make any response with respect to these protests should file with the Commission, on or before May 30, 1980, a petition to intervene in accordance with 18 CFR 1.8. The seller need not file for intervention because under 18 CFR 154.94(j)(4)(ii), the seller in the first sale is automatically joined as a party.

Kenneth F. Plumb,

Secretary.

Appendix A

Producer	Rate schedule No. or contract date
Aminoil Development	9-18-57
Flour Oil and Gas	9-18-57
Mobil Oil Exploration	176
Murphy Oil Company	9-18-57
Ocean Production Company	6
Pelto Oil Company	9-18-57
Sun Oil Company	539
Aminoil Development	9-18-57
Ocean Production Company	5
Pelto Oil Company	9-18-57
Sun Oil Company	538
Bethlehem Steel	12-15-77
C&K Marine Production	12-15-77
Candel USA	12-15-77
Four M Properties	12-15-77
St. Joe Petroleum	12-15-77
Louisiana Land and Exploration	37
Lynal, Inc.	6-1-78
Natomas North America	8-1-78
Newmont Oil Company	3
Exxon Co.	131
Sun Gas Co.	371
Transco Exploration Co.	24
Liberty Oil & Gas	3-27-78
Mesa Petroleum Co.	103
Ocean Peoduction Co.	27

Appendix B

Seller	Control number	Rate schedule No.	Contract date
Arco Oil & Gas Co.	21436	742	1/15/73
Liberty Oil & Gas	11609	SPC	3/27/78
Lynal Inc.	20621	N.A.	6/1/78
Louisiana Land & Exploration	20746	37	3/22/79
First Nat'l Bank	12762	SPC	5/2/79
Willcorp Inc.	12779	NR	4/30/79
Gruy Management Ser.	11898	SPC	1/17/80
Austin Drilling 1979 Ltd.	11898	SPC	1/17/80
B. J. Gierhart, Inc.	11898	SPC	1/17/80
BJG 79 Ltd.	11898	SPC	1/17/80
C. R. Lewis	11898	SPC	1/17/80
J. Shelby Bryan	11898	SPC	1/17/80
Knickerbocker Petroleum	11898	SPC	1/17/80
M. A. Radley	11898	SPC	1/17/80
Rick Heinz	11898	SPC	1/17/80
Sowest Energy Corp.	11898	SPC	1/17/80
W. M. Null	11898	SPC	1/17/80
Weldon I. Thompson	11898	SPC	1/17/80
Whitaker Oil & Gas Co.	11898	SPC	1/17/80
Davis Oil Company	20880	SPC	9/17/79
Killam & Hurd	21850	SPC	8/30/79
Killam & Hurd	12851	SPC	8/30/79
Louisana Land & Exploration	20619	N.A.	5/16/78
Murphy Oil Co.	21117	SPC	9/18/57
Newmont Oil	21118	3	9/18/57
Ocean Production Co.	21358	27	12/15/69
Superior Oil Co.	12805	N.A.	6/21/79
M. M. Miller & Sons	12899	SPC	1/9/80
Getty Oil Co.	14050	443	9/1/79
Transcontinental Oil Co.	29827	SPC	8/3/79
Amerada Hess Corp.	30707	N.A.	12/12/78

Appendix B—Continued

Seller	Control number	Rate schedule No.	Contract date
Holly Energy Inc.	12878	SPC	11/6/79
Tuthill & Barbee	12878	SPC	11/6/79
Tuthill & Barbee	12878	SPC	11/6/79
Marathon Oil Co.	21791	164	6/5/79
Ruth Phillip Bisiker	12918	SPC	1/3/80

[FR Doc. 80-15707 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket No. ID-1891]

Douglas W. Tschappat; Application

May 16, 1980

Take notice that on March 31, 1980, Douglas W. Tschappat (Applicant) filed an application pursuant to Section 305(b) of the Federal Power Act to hold the following positions:

Director, Pennsylvania Power Company, Public Utility.

Executive Vice President, Director, Ohio Edison Company, Public Utility.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426, in accordance with Sections 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8, 1.10). All such petitions or protests should be filed on or before June 13, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15708 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket No. ER80-365]

Tucson Electric Power Co.; Cancellation

May 15, 1980

Take notice that Tucson Electric Power Company (Tucson), by letter dated April 24, 1980, filed a Notice of Cancellation of Rate Schedule FERC No. 33, dated October 18, 1979. This rate schedule is identified as the "1980 San Juan Generating Station Power Sale Agreement between Tucson Electric Power Company and the Los Angeles Department of Water and Power, City of Los Angeles". Tucson indicates that the Agreement by its terms provides for a termination date of April 30, 1980.

Tucson indicates that notice of the cancellation has been sent to the Los Angeles Department of Water and Power.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426, in accordance with §§ 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8 and 1.10). All such petitions or protests should be filed on or before June 6, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15709 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket No. ER80-391]

Tucson Electric Power Co.; Cancellation

May 16, 1980.

Take notice that Tucson Electric Power Company (Tucson) on May 12, 1980, tendered for filing a Notice of Cancellation of FERC Rate Schedule No. 22, dated May 15, 1978 between Southern California Edison Company and Tucson. Tucson states that this cancellation is to be effective as of December 31, 1978.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426, in accordance with §§ 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.18, 1.10). All such petitions should be filed on or before June 9, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15710 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket No. ER80-390]

Tucson Electric Power Co.; Cancellation

May 16, 1980.

Take notice that Tucson Electric Power Company (Tucson) on May 12, 1980, tendered for filing a Notice of Cancellation of FERC Rate Schedule No. 18, dated October 20, 1977 between The United States Colorado River Project and Tucson. Tucson states that the proposed effective date of cancellation is September 30, 1977.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street N.E., Washington, D.C. 20426, in accordance with §§ 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8, 1.10). All such petitions or protests should be filed on or before June 9, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15711 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket No. ER80-389]

Tucson Electric Power Co.; Cancellation

May 15, 1980

Take notice that Tucson Electric Power Company (Tucson on May 12, 1980, tendered for filing a Notice of Cancellation of FPC Rate Schedule No. 17, dated June 1, 1977 between Nevada Power Company and Tucson. Tucson states that the proposed effective date of cancellation is June 30, 1977.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, D.C. 20426, in accordance with §§ 1.8 and 1.10 of the Commission's Rules of Practice and Procedure (18 CFR 1.8, 1.10). All such petitions or protests should be filed on or before June 9, 1980. 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 petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 80-15712 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

[Docket Nos. G-2712, et al.]

Cities Service Co. et al.; Applications for Certificates, Abandonment of Service and Petitions To Amend Certificates [1]

May 16, 1980.

Take notice that each of the Applicants listed herein has filed an application or petition pursuant to Section 7 of the Natural Gas Act for authorization to sell natural gas in interstate commerce or to abandon service as described herein, all as more fully described in the respective applications and amendments which are on file with the Commission and open to public inspection.

Any person desiring to be heard or to make any protest with reference to said applications should on or before June 2, 1980, file with the Federal Energy Regulatory Commission, Washington, D.C. 20426, petitions to intervene or protests in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 1.8 or 1.10). All protests filed with the Commission will be considered by it in determining the appropriate action to be taken but will not serve to make the protestants parties to the proceeding. Persons wishing to become parties to a proceeding or to participate as a party in any hearing therein must file petitions to intervene in accordance with the Commission's Rules.

Take further notice that, pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Energy Regulatory Commission by Sections 7 and 15 of the Natural Gas Act and the Commission's Rules of Practice and Procedure a hearing will be held without further notice before the Commission on all applications in which no petition to intervene is filed within the time required herein if the Commission on its own review of the matter believes that a grant of the certificates or the authorization for the proposed abandonment is required by the public convenience and necessity. Where a petition for leave to intervene is timely filed, or where the Commission on its own motion believes that a formal hearing is required, further notice of such hearing will be duly given.

Under the procedure herein provided for, unless otherwise advised, it will be unnecessary for Applicants to appear or to be represented at the hearing.

Kenneth F. Plumb,

Secretary.

[1] This notice does not provide for consolidation for hearing of the several matters covered herein.

Docket No. and date filed	Applicant	Purchaser and location	Price per 1,000 ft³	Pressure base
G-2712, May 8, 1980 [1]	Cities Service Company, P.O. Box 300, Tulsa, Oklahoma 74102.	Arkansas Louisiana Gas Company, Panola County, Texas.	([2])	14.65
G-4282, D, Apr. 28, 1980	Gulf Oil Corporation, P.O. Box 2100, Houston, Texas 77001.	Natural Gas Pipeline Company of America, Boonsville Field, Jack County, Texas.	The only well on the lease has ceased to produce and the lease well expire May 13, 1980.	
G-6652 D, May 8, 1980	Sun Oil Company, P.O. Box 20, Dallas, Texas 75221.	Tennessee Gas Pipeline Company, Heyser and McFaddin Fields, Victoria County, Texas.	([3])	
G-7008, D, Apr. 18, 1980	Cities Service Company	Kentucky West Virginia Gas Company, Big Sandy Field, Pike County, Kentucky.	([4])	
G-7009, D, Apr. 16, 1980	Cities Service Company	Columbia Gas Transmission Corporation, Big Sandy Field, Eastern Kentucky.	([5])	
G-7645, D, May 6, 1980	Mobil Oil Corporation, Nine Greenway Plaza—Suite 2700, Houston, Texas 77046..	Cities Service Gas Company, Guymon-Hugoton Field, Texas County, Oklahoma..	To release gas for irrigation fuel	
G-11742, D, May 6, 1980	Mobil Oil Corporation	Cities Service Gas Company, Grant, Haskell and Stevens Counties, Kansas.	To release gas for irrigation fuel	
G-13704, D, May 5, 1980	Shell Oil Company, One Shell Plaza, P.O. Box 2463, Houston, Texas 77001.	Northern Natural Gas Company, SW. Camp Creek Field, Beaver County, Oklahoma.	([6])	
G-15058, F, Apr. 18, 1980	ONG Exploration, Inc. (Partial Successor to Phillips Petroleum Company), P.O. Box 871, Tulsa, Oklahoma 74102.	Northern Natural Gas Company, SE/4 of Sec. 7-T3N-R26ECM, Beaver County, Oklahoma.	([7])	14.65

Docket No. and date filed	Applicant	Purchaser and location	Price per 1,000 ft³	Pressure base
CI60-149, D, May 6, 1980	General American Oil Company of Texas, Meadows Building, Dallas, Texas 75206.	Arkansas Louisiana Gas Company, Ivan Field, Webster & Bossier Parishes, Louisiana.	Final determination under Section 103 of the NGPA of 1978.	
CI61-1413, D, May 3, 1980	Mobil Oil Corporation	Cities Service Gas Company, Hugoton Field, Finney County, Kansas.	To release gas for irrigation fuel	
CI73-698, F, Apr. 21, 1980	Grace Petroleum Corporation and W. R. Grace & Co. (Successor to Mallard Exploration, Inc. (Operator) *et al.*), Broadway Executive Park, 6501 North Broadway, Oklahoma City, Okla. 73116.	Southern Natural Gas Company, Big Escambia Creek Field, Escambia County, Alabama.	(*)	15.025
CI80-290, A, Apr. 30, 1980	Kerr-McGee Corporation, P.O. Box 25861, Oklahoma City, Okla. 73125.	Texas Eastern Transmission Corporation, A portion of West Cameron Block 522, Offshore Louisiana.	(*)	15.025
CI80-291 (CI64-1389), B, Apr. 18, 1980.	Anadarko Production Company, P.O. Box 1330, Houston, Texas 77001.	Northern Natural Gas Company, Beaver and Texas Counties, Oklahoma.	(10)	
CI80-292, A, May 2, 1980	Union Oil Company of California, Union Oil Center, Room 901, P.O. Box 7600, Los Angeles, California 90051.	Tennessee Gas Pipeline Company, Block 65, Vermilion Area, Offshore Louisiana.	(11)	15.025
CI80-293, A, Apr. 28, 1980	Transco Exploration Company, P.O. Box 1396, Houston, Texas 77001.	Transcontinental Gas Pipe Line Corporation, High Island Area, Blocks A-446, A-447 and A-448, Offshore Gulf of Mexico.	(12)	14.65
CI80-294, A, May 1, 1980	Texaco Inc., P.O. Box 52332, Houston, Texas 77052.	Natural Gas Pipeline Company of America, West Delta 109 Field, Offshore Louisiana.	(*)	15.025
CI80-295 (CI63-1129), B, Apr. 28, 1980.	Gulf Oil Corporation, P.O. Box 2100, Houston, Texas 77001.	Arkansas Louisiana Gas Company, North Carter Field, Beckham County, Oklahoma.	Leases have expired and all of wells have been plugged and abandoned.	
CI80-296, A, May 2, 1980	Amoco Production Company, P.O. Box 50879, New Orleans, La. 70150.	Florida Gas Transmission Company South Pelto Blocks 9 & 10, Offshore Louisiana.	(13)	15.025
CI80-297, A, May 5, 1980	Union Oil Company of California	Columbia Gas Transmission Corporation Block 595, West Cameron Area, Offshore Louisiana.	(11)	15.025
CI80-298, A, May 5, 1980	Exxon Corporation, P.O. Box 2180, Houston, Texas 77001.	Columbia Gas Transmission Corporation, High Island Block A-286, Offshore Texas.	(12)	14.65,
CI80-299, B, May 5, 1980	Frank W. Cass, *et al.*, Suite 2555, 2001 Bryan Tower, Dallas, Texas 75201.	Allied Chemical Corporation, *et al.*, Certain acreage in Upton County, Texas.	(14)	
CI80-300, A, May 6, 1980	Union Oil Company of California	Tennessee Gas Pipeline Company, Block 494, West Cameron Area, South Addition, Offshore Louisiana.	(11)	15.025
CI80-301, A, May 8, 1980	Mesa Petroleum Co, One Mesa Square, P.O. Box 2009, Amarillo, Texas 79189.	Michigan Wisconsin Pipe Line Company, Sec. 22-T11N-R8W, Canadian County, Oklahoma.	(15)	14.65
CI80-302, A, Apr. 30, 1980	Marathon Oil Company, 539 South Main Street, Findlay, Ohio 45840.	Natural Gas Pipeline Company of America, Southeast Boyd Area, Beaver County, Oklahoma.	(16)	14.65,
CI80-303, A, May 8, 1980	Pan Eastern Exploration Company, P.O. Box 1642, Houston, Texas 77001.	Panhandle Eastern Pipe Line Company, East Cameron, South Addition, Block 353, Offshore Louisiana.	(17)	15.025
CI80-304, A, May 7, 1980	Amoco Production Company, P.O. Box 50879, New Orleans, La. 70150.	Michigan Wisconsin Pipe Line Company, High Island Block A-469, Offshore Texas.	(18)	14.65
CI80-306, A, May 9, 1980	Texaco Inc., P.O. Box 60252, New Orleans, La. 70160.	Natural Gas Pipeline Company of America, Eugene Island Block 72 Field, Offshore Louisiana.	(19)	15.025
CI80-307, B, May 7, 1980	DMGM Trust, *et al.*, Suite 2555, 2001 Bryan Tower, Dallas, Texas 75201.	Phillips Petroleum Company, Certain Acreage in Upton and Reagan Counties, Texas.	(14)	

[1] To provide for an additional delivery point, at the tailgate of Champlin's Carthage Field Plant in Panola County, Texas.

[2] Applicant is filing under Gas Purchase Contract Amendment dated 4-8-80, amending contract dated 6-30-70, to accommodate gas deliveries from the Pirkle C-3 Well, effective 3-1-80.

[3] Well No. 2 on the J. A. McFaddin "B" Lease was the last well on the lease and which was plugged and abandoned on 12-21-78 with the lease expiring on 11-25-78.

[4] Cities Service hereby seeks release of approximately 24,000 MCF annually from the subject contract in order to continue furnishing gas to the existing domestic users.

[5] Cities Service hereby seeks release of approximately 160,000 MCF annually from the subject contract in order to continue furnishing gas to the existing domestic users.

[6] Shell has assigned all of its interests in nonproducing formations in Sec. 4-3N-24 ECM, Beaver County, Oklahoma, to lessor.

[7] Agreement dated 7-26-76, ONG Exploration, Inc. Acquired by assignment from Phillips Petroleum Company oil and gas leases covering said acreage, effective 12-26-76. The acquired acreage is covered by Renewal Gas Purchase Contract dated 7-25-77.

[8] Effective 7-1-79, Mallard and the following other interest owners selling gas to Southern, conveyed certain assets and properties, including rights under the Gas Contract dated 12-1-72 and the lease acreage committed thereunder to Applicants. These properties are non-fully described in the documents of assignment as follows: (1) Assignment from Mallard Exploration, Inc. to W. R. Grace & Co., dated 1-11-80: (2) Assignment from Cumberland Petroleum Corporation to Grace Petroleum Corporation, dated 11-15-79; (3) Assignment from Robert M. Leibrook and wife, Prudie Leibrook to Grace Petroleum Corporation, dated 1-11-80; (4) Assignment from Charles E. March, II and wife, Loretta McDermott March to Grace Petroleum Corporation, dated 1-11-80. As a result of these assignments, Applicants now own a 14.7% interest in the gas reserves committed for sale to Southern under the Gas Contract and Applicant respectfully request the Commission to authorize the continued sale of gas to Southern, pursuant to the terms and conditions of the Gas Contract, effective as of 1-15-80.

[9] Applicant is filing under Gas Purchase Contract dated 2-1-80.

[10] As a result of depletion, acreage dedicated under Anadarko Rate Schedule No. 81 was released by Northern Natural due to cessation of production.

[11] Applicant is willing to accept a certificate at an initial rate of the maximum lawful price as prescribed in subsection 104(b) of the NGPA of 1978.

[12] Applicant is willing to accept a certificate conditioned upon the maximum applicable rate as allowed by the NGPA of 1978.

[13] Applicant agrees to accept a permanent Certificate of Public Convenience and Necessity covering the subject sale conditioned in accordance with the NGPA of 1978 and the Commission's Regulations under said Act.

[14] Available supply of natural gas in subject property cannot be developed pursuant to the terms and provisions of subject Casinghead Gas Contract, and that the continuance of service is unwarranted.

[15] Applicant is willing to accept the applicable rate under Section 104 of the NGPA of 1978.

[16] Applicant is filing under Gas Purchase Contract dated 7-16-79.

[17] Applicant is filing under Gas Purchase Contract dated 3-31-80.

[18] Applicant is filing under Gas Purchase Contract dated 4-3-80.

[19] Applicant is filing under Gas Purchase Contract dated 4-17-80.

Filing Code: A—Initial Service. B—Abandonment. C—Amendment to add acreage. D—Amendment to delete acreage. E—Total Succession. F—Partial Succession.

[FR Doc. 80-15713 Filed 5-21-80; 8:45 am]

BILLING CODE 6450-85-M

Office of Hearings and Appeals

Issuance of Decisions and Orders; Week of March 24 through March 28, 1980.

Notice is hereby given that during the week of March 24 through March 28, 1980 the Decisions and Orders summarized below were issued with respect to Appeals and Applications for Exception or other relief filed with the Office of Hearings and Appeals of the Department of Energy. The following summary also contains a list of submissions which were dismissed by the Office of Hearings and Appeals and the basis for the dismissal.

Appeals

Cotten, Day & Doyle, Washington, D.C.; BFA-0252, Freedom of Information

Cotten, Day & Doyle filed an Appeal from a denial by the Deputy General Counsel for

Enforcement and Litigation of a Request for Information which the firm had submitted under the Freedom of Information Act. In considering the Appeal, the DOE determined that the Deputy General Counsel had failed to supply a sufficiently specific index of documents or provide any reason why a more specific index could not be supplied. The DOE also determined that the Deputy General Counsel had not supplied sufficiently specific reasons for applying Exemptions 4 and 7 to the documents withheld. Finally, the DOE determined that the Deputy General Counsel did not address the issue of whether any segregable factual material existed. The DOE therefore concluded that the matter should be remanded to the Deputy General Counsel for futher action.

Doub & Muntzing, Washington, D.C.; BFA–0206, Freedom of Information

Doub & Muntzing filed an Appeal from a denial by the Director of the Office of Policy of the Procurements and Contracts Management Directorate of a Request for Information which the firm had submitted under the Freedom of Information Act (the FOIA). In considering the Appeals, the DOE found that certain portions of the document which were initally withheld under Exemption 5 should be released to the public. An important issue that was considered in the Decision and Order was that there was factual material in the document which was segregable from opinions and recommendations.

Getty Refining and Marketing Company, Cherry Hill, New Jersey; DEA–0419, Motor Gasoline

Getty Refining and Marketing Company filed an Appeal from an Assignment Order issued by the Region II Office of Petroleum Operations. In its Appeal, Getty contended that the Assignment Order was based upon erroneous information submitted to the Department of Energy by Award Petrolerum, Inc. In considering the Appeal, the DOE found that there was no indication in the Assignment Order or in the record that the Office of Petroleum Operations had relied on the allegedly erroneous information. Accordingly, the Appeal was denied.

Dolph Honicker, Nashville, Tennessee; BFA–0199, Freedom of Information

Mr. Dolph Honicker filed an Appeal from a denial by the Assistant to the Manager, Oak Ridge Operations, of two Requests for Information which he had submitted under the Freedom of Information Act. In considering the Appeal, the DOE found that the Authorizing Official was correct in stating that the DOE had no documents that were responsive to either request. The Honicker Appeal was therefore denied.

Industrial Fuel and Asphalt of Indiana, Inc., Hammond, Indiana; BEA–0194, BES–0194, BST–0194, BEL–0962, crude oil

IFAI filed an Appeal of a Decision and Order issued to the firm by the Economic Regulatory Administration of the Department of Energy (ERA) which denied an emergency allocation of crude oil under the provisions of 10 CFR 211.65 (the Buy/Sell Program). The firm also filed an Application for Stay and an Application for Temporary Stay. In the Decision and Order which is the subject of the IFAI Appeal, the ERA determined that the firm was not eligible for an emergency allocation of crude oil because the reduction in crude oil availability which it experienced was the result of the discontinuance of a processing agreement with Arizona Fuels Corporation (Arizona Fuels) rather than a drop in IFAI's own supply of crude oil. In its Appeal, IFAI asserted that processing volumes should be included in determining eligibility for an emergency allocation of crude oil. In considering the Appeal, the OHA determined that the ERA methodology was neither in conflict with the regulations, nor arbitrary and capricious. The OHA observed that the regulations specifically provide for the ERA to evaluate the efforts which applicants have made to obtain crude oil, and that the position advanced by IFAI would create an even greater potential for manipulation of crude oil supplies by applicants. The OHA further noted that any refiner which experienced a serious hardship, a gross inequity, or an unfair distribution of burdens as a result of the operation of the emergency allocation portion of the Buy/Sell program could file an Application for Exception. On the basis of these considerations, the OHA determined that IFAI's Appeal should be denied. The OHA concluded, however, that emergency relief should be provided to IFAI, in the form of a temporary exception, in order to permit the firm to keep its refinery running at its minimum physical operating rate. Accordingly, IFAI's Application for Stay and its Application for Temporary Stay were dismissed.

Finally, the OHA stated that the processing agreement between IFAI and Arizona Fuels during the base period appeared to have been economically feasible only as a result of Arizona Fuels' apparent disregard of entitlements purchase obligations. Accordingly, equitable considerations dictated that the OHA evaluate whether, or the extent to which, IFAI should be granted exception relief providing crude oil under the Buy/Sell program. IFAI was therefore directed to file an Application for Exception accompanied by a calculation of revenues it obtained pursuant to its processing arrangement with Arizona Fuels.

Southwestern States Marketing Corp., Abilene, Texas; BFA–0205, Freedom of Information

Southwestern States Marketing Corp. filed an Appeal from a partial denial by the District Manager of Southwest District Office of Enforcement of a Request for Information which the firm had submitted under the Freedom of Information Act. In considering the Appeal, the DOE found that certain of the documents which were initially withheld under Exemptions 5 and 7(A) should be released to the public. The DOE determined that the District Manager had misconstrued the holding in *Exxon Company, U.S.A.*, 4 DOE Par. 80,109 (1979), in withholding some documents pursuant to Exemption 7(A) on the basis of burdensomeness.

Remedial Orders

In the following cases involving Proposed Remedial Orders and/or Interim Remedial Orders for Immediate Compliance, no Statements of Objections were filed. The DOE therefore issued the orders in final form.

Company name, Location, and Case No.

Jerry Rakowski, d/b/a Amoco Dealer, Milwaukee, Wisconsin; BRW–0022
Gerald Sedney, d/b/a Bay Shore Marina, Erie, Pennsylvania; BRW–0023
Tunnel Service Station (Shell), Long Island City, New York; BRW–0024
Cherokee Texaco, Cherokee, North Carolina; BRW–0025
De Luc Service Station (Sunoco, Bronx, New York; BRW–0026
Hancock Exxon Service Station, Quincy, Massachusetts; BRW–0027
Hilgton's Exxon, West Chester, Pennsylvania; BRW–0028
James Bulloch, Inc., Belle Harbor, New York; BRW–0029
Dave James, Bethel Park, Pennsylvania; BRW–0030
Kammerman Marina, Atlantic City, New Jersey; BRW–0031
Mrs. Center, Mineola, New York; BRW–0032
Romeo's Service Station, Seafood, New York; BRW–0034
S&H Texaco, Lancaster, Pennsylvania; BRW–0035
Banks Service Station, Buffalo, New York; BRW–0036
Terrace Mobil, Binghamton, New York; BRW–0037
Terzakis Bros. Getty, Beverly, Massachusetts; BRW–0038
Brothers Amoco, West Seneca, New York; BRW–0039
Yacht Basin, Inc., Wildwood, New Jersey; BRW–0040
Wolf Run Marina, Warren, Pennsylvania; BRW–0041

Remedial Orders

Bill J. Graham, Seminole, Oklahoma, DRO–0216, crude oil

Bill J. Graham objected to a Proposed Remedial Order which the DOE Southwest District Office of Enforcement issued to the firm on May 3, 1979. In the Proposed Remedial Order, the Office of Enforcement found that Graham improperly classified several of the firm's properties as stripper well properties. The DOE found that Graham's interpretation of the regulatory definition of property was incorrect and therefore concluded that the Proposed Remedial Order should be issued as a final Order.

Greene's Transport Company, Thomaston, Georgia, DRO–0012, propane

Greene's Transport Company objected to a Proposed Remedial Order which the Southeast District Office of Enforcement issued to the firm on March 8, 1978. In the Proposed Remedial Order, the Office of Enforcement found that Greene's and six affiliated companies sold propane at prices in excess of the maximum permissible selling prices calculated under 212.93. The PRO directed Greene's to roll back prices, make direct refunds or issue credit memoranda to

specified classes of purchaser until the overcharges resulting therefrom were refunded. Upon review of the firm's submission, the DOE determined that the Office of Enforcement had properly treated Greene's and its affiliated companies as a single firm pursuant to 10 CFR 212.31. In addition, the DOE found that Greene's had presented no evidence to support its claim that the firm's various entities should have been accorded separate inventory treatment based on Greene's historical inventory accounting procedures. Accordingly, the DOE rejected Greene's Objections and concluded that the PRO should be issued as a final Order.

Requests for exception

Ergon Refining Inc., Vicksburg, Mississippi, BEE–0308, BEL–0308, crude oil

Ergon Refining, Inc. filed Applications for Exception and Temporary Exception from the provisions of 10 CFR 211.65(a)(1)(iii). The Applications, if granted, would result in the issuance of Orders authorizing Ergon to obtain increased supplies of crude oil through participation in the Crude Oil Buy-Sell Program as a refiner-buyer, in order to allow the firm to expand its refinery. In its Applications, Ergon indicated that the financing of the proposed expansion of its Vicksburg, Mississippi refinery is dependent upon Ergon's ability to obtain an assured supply of crude oil to enable the firm to utilize the refinery's expanded capacity. In considering Ergon's exception requests, the DOE noted that under the provisions of 211.65(a)(1)(iii), Ergon is not eligible to obtain crude oil for the firm's refinery expansion project because Ergon had not made a commitment to the project prior to August 24, 1977. The DOE also determined that Ergon had failed to demonstrate that the Mandatory Petroleum Allocation Regulations are responsible for the difficulties Ergon anticipates incurring in the absence of an exception. Based upon the above considerations, Ergon's Applications were denied.

General Machine Corporation, Duo-Matic Olsen, Inc., Emmaus, Pa. Park Forest South, Il, BEE–0422, BEE–0648, test requirements

The General Machine Corporation and Duo-Matic Olsen, Inc. filed Applications for Exception from the provisions of 10 CFR, Part 430, in which they sought to be relieved of the energy efficiency and fuel utilization test requirements applicable furnaces. In considering the firms' requests, the DOE determined that the test procedures yielded inappropriate results when applied to the multi-fuel furnaces and boilers manufactured by the applicants. Accordingly, exception relief was granted.

Glaser's Texaco Service, Ellisville, Missouri, BEO–0286, motor gasoline

Glaser's Texaco Service filed an Application for Exception from the provisions of 10 CFR, Part 211 in which the firm sought an increase in its base period allocation of motor gasoline. In considering the request, the DOE found that the firm had failed to show that it was suffering a serious financial hardship as a result of the DOE allocation regulations. Accordingly, exception relief was denied.

Holiday Foods, Inc., Seattle, Washington, BEO–0133, motor gasoline

Holiday Foods, Inc. filed an Application for Exception from the provisions of 10 CFR, Part 211, Subpart F in which the firm sought an increased allocation of motor gasoline for a retail gasoline outlet which it intended to purchase. In considering the exception request, the DOE found that the firm's plan to purchase an existing retail outlet and expand its operations at the outlet did not constitute a proper basis for exception relief. Accordingly, Holiday's Application was denied.

Lake Chelan School, District #129, Upjohn Company, Cabot Corporation, Chelan, Wash. Kalamazoo, Mich. Pampa, Texas, BEO–0704, BEO–0527, BEO–0261, emergency bldg. temperature restrictions

Lake Chelan School District, Upjohn Company, and Cabot Corporation filed Applications for Exception from the provisions of 10 CFR, Part 490 in which the firms sought permission to raise the maximum heating temperature above 60°F in their locker and shower facilites. In considering the request, the DOE found that the firms had not demonstrated that the 65°F temperature level presents a significant threat to the health of the individuals who use these facilities. Accordingly, exception relief was denied.

C. Lee Waugh, d.b.a. Shamrock Exxon, Columbia, South Carolina, DEE–7752, motor gasoline

C. Lee Waugh d.b.a. Shamrock Exxon filed an Application for Exception from the provisions of 10 CFR 212.93 in which the firm sought permission to increase its maximum permissible markup on sales of motor gasoline. In considering the request, the DOE found that although amendments to Section 212.93 had required the firm to reduce its markup, the firm was not suffering a hardship or inequity. Accordingly, Waugh's Application for Exception was denied.

Wash and Dry, Inc., Hialeah, Florida, BEO–0129, motor gasoline

Wash and Dry, Inc. filed a request for exception from the motor gasoline allocation regulations. The decision denied relief on the basis that Wash and Dry did not experience an anomalous base period and the firm failed to establish that it would be adversely affected in a significant manner by the use of the new base period.

Request for Temporary Exception

Standard Oil Company of Ohio, Cleveland, Ohio, BEL–0974, gasohol

The Standard Oil Company of Ohio filed an Application for Temporary Exception from the provisions of 10 CFR 212.83 in which the firm sought to treat the gasohol it markets as a separate category of gasoline for the purposes of cost allocation. In considering the request, the DOE found that exception relief was necessary to permit the firm to begin a test marketing program for gasohol. Accordingly, exception relief was granted.

Request for Modification and/or Rescission

J&W Refining Inc., Washington, D.C., DMR–0044, crude oil

J&W Refining, Inc. (J&W) filed an Application for Modification or Rescission of a Decision and Order issued by the DOE to J&W on February 2, 1979. The February 2 determination denied J&W an extension of exception relief which was previously accorded the firm and which relieved J&W of a portion of its entitlement purchase obligation. In considering J&W's present request for modification, the DOE found that J&W had not submitted any new financial information which would warrant modification of the conclusions reached in the February 2 Order. Accordingly, the J&W request was denied.

Motion for Discovery

Marathon Oil Company, Washington, D.C., BED–0237, gasohol

Marathon Oil Company filed a Motion for Discovery in which the firm sought access to all information forming the basis for its designation as a supplier of Lawrence & Sons Oil Company (LOCO) in connection with a proposed decision granting exception relief to that firm. In that Decision it was determined that in the absence of exception relief LOCO would be unable to obtain unleaded motor gasoline to produce and distribute gasohol, and would therefore suffer a gross inequity under DOE allocation regulations. In reviewing the Motion for Discovery, the DOE found that the criteria governing the review of such motions had been satisfied. Accordingly, the Motion for Discovery filed by Marathon was granted.

Interim Orders

The following firms were granted Interim Exception relief which implements the relief which the DOE proposed to grant in an order issued on the same date as the Interim Order:

Company Name, Case Number, and Location

Connecticut General Life Insurance Co., DEN–7669, Bloomfield, CT
Great Lakes Dev. Co., Inc., DEN–6465, Foster City, CA

Protective Orders

The following firms filed Applications for Protective Orders. The applications, if granted, would result in the issuance by the DOE of the proposed Protective Order submitted by the firm. The DOE granted the following applications and issued the requested Protective Order as an Order of the Department of Energy:

Name, Case Number, and Location

Chevron USA, Inc., Ashland Oil, Inc., BEJ–0054, Washington, D.C.
Midland Energy Corp., Tosco Corp., BEJ–0042, Washington, D.C.

Petitions Involving The Motor Gasoline Allocation Regulations

The following firms filed Applications for Exception from the provisions of the Motor Gasoline Allocation Regulations. The requests, if granted, would result in an increase in the firms' base period allocations of motor gasoline. The DOE issued a Decision

and Order which finalized the Proposed Decisions and Orders issued to each firm:

Name of petitioner	Case No.	Date proposed decision and order issued
Abernathy's Exxon Service	DEE-4327	09/24/79
Anlee Service Station	DEE-7432	12/05/79
Art's Exxon	DEE-4522	01/31/80
Atherton, Libby E	DEE-6995	12/06/79
Bainbridge Enterprises	DEE-3221	01/31/80
Baldwin Petroleum Co., Inc	DEE-3878	09/17/79
Balrone, Anthony R	DEE-6721	11/21/79
Blodgett Oil Co., Inc	DEE-6229	01/31/80
Bob's Gas	DEE-4416	12/05/79
Brighton Auto Body & Repair	DEE-7235	01/22/80
Bristol Service Center, Inc	DEE-6184	12/06/79
Brookside Self Service	DEE-7715	12/05/79
Bruckens Auto	DEE-3201	01/18/80
Bryson's Gulf Service	DEE-7443	12/05/79
Bud's Service Center	DEE-4673	09/21/79
Busbee Service Station	DEE-6103	12/06/79
By-Pass Exxon	DEE-6688	01/31/80
Carlson's Sunoco	DEE-7066	10/31/79
Cave Springs Chevron #8044	DEE-6878	11/15/79
Circle Arco	DEE-6036	12/06/79
Citadel Corporation	BXE-0126	01/09/80
Convenience Petroleum Co	DEE-4495	01/17/80
D.C. Curl	DEE-2911	01/07/80
De Baise, Michael	DEE-4684	12/25/79
Dillion, John	DEE-6285	01/31/80
District Petroleum Products	DEE-4044	11/05/79
Don's Market, Inc	DEE-5680	10/25/79
Enriquez, Servando	DEE-7475	01/31/80
Ernst, Richard H. & Eunice	DEE-6735	12/05/79
Exton Arco	DEE-5908	11/07/79
Fork Shell Service Station	DEE-5126	11/20/79
Forrest General Chevron Ser	DEE-7274	01/08/79
Fred's Exxon	DEE-6752	12/05/79
Fredette Chevrolet, Inc	DEE-7307	01/24/80
Freeway Autocare Shell Ser	DEE-7539	11/29/79
G & C Gulf	DEE-6690	12/05/79
George W. Prescott Pub	DEE-7696	11/15/79
Glenn & Joe's Shell	DEE-4788	01/22/80
Good Deal Self-Service	DEE-5271	12/05/79
Groveland Sales & Service	DEE-5620	01/28/80
H. A. Wallace (Meredith)	DEE-6840	11/15/79
Henry's Conoco Service	DEE-3795	12/11/79
Hollow Tree Grocery	DEE-6302	12/05/79
Hollywood Foreign Auto Rep	DEE-6734	09/24/79
Holmes Mobil Service	DEE-6441	12/25/79
Howard, Bruce	DEE-5893	12/06/79
Huth, Robert	DEE-7042	09/17/79
Ihinger Texaco	DEE-6012	12/06/79
Interstate Mobil	DEE-4699	09/18/79
Jack Russell Oil Co., Inc	DEE-6470	10/18/79
Jim's Standard Service	DEE-3313	01/16/80
John's Standard Service	DEE-7520	12/17/79
Joseph Anastasio	DEE-5669	12/15/79
Ken's Exxon Servicenter	DEE-6758	10/31/79
Ken's Lakeside Gulf	DEE-6833	01/24/80
Kings Corners	DEE-5732	01/31/80
Lakewood Sunoco	DEE-6544	12/05/79
Lampert, Allen L	DEE-5412	12/03/79
Lane, Lee Roy	DEE-6956	12/05/79
Larry's Orangevale Tire #2	DEE-0359	12/05/79
Limehouse Gulf Station	DEE-7511	01/04/80
Littons Orchardhill Amoco	DEE-5497	12/06/79
Loden Oil Company	DEE-7491	01/09/80
Loewy, William	DEE-4177	12/06/79
Lynn Smith's Arco Mini Mart	DEE-7250	09/17/79
Main Street Arco	DEE-6477	12/05/79
Mall Mart	DEE-3492	01/31/80
Martin, John	DEE-6392	12/15/79
Miller's Pack Horse	DEE-5398	01/30/80
Minor, Randolph	DEE-3790	12/06/79
Monk's Shoppette	DEE-7514	10/12/79
Montbello Conoco & Tire Co	DEE-3308	01/07/80
Mount Pleasant Arco	DEE-7070	10/31/79
Murry Petroleum Inc	DEE-6993	01/08/80
Newspaper Printing Corp	DEE-4370	01/16/80
Orlandi's Gulf	DEE-6821	12/05/79
Patterson Exxon Service	DEE-5739	12/05/79
Pedco	DEE-0145	01/22/80
R & R Gulf Service	DEE-4307	01/31/80
Ramirez Texaco	DEE-5341	12/05/79
Ray's Auto Station	DEE-7528	11/21/79
Razhegi Texaco	DEE-2719	12/05/79
Red Carpet Car Wash	DEE-6930	10/22/79
Red Cloud Exxon Service	DEE-6047	12/05/79
Reece Oil Co	DEE-5130	01/17/80
Riggs, Carl	DEE-6579	12/05/79
Rulon, John C	DEE-6967	10/18/79
Scott's Arco Mini Mart	DEE-5576	12/05/79
Simon's Gas	DEE-5290	12/05/79
Slone, Mitchell	DEE-7150	01/16/80
Smith, Reginald M	DEE-3351	12/05/79
Snyder's Mini Mart Co., Inc	DEE-5840	01/30/80
South Braintree Mobil	DEE-4739	11/29/79
South Sheridan Conoco	DEE-3528	12/05/79
Staggers Oil Co	DEE-7104	01/24/80
Sun Valley Gas, Inc	DEE-6738	12/06/79
Telly's Arco	DEE-7306	11/06/79
Thigpen, J. A	DEE-7101	12/05/79
Thompson's Texaco	DEE-2706	11/14/79
Twin State Oil Co. of Tabor	BEE-0435	01/30/80
Unimed Management Corp	DEE-7141	09/26/79
Vic's Texaco	DEE-7014	12/05/79
Weir Motors	DEE-5686	12/06/79
White Arrow Service Station	DEE-5812	12/05/79
Will Mart Shell	DEE-4367	11/15/79
William General Store	DEE-7706	01/07/80
Yoerg's Garage	DEE-6839	12/06/79

Petitions Involving the Motor Gasoline Allocation Regulations

The following firms filed Applications for Exception from the provisions of the Motor Gasoline Allocation Regulations. The requests, if granted, would result in an increase in the firms' base period allocations of motor gasoline. The DOE issued a Decision and Order which finalized the Proposed Decisions and Orders issued to each firm:

Names of Petitioners and Case Numbers

Lou Emma Exxon, BEO–0216
Rusty's Gulf Service, BEO–0749
Miller, Edward R., BEO–0582
Douglas Bennett, BEO–0800
H. Jack Edwards, BEO–0479
Troy Gulf Service Center, BEO–0360
Raymond Brooks Quik Stop Convenience Store, BEO–0168
D. U. Exxon, BEO–0680
Trimat, Inc., BEO–0989
Mid-America Mobil Service, BEO–1060
Avis Rent-a-Car, BEO–0313
Mann & Parker Lumber Company, BEO–0328
Gary Thompson Oil Co., BEO–0207
Gordon's Marathon, BEO–0606
Oakland Tribune, BEO–00685
Fronk, Steven A., BEO–0428
Skyline's Nautical Yacht Basin, BEO–0589
Noland's Mobil, DEO–0223
O'Brian Properties, BEO–0195
D&R Contractors, Inc., BEO–0687
Midan Auto Car, Inc., BEO–0619
Cash "N" Dash, BEO–0067
American Builders Supply Co., Inc., BEO–0513
Wally's Texaco Service, BEO–0709
Tom's Marathon, BEO–0477

Petitions Involving the Motor Gasoline Allocation Regulations

The following firms filed Applications for Exception, Temporary Exception, Stay, and/or Temporary Stay from the provisions of the Motor Gasoline Allocation Regulations. The requests, if granted, would result in an increase in the firms' base period allocations of motor gasoline. The DOE issued Decisions and Orders which determined that the requests be granted.

Company Name, Case Number, and Location

Du-Cor Svc. Station, BXE–0494, New York, NY
Greenwood Oil Co., BXE–0323, Greenwood, SC

Petitions Involving the Motor Gasoline Allocations Regulations

The following firms filed Applications for Exception, Temporary Exception, Stay, and/or Temporary Stay from the provisions of the Motor Gasoline Allocation Regulations. The requests, if granted, would result in an increase in the firms' base period allocations of motor gasoline. The DOE issued Decisions and Orders which determined that the requests be denied.

Company Name Case No., and Location

A. G. Inc./Town Line Service, DEE–6541; Lynn, MA
Ceed Enterprises t/a Westside Texaco, BEO–0596; Hackensack, NJ
Felter's Store, BEO–1115; New Lebanon, Center, NY
Gateway Texaco, DEE–5550; San Fran., CA
Gill's Amoco, DEE–3648; Herndon, VA
Kwik Six #3, Kwik Six #9, DEE–6536, DEE–6537; Longmont, CO
Middlebrook Exxon, BEO–0668; Bound Brook, NJ
Morton Service Center, BEO–0675; Morton, IL
Mounts Exxon, BEO–0640; Belfry, KY
Silver Spray Car Wash, BEO–0644; Mequon, WI
Slauson Car Wash, DEO–0389; Los Angeles, CA
Spring Valley Gulf, BEO–0822; Wash., DC
Ted Lokey Oil Co., BEO–1076; Austin, TX
V. I. P. Professional Services, Inc., BEO–0380; Oxnard, CA
Wurm's Texaco, BEO–0354; Ferguson, MO
33rd Street Texaco, BEO–0741; Orlando, FL
John B. Walker, Jr, BEO–0515; Jackson, MS

Dismissals

The following submissions were dismissed without prejudice to refiling at a later date:

Name and case No.

B & T Gulf Station, DEE–6448
Blanton Petroleum Distributors, DES–2340; DST–2340
Bogalusa Material, DEE–6787
Champion Oil Service, BEE–0619; BEL–0619
Chevron USA, Inc., BED–0054
Consolidated X-ray, BEO–0986
D. L. McBrayer, DEE–7240
L & B Car Wash, DEE–6817
Rice-Lindquist, Inc., DES–5312
Belle Haven Sunoco, BEE–0912
Heintz Oil Co., Inc., DEE–7773
Petroleum Sales and Services, Inc., BEE–0394
Vickers Petroleum Corp., BES–0030; BST–0030
Wind Energy Report, BFA–0283 (Request No. 02058015S) and BFA–0282
Carruthers Oil Co., DEE–2571; DES–2571; DST–2571
Currey Enterprises, DEE–6944
Bazell Oil Co., Inc., DES–4490
County of Erie Dept. of Law, BFA–0275
Doug's Distributing Co., DES–3512
Edwin Jason Dryer, Esq., BEA–0194; BES–0194; BST–0194; BEL–0962
Target Stores, DEE–3323; DST–3323
E. R. Tucker, , DEE–6017
Vic's Arco Svc., DES–4838
Warelubco, Inc., DST–2396
Fritz's Standard, BEO–0322; BEO–0323
Hubbard Oil Corp., DEE–2570; DES–2570; DST–2570
Landes Oil Co., Inc., BEE–0697

Polk Oil Co., DEE–2866
Publicker Industries, BEE–0652
Strickland Oil Co., DEE–5484
Air Transport Assoc. of America, DMR–0006
Broward Fuels Co., DST–3879
City of Cleburne, TX, BEE–0897; BES–0897
Eagle Oil Company, DEE–8322
Fischer's Service Station, Inc., DES–7350
Heltne's Oil Co., DEE–5774
Petroleum Sales, Inc., DEE–3839
Phillips Petroleum Co., BES–0032
Rick's Green Trail's Texaco, BEO–0676
Sun Oil Co., BED–0066; BEJ–0066
Texas Assoc., BED–0436
United Oil Indiana, Inc., DEE–4566; DES–4566
Western Produce Co., Inc., DEE–4385
Whitcomb's Arco, DEE–4561
Dundalk Exxon, DES–3026; DST–3026,
David Harris, BFA–0273
Hawkie's Service Station Corp., DRS–0281
I. V. Cole Petroleum Co., Inc., DEE–4546
Lincoln Land Oil Co., DEE–5040
Midway Petroleum, Inc., DES–3851
Pester Refining Co., DES–0439
Robert H. Hart & Sons, Inc., DEE–2479; DES–2479; DST–2479
Snyder Mini Mart Company, Inc., DES–5840
Southland Corp., DES–5856; DST–5856
Sumter Oil & Gas, Inc., DST–2725
Sunglo Svc., Inc., DEE–3605; DES–3605; DST–3605

Copies of the full text of these Decisions and Orders are available in the Public Docket Room of the Office of Hearings and Appeals, Room B–120, 2000 M Street, N.W., Washington, D.C. 20461, Monday through Friday, between the hours of 1:00 p.m. and 5:00 p.m., e.s.t., except Federal holidays. They are also available in *Energy Management: Federal Energy Guidelines*, a commericially published loose leaf reporter system.

Melvin Goldstein,

Director, Office of Hearings and Appeals.

May 8, 1980.

[FR Doc. 80–15504 Filed 5–21–80; 8:45 am]
BILLING CODE 6450–01–M

Issuance of Decisions and Orders; Week of March 31 Through April 4, 1980

Notice is hereby given that during the week of March 31 through April 4, 1980 the Decisions and Orders summarized below were issued with respect to Appeals and Applications for Exception or other relief filed with the Office of Hearings and Appeals of the Department of Energy. The following summary also contains a list of submissions which were dismissed by the Office of Hearings and Appeals and the basis for the dismissal.

Appeals

Fried, Frank, Harris, Shriver & Kampelman, Washington, D.C., BFA–0197, freedom of information.

Fried, Frank, Harris, Shriver & Kampelman filed an Appeal from a partial denial by the Director, Division of Petroleum Price Regulations, Office of Regulations and Emergency Planning of the Economic Regulatory Administration, of a Freedom of Information Act request. In considering the Appeal, the DOE found that four of the documents which were initially withheld under Exemption 5 should be released to the public. In addition, the DOE found that the release of one document was not contrary to the public interest. The DOE also determined that an additional search for documents responsive to the firm's request for information should be performed.

Hogan & Hartson, Washington, D.C., BFA–0247, freedom of information.

Hogan & Hartson filed an Appeal from a partial denial by the Director of the Enforcement Information Division of the Economic Regulatory Administration of a request for information which the firm had submitted under the Freedom of Information Act. In considering the Appeal, the DOE provided a more thorough description of the withheld documents. The DOE found that two documents and portions of three others which were initially withheld under Exemption 5 should be released to the public either because they were not deliberative documents or because they contained purely factual matter. However, the DOE also determined that the majority of the documents were properly withheld under Exemption 5 since they were deliberative, non-factual, predecisional intra-agency memoranda generated in the formulation of a price regulation for resellers of crude oil. Since the substance of these deliberative rulemaking documents had not already been largely disclosed to the public and since their release could inhibit the frank exchange of views in controversial areas of policymaking, the DOE determined that release of these documents would be contrary to the public interest. In addition, the DOE found that one document identified by the Director was not responsive to Hogan & Hartson's request.

Hughes Oil Company, Atlanta, GA., BFA–0248, freedom of information.

Hughes Oil Company filed an Appeal from a denial by the Manager of the ERA Southeast Enforcement District of a Request for Information which the firm had submitted under the Freedom of Information Act. In considering the Appeal, the DOE found that the determination issued by the District Manager contained neither an index of responsive documents nor reasons for their nondisclosure. The DOE also held that the Request for Information was too broadly drawn. The Appeal was therefore granted in part, and remanded to the District Manager for further consideration.

Mid-Atlantic Legal Foundation, Philadelphia, Pa., BFA–0253, freedom of information.

Mid-Atlantic Legal Foundation filed an Appeal from a partial denial by the Director of Buildings and Community Systems of a Request for Information which the firm had submitted under the Freedom of Information Act. In considering the appeal, the DOE found that the Director had properly withheld the financial portions of two documents under Exemption 4. The DOE held that a non-profit organization may have a sufficient competitive interest in information that the firm submits to the government to be protected by Exemption 4.

Oettinger's Sunoco service station, Tonawanda, N.Y., BEA–0183, motor gasoline.

Oettinger's Sunoco Service Station filed an Appeal of an Assignment Order issued by the Economic Regulatory Administration (ERA), Region II, in which the firm sought to have the Order rescinded. In considering the request, the DOE found that in issuing the Order the ERA had failed to consider whether the assignment Order would confer an unfair advantage on the firm which had requested the Assignment Order. Accordingly, the Appeal was granted. The DOE also noted that in future Assignment Orders the ERA should specifically consider whether granting an Assignment Order would confer an unfair advantage on the firm which had requested the Assignment Order.

St. Sauver, Joseph E., Troy, N.Y., BFA–0175, freedom of information.

Joseph E. St. Sauver filed an Appeal from a partial denial by the Director of the DOE Office of Classification of a Request for Information which the firm had submitted under the Freedom of Information Act. In considering the appeal, the DOE found that the documents which Mr. St. Sauver requested were properly classified as "Restricted Data" under the Atomic Energy Act of 1954, and should therefore not be released to the public.

Transco Trading Co., Tulsa, Okla., BFA–0245, freedom of information.

On March 4, 1980, the transco Trading company filed an Appeal from a partial denial by the assistant Administrator for enforcement of a Request for Information which the firm had submitted under the Freedom of Information Act. In considering the Appeal, the DOE found that a portion of the Enforcement Manual which was initially withheld under Exemption 2 should be released to the public. In addition, a predecisional memorandum was found to be properly withheld under Exemption 5.

Remedial Order

Warwick Oil Corp., Lafayette, La., BRO–0733, crude oil.

Warwick Oil Corporation (Warwick) filed a Notice of Objection to a Proposed Remedial Order (PRO) that the District Manager of the DOE Office of Enforcement, Southwest District, issued to the firm on November 6, 1979. In the PRO, the Southwest Enforcement District found that Warwick had sold crude oil from the Hanks Company Property at prices in excess of the prices which were permissible under the applicable regulations and, as a result of this action, overcharged the purchaser of the crude oil by approximately $89,250. In its Notice of Objection, Warwick indicated that it intended to challenge the findings reached in the PRO. However, Warwick failed to file a Statement of Objections specifying the issues of fact or law in the PRO that the firm disputes. Consequently, the PRO was issued

as a final Remedial Order of the Department of Energy.

Request for Modification and/or Rescission

Bassett Oil & Equipment Co., Inc., Bassett, Va., BRR—0006, middle distillate.

Bassett Oil and Equipment Company, Inc. (Bassett) filed a request for modification of a Decision and Order which was issued to the firm on May 4, 1977. *Bassett Oil and Equipment Company, Inc.*, 5 FEA ¶85,059 (1977). In the previous Decision, the FEA stayed the refund provisions of a Remedial Order issued to Bassett by FEA Region III, but conditioned the stay upon the establishment of an escrow account into which Bassett would place the disputed funds. In its request for modification, Bassett requested that it be permitted to substitute a letter of credit for the escrow account. In considering the request, the DOE determined that the diversion of a considerable sum of money from productive use should be avoided particularly when an irrevocable letter of credit would serve the same protective function as an escrow account. Therefore, the Bassett request for modification was granted.

Department of Energy, Economic Regulatory Administration, Washington, D.C., BRR–0027, motor gasoline.

On February 29, 1980, the Economic Regulatory Administration of the Department of Energy requested that the Office of Hearings and Appeals rescind a Remedial Order that had been issued to Jack Lloyd d/b/a Long Point Marina on February 20, 1980. The DOE determined that the ERA's request should be granted and that the Remedial Order should be rescinded because the DOE and the firm had entered into a consent order prior to the issuance of the Remedial Order.

Requests for Exception

Asamera Oil (U.S.) Inc., Denver, Colo., BEE–0018, through BEE–0023, crude oil.

Asamera Oil (U.S.) Inc. filed Applications for Exception from the provisions of 10 CFR, Part 212, Subpart D. Exception relief was granted to permit Asamera to sell a portion of the crude oil produced from the Altamont Field at market price levels.

Brock's Automotive, El Paso, Tex., DEE–8275, motor gasoline.

Brock's Automotive filed an Application for Exception from the provisions of 10 C.F.R., Part 211 in which the firm sought an increased base period allocation of motor gasoline. In considering the request, the DOE found that anomolous events occurred during the base period which seriously distorted the use of the base period for the purpose of measuring Brock's normal business activities. Accordingly, exception relief was granted.

Chevron U.S.A., Inc., Santa Barbara, Calif., BXE–0986, crude oil.

Chevron U.S.A. Inc. filed an Application for Exception from the provisions of 10 C.F.R., Part 212, Subpart D in which the firm sought permission to sell the crude oil produced from the South Flank Lease at market prices. In considering the request, the DOE found that exception relief was necessary to provide the firm with an incentive to continue its crude oil production operations. Accordingly, exception relief was granted.

Chevron U.S.A., Inc., Santa Barbara, Calif., DXE–2115, BXE–0987, crude oil.

Chevron U.S.A. Inc. filed an Application for Exception from the provisions of 10 C.F.R., Part 212, Subpart D in which the firm sought permission to sell the crude oil produced from the Main Zone Lease at market prices. In considering the request, the DOE found that exception relief was necessary to provide the firm with an incentive to continue its crude oil production operations. Accordingly, exception relief was granted.

Cociba, Inc., Philadelphia, Pa., DEO–0355, motor gasoline.

Cociba, Inc. filed an Application for Exception from the Mandatory Petroleum Allocation Regulations, 10 C.F.R., Part 211, in which the firm requested that its base period allocation of motor gasoline be increased. In considering the exception request, the DOE determined that certain of Cociba's financial difficulties associated with its car wash were exacerbated by DOE Price Regulations. The DOE therefore granted Cociba an exception which permits the firm to increase its maximum permissible markup on sales of motor gasoline to 21.0 cents per gallon.

FS Services, Inc., Bloomington, ILL., BEE–0274, gasohol.

FS Services, Inc. filed an Application for Exception from the provisions of 10 C.F.R. § 212.93 in which the firm sought to include in the price of gasohol sold to each of its customers the actual cost of transporting gasohol to that customer. In considering the request, the DOE found that exception relief was necessary to enable the firm to expand its gasohol marketing operations. Accordingly, exception relief was granted.

Gilroy Car Wash d.b.a. M.G.C. Sales, Gilroy, Calif., BEO–0374, motor gasoline.

Gilroy Car Wash, d/b/a/ M.G.C. Sales filed an Application for Exception from the provisions of 10 C.F.R., Part 211 in which the firm sought an increased base period allocation of motor gasoline. In considering the request, the DOE found that the firm had failed to demonstrate that it was suffering a severe financial hardship as a result of DOE regulations. Accoringly, exception relief was denied.

Hayes, ARCO, Yucca Valley, Calif., BEO–0740, motor gasoline.

Hayes Arco filed an Application for Exception from the provisions of 10 C.F.R. § 211.102 in which the firm sought an increase in its base period allocation of motor gasoline. In considering the request, the DOE found that the firm had failed to show that it was experiencing a serious financial hardship. Accordingly, exception relief was denied.

Lillian Segall's Dresses, Wilmington, Del., BEO–0973, temperature.

Lillian Segall's Dresses filed an Application for Exception from the provisions of 10 C.F.R. § 390.11–.23 in which the firm requested that it be allowed to raise the temperatore in its dress shop above 65°F during the winter heating season. In considering the request, the DOE found that the firm had failed to show that it was suffering any hardship, inequity, or unfair distribution of burdens as a result of the Emergency Building Temperature Restriction Regulations. Accordingly, exception relief was denied.

Miles Farm Supply, Inc., Owensboro, Kentucky, BEE–0089, gasohol.

Miles Farm Supply, Inc. filed an Application for Exception from the provisions of 10 C.F.R., Part 211 in which the firm sought an increase in its allocation of unleaded motor gasoline so that it could blend and sell gasohol. In considering the request, the DOE found that exception relief was necessary to enable the firm to meet the strong demand for gasohol in its market area. Accordingly, exception relief was granted.

Straka's Service, Toledo, Ohio, BEO–1045 motor gasoline.

Straka's Service filed an Application for Exception from the provisions of 10 C.F.R. § 211.102 in which the firm sought an increase in its base period allocation of motor gasoline. In considering the request, the DOE found that the firm had failed to show that it was experiencing a serious financial hardship or that the applicable standards had been applied in an inconsistent or discriminatory manner. Accordingly, exception relief was denied.

Wentland's Car Wash and Standard Service, Allegan, Michigan, BEO–1019 motor gasoline.

Wentland's Car Wash and Standard Service filed an Application for Exception from the provisions of 10 C.F.R. § 211.102 in which the firm sought an increase in its base period allocation of motor gasoline. In considering the request, the DOE determined that the firm had not made the types of investments which could reasonably be expected to promote increased sales of motor gasoline. The DOE also found that the firm was not experiencing a serious hardship. Accordingly, exception relief was denied.

Request for Stay

Gulf Oil Corporation, Houston, Texas, BES–0277 crude oil.

Gulf Oil Corporation filed an Application for Stay of an Order issued on February 5, 1980 by the Economic Regulatory Administration to the Commonwealth Oil Refining Company (Corco) which granted Corco an emergency allocation of crude oil under the Buy/Sell Program. In considering the stay request, the DOE determined that Gulf had failed to demonstrate a likelihood of success on the merits of its Appeal of the ERA Order or that Gulf would suffer irreparable injury in the absence of stay relief. Gulf's stay request was therefore denied.

Supplemental Order

Simonson Station Store, Grand Forks, N. Dak., Exxon U.S.A., Inc., Washington, D.C., Texaco, Inc., Denver, Colo., BEX–0041 Motor Gasoline.

The Department of Energy issued a Supplemental Order pertaining to a Decision

and Order issued on February 22, 1980 by the Western Regional Center of the Office of Hearings and Appeals. In that Decision, the Western Regional Center determined to grant Appeals which had been filed by Simonson Station Store, Exxon U.S.A., Inc. and Texaco, Inc. from assignment orders issued by the Office of Petroleum Operations of the Economic Regulatory Administration, Region VIII. The Western Regional Center therefore remanded the assignment orders to ERA Region VIII for further proceedings and the issuance of revised determinations which were consistent with DOE Regulations and principles set forth in the February 22 Decision.

In the Supplementary Order, the DOE found that ERA Region VIII had indicated that it did not intend to conduct any further proceedings with respect to the assignment orders which has been remanded to it. Accordingly, the DOE concluded that the matter should be forwarded to the Administrator of the ERA with instructions to comply fully with the terms of the February 22 Decision and Order by a specified date.

Protective Orders

The following firms filed Applications for Protective Orders. The applications, if granted, would result in the issuance by the DOE of the proposed Protective Order submitted by the firm. The DOE granted the following applications and issued the requested Protective Order as an Order of the Department of Energy:

Name, case number and location

Ashland Oil, Inc., Gulf Oil Corp., Shell Oil Co., Atlantic Richfield, Marathon Oil Co., Stand. Oil of Ind., Chevron USA, Inc., BEJ–0065, BEJ–0067 thru BEJ–0073, Wash., D.C.
Atlantic Richfield, Cities Service Co., BEJ–0055, Los Angeles, CA, Tulsa, OK.
Chevron USA, Inc., Cities Service Co., BEJ–0036, San Fran., CA, Tulsa, OK.
Gulf Ref. & Mktg., Union Oil Co. of Cal. BEX–0038, Wash., DC.

Petitions Involving the Motors Gasoline Allocation Regulations

The following firms filed Applications for Exception, Temporary Exception, Stay, and/or Temporary Stay from the provisions of the Motor Gasoline Allocation Regulations. The requests, if granted, would result in an increase in the firms' base period allocation of motor gasoline. The DOE issued Decisions and Orders which determined that the requests be granted.

Company Name, case number and location

Brent-West Car Wash, Inc., DEE–4531, Los Angeles, CA.
K&W Auto Electric, Inc., BEO–0290, Melbourne, FL.

Petitions Involving the Motor Gasoline Allocation Regulations

The following firms filed Applications for Exception, Temporary Exception, Stay, and/or Temporary Stay from the provisions of the Motor Gasoline Allocation Regulations. The requests, if granted, would result in an increase in the firms' base period allocation of motor gasoline. The DOE issued Decisions and Orders which determined that the requests be denied.

Company Name, Case Number and Location

Angel Car Wash, BEO–0149, Anaheim, CA.
Bernie's Texaco, DEE–4773, Tucson, AZ.
Clark Plumbing, Inc., BEO–0459, Beverly Hills, CA.
Joe's 66 Service, DEE–4033, Columbus, NB.
Phillips & Munzel Shell, DEE–2925, Wash., DC.
Southtown Mobil, BEO–0359, St. Louis, MO.
Tidmore Oil Co., DEE–6022, Wash., D.C.

Petitions Involving the Emergency Building Temperature Restrictions

The following firms filed Applications for Exception from the provisions of the Emergency Building Temperature Restrictions Regulations. The requests, if granted, would permit the firms to change the temperature in their facilities from the temperature level prescribed in the regulations. The DOE issued Decisions and Orders which determined that the requests be denied.

Company Name, Case No., Location

Docktor Pet Center, DEE–7801, Columbus, OH.

Dismissals

The following submissions were dismissed without prejudice to refiling at a later date:

Name, Case No.

Al's Super Shell, BEO–0663.
Coggins Fence & Supply, Inc., BEO–0738.
Getty's Oil Co., DRO–0092; DRD–0092; DRH–0092.
Pollock-Collins Oil Company, Inc., DEE–7497.
Whistle Stop, DEE–5838.
Colonial Car Wash, DEE–2147.
Crown Central Pet, DEE–2035.
Curtiss Oil Co., DEE–2752; DES–2752.
D. W. Small & Sons, Inc., BEE–0461.
Riddell Pet. Co., DST–0032.
Sabre Ref., Inc., BEH–0010.
Sam Iacobellis, DEE–6457.
San Bruno Carwash, DEE–3479; DES–3479.
Weakley Oil & Gas Co., DEE–4060.
Fauser Oil Co., BEE—0776.
Fullerton Rentals & Ready Mix, DEE–6306.
Orange County Towing, DEE–4733.
Pismo Chevron, DES–2639.
C. B. Shell, DST–4254.
Amos Post, Inc., DES–8062.
Bert's Exxon, DES–2496.
Bullard Plaza Union, DES–5207; DST–5207.
Clark's Ferry Auto/Truck Stop, DES–2954.
Bowers & Burrows Inc., DES–0229.
Fast Stop Marts, DES–4995.
Fasgo, Inc., DES–6697.
Telum, Inc., DES–3869; DST–3869.
Auburn Mini-Market Jr., DES–6021.
Brown's Gas Station, DES–5813; DST–5813.

Copies of the full text of these Decisions and Orders are available in the Public Docket Room of the Office of Hearings and Appeals, Room B–120, 2000 M Street, N.W., Washington, D.C. 20461, Monday through Friday, between the hours of 1:00 p.m. and 5:00 p.m., e.d.t., except Federal holidays. They are also available in *Energy Management: Federal Energy Guidelines*, a commercially published loose leaf reporter system.

Melvin Goldstein,

Director, Office of Hearings and Appeals.

May 8, 1980.

[FR Doc. 80–15645 Filed 5–21–80; 8:45 am]

BILLING CODE 6450–01–M

Medium Btu Industrial Fuel Gasification Demonstration Plant, Memphis, Tenn.; Notice of Floodplain/Wetlands Preliminary Statement of Findings

AGENCY: Department of Energy.

ACTION: Notice of Preliminary Statement of Findings for Locating a Medium-Btu Industrial Fuel Gasification Demonstration Plant within the Mississippi River Floodplain/Wetlands in Memphis, Tennessee.

SUMMARY: The Department of Energy (DOE) announces its Preliminary Statement of Findings for locating a medium-Btu industrial fuel gasification demonstration plant within a floodplain/wetlands area. The Preliminary Statement of Findings and supporting analysis conclude that there is no practicable alternative to locating a plant in the Mississippi River floodplain/wetlands. The proposed DOE action will cost-share the construction and operation of an industrial fuel gas demonstration plant. The plant is to be located in Shelby County, Tennessee (in the immediate vicinity and southwest of Memphis, Tennessee). The applicant, the Memphis Light, Gas and Water Division (MLGW) of the City of Memphis has proposed a facility which would convert 3155 tons per day of high sulfur coal into a fuel gas for pipline distribution to selected customers in the Memphis area. This notice is being published to provide the public with an opportunity to participate early in the decision making process. Comments by: June 6, 1980.

Interested agencies, organizations, and the general public desiring to submit comments or suggestions for consideration with this Preliminary Statement of Findings are invited to do so. The comment period for this Preliminary Statement of Findings will close June 6, 1980.

FOR FURTHER INFORMATION CONTACT: Peter Lui at the address noted below.

All comments may be expressed in writing to: U.S. Department of Energy, Chicago Operations and Regional Office, Project Management Division, 9800 South Cass Avenue, Argonne,

Illinois 60439. Attn: Peter Lui, Project Manager, telephone (312) 972–2274.

SUPPLEMENTARY INFORMATION: A medium-Btu industrial fuel gas demonstration plant is being proposed for construction and operation in Shelby County, Tennessee, by Memphis Light, Gas and Water Division (MLGW) on a cost-shared basis with the Department of Energy. The Demonstration Plant will convert high sulfur coal to medium Btu gas for industrial applications. MLGW is a municipal chartered utility that distributes electricity, gas and water in Shelby County, Tennessee. The proposed 134-acre site for this plant, named the Allen Site, is located in a 100-year floodplain and contains land which has been designated as wetlands by the U.S. Corps of Engineers and U.S. Fish and Wildlife Service.

In compliance with Executive Order 11988, "Floodplain Management," Executive Order 11990, "Protection of Wetlands," Water Resources Council "Floodplain Management Guidelines," 43 FR 6030, February 10, 1978, and DOE regulations "Compliance with Floodplain/Wetlands Environmental Review Requirements," 10 CFR 1022, various alternatives to this proposed action have been identified and evaluated. Accordingly, a tentative determination has been made by the Secretary, Department of Energy, that no practicable alternative exists to proceeding with the project for construction at the Allen Site.

Identification and Evaluation of Alternatives

In the preliminary identification of alternative sites, basic siting constraints have been identified which candidate sites must satisfy to qualify for consideration. The following is a list of these constraints:

1. Statute Requirements—Land outside of Shelby County, Tennessee is not available for siting the plant since, as a municipal chartered utility, MLGW is governed by Chapter 381 of the Private Act of 1939 which limits all MLGW construction to Shelby County.

2. Zoning, Land-Use—Due to current land use policies, only those areas currently zoned for heavy industry or available for rezoning to heavy industry are available for siting the plant.

3. Barge vs. Rail Delivery of Coal—Based on an economic evaluation of alternative transportation costs for coal, only those regions in the county accessible to barge transport are possible locations for the plant.

4. Proximity to Fuel Gas Users—The capital costs of the fuel gas transmission and distribution system establish a constraint on the maximum distance which the plant can be located from potential fuel gas customers.

5. Minimum Site Area of 100 Acres—The prospective plant site must be a contiguous area of at least 100 acres in size, presently unoccupied by existing facilities or structures and available for development by this project.

Five alternative sites were identified which were not eliminated by these constraints. The sites and a brief description of their location are as follows:

1. *Site A* is the Allen Site located near the confluence of the Mississippi River and Lake McKellar and across a barge turning basin from TVA's Allen Generating Plant. The site is located within the 100-year floodplain and would impact wetlands.

2. *Site B* is the Pidgeon Site located in the northwest section of the 4,000 acre Pidgeon Industrial Park. The site is located within the 100-year floodplain and would impact wetlands.

3. *Site C* is the Rivergate Site located on Lake McKellar adjacent to site is outside the 100-year floodplain but would impact wetlands.

4. *Site D* is the Mud Island Site located on the northern portion of the peninsula, Mud Island, adjacent to the Wolf River Lagoon. The site is outside the 100-year floodplain but would impact wetlands.

5. *Site E* is the North Site located on the bluffs above the Mississippi River as close as possible to the river. The site is located within the 100-year floodplain and would impact wetlands.

In accordance with the Water resources Council Guidelines, siting criteria were used to determine the practicability of each of the five alternative sites. The guidelines state that, at a minimum, site practicability shall be addressed in light of natural, social, economic, and legal considerations. In the context of this project, these considerations have been further analyzed with respect to the following criteria:

1. *Schedule*—The ability of each alternative site to meet program/project schedules for contractual obligations, permit applications, site preparation, foundation requirements, public acceptance, and long lead-time activities.

2. *Cost*—The ability of each alternative site to avoid incurring prohibitive costs as a result of special requirements, such as the construction of new railways, auxiliary facilities, extensive site development; or significant increases in operating costs caused by factors unique to that site.

3. *Environmental*—The ability of each alternative site to satisfy environmental regulations or avoid adverse environmental impacts which cannot be mitigated. These include considerations in the areas of water quality, aquatic ecology, air quality, terrestrial ecology, land use, socio-economics, and noise.

4. *Engineering/Technical*—The ability of each alternative site to avoid high technical risks and an inordinately large number of technical problems.

As a result of the preliminary alternative site evaluations, the Allen Site was found to be the only practicable site within Shelby County upon which to build the plant.

In conjunction with the alternative site determination, an alternative action evaluation was also conducted. The following alternative actions were considered:

1. *Resolicit New Industrial Partner to Construct Outside Shelby County*—Selection by DOE of a site outside Shelby could not involve MLGW and would result in a time delay to the project of at least 18 months, including time to resolicit a new industrial partner, negotiate a suitable new contract, and to modify the existing design with respect to the new site. The added project cost under these circumstances would exceed $90 million for the most economic alternative, and the cost differential could, in fact, be several times greater for some sites.

2. *No Action*—If no action is taken, the demonstration of a viable energy alternative, medium Btu coal gasification for multiple industrial users, in the National Energy Program will be impacted and delayed for a minimum of 18 months. Furthermore, the Tennessee Valley Authority (TVA) plans to exercise ash disposal easement rights which it holds on the site and the Corps of Engineers will continue using the site to accumulate dredge spoils. Ash disposal and dredge deposition will result in aquatic and terrestrial impacts and eventual loss of the floodplain/wetlands area on the Allen Site. Moreover, the economic benefits to the Memphis area associated with the plant, including construction and operating jobs, increased tax revenues, and availability of industrial fuel gas, would be lost with the use of the Allen Site for ash disposal and dredge disposition.

3. *Construct on Proposed Site*—The Allen Site would be used since both the plant and/or surrounding area would encounter negligible danger from flood damage. Existing wetlands are not considered ecologically significant and no other site currently exists within Shelby County which meets the previously described constraints

imposed on the project. Locating the plant on the Allen Site requires elevation of the site from present levels of 205 to 210 feet (msl) to the project design flood level, 233 feet (msl), recommended by the Corps of Engineers. The elevation can be accomplished in a proven and controllable manner so as to provide adequate bearing capacity for the plant facilities as well as flood protection. A hydraulic fill operation using sand taken from a Mississippi River sand bar, located approximately 2 miles from the site, will be used to raise the site level. A commercially proven process called "vibroflotation" will be employed to compact the fill and minimize the risk from soil liquefaction during a major seismic event. Borings already conducted on soil beneath the site indicate satisfactory conditions for the proposed development. Of the three action alternatives, a preliminary determination has been made that this alternative is the only practicable choice.

The proposed plant could be built such that it will conform with all applicable State and local floodplain protection standards as well as appropriate building codes, zoning codes, and Federal and State Environmental Regulations and Permits.

The elevated site is not located within the main flow channel of the Mississippi River under flood conditions. On the basis of tests conducted on the Mississippi Basin Model, the Corps of Engineers has determined that the elevated site will not significantly (i.e., by less than 0.7 foot) alter the flood depths of surrounding areas in Lake McKellar and downstream during a major flood. Therefore, use of the Allen Site poses no added flood threat.

Coal transportation and unloading can be accomplished by barges utilizing the existing barge turning basin in Lake McKellar without affecting TVA facilities since such facilities would be on the north bank of the barge turning basin.

Site development will result in the loss of approximately 70 acres of wetlands considered to be of low to medium ecological value by the Corps of Engineers and U.S. Fish and Wildlife Service. They contain no unique ecological resources and provide only limited food supply and diversity of habitat. The ecological community is relatively young, since the site area was underwater in the main flow channel of the Mississippi River in the late 1800's and was subsequently built up by dredging activities. Loss of this area will not appreciably affect terrestrial and aquatic wildlife, due to the fact that within a three-mile radius of the plant, there are more than 1,000 acres of high quality wetlands that will not be affected by site development. As a result of site development, mobile wildlife will migrate to these areas.

Based on an evaluation of available data, development of the Allen Site for the plant is considered practicable from the standpoint of environmental and socio-economic acceptability, project cost, and implementation time. Although the Allen Site is zoned industrial, the land would probably not be used for any other industrial purpose in the near future since it is owned by MLGW and the TVA holds ash disposal easement rights. Constructing on the Allen Site would utilize vacant industrial land without impacting future industrial, aesthetic, or recreational potential in the Memphis area. Furthermore, use of the site would expedite the use of advanced technology in accord with the current energy plan. Use of the site would also provide community and national benefits that would not otherwise be realized. No other site currently exists within Shelby County which meets the siting constraints imposed on the project. After considering alternatives, DOE has made a preliminary determination that no practicable alternatives to locating at the Allen Site in the floodplain/wetlands is available. The site alternatives, as well as the action alternatives, will be re-examined in detail following completion of the floodplain/wetlands assessement.

The identification and evaluation of alternatives to locating in the floodplain/wetlands discussed above is supported by a document entitled, "Identification and Evaluation of Alternatives to the Location of a Proposed Federal Action in the Floodplain." Copies of this document, which was used in the preparation of the Preliminary Statement of Findings, are available for public inspection at the following locations:

U.S. Department of Energy, Chicago Operations and Regional Office, Project Management Division, 9800 South Cass Avenue, Argonne, Illinois 60439.

Government Document Room, Memphis-Shelby County Public Library, and Information Center, 1850 Peabody Avenue, Memphis, Tennessee 38101.

Public Reading Room, FOI, Room GA-152, 1000 Independence Avenue SW., Washington, DC 20585.

COMMENTS

All interested parties are invited to submit comments or suggestions in connection with the Preliminary Statement of Findings. Those desiring to submit comments or suggestions should send them to the individual previously listed in this statement.

In conjunction with the development of the Environmental Impact Statement (EIS) for this proposed project, a floodplain/wetlands assessment will be completed which will identify the impacts of locating the project in the floodplain/wetlands. This assessment will be included in the EIS and will also address measures available to mitigate any adverse effects on the floodplain/wetlands.

In addition to this opportunity to comment on the Preliminary Statement of Findings, interested persons will have an opportunity to comment on the floodplain/wetlands assessment when the draft EIS is published for comment.

Following publication of the floodplain/wetlands assessment and the draft EIS, DOE will consider all comments received on both the Preliminary Statement of Findings and floodplain/wetlands assessment. A Statement of Findings which will be incorporated into the Record of Decision will be published subsequent to the final EIS.

All suggestions, comments, and questions submitted to DOE, with respect to the Preliminary Statement of Findings, will be carefully considered in preparing the EIS.

Dated at Washington, D.C. this 16th day of May, 1980.

For the United States Department of Energy.

John C. Sawhill,

Deputy Secretary.

[FR Doc. 80-15923 Filed 5-21-80; 9:42 am]

BILLING CODE 6450-01-M

ENVIRONMENTAL PROTECTION AGENCY

[FRL 1498-4]

Prevention of Significant Deterioration of Air Quality: Partial Delegation of Authority to the State of Mississippi

AGENCY: Environmental Protection Agency.

ACTION: Informational notice.

SUMMARY: Section 301 in conjunction with sections 101 and 110 of the Clean Air Act authorizes the Administrator to delegate his authority to implement and enforce the Prevention of Significant Deterioration of Air Quality (PSD) regulations to any State which has submitted adequate implementation and enforcement procedures. The Mississippi Department of Natural Resources submitted to the EPA Region

IV office a request that EPA relinquish to it responsibility for implementing the administrative and technical portions of the PSD program. After a thorough review of the request and information submitted, the Regional Administrator determined that such partial delegation was appropriate for the source categories and with the conditions set forth in the letter reproduced below. Under the terms of the partial delegation made by that letter, EPA retains authority to issue and enforce PSD permits for sources in Mississippi while the State performs the administrative and technical review functions associated with the PSD program.

EFFECTIVE DATE: June 14, 1979.

FOR FURTHER INFORMATION CONTACT: Winston Smith, Chief, Air Programs Branch, Environmental Protection Agency, Region IV, 345 Courtland Street, N.E., Atlanta, Georgia 30308, 404/881-3043 (FTS 257-3043).

SUPPLEMENTAL INFORMATION: On May 10, 1979, Mr. Charles H. Chisolm, Director, Mississippi Bureau of Pollution Control, submitted to the EPA Regional Office a request that EPA relinquish to Mississippi the responsibility for implementing the administrative and technical portions of PSD. After a thorough review of the request and information submitted, the Regional Administrator determined that for the source categories set forth in the following official letter to the Acting Executive Director of the Mississippi Air and Water Pollution Control Commission, delegation was appropriate subject to the conditions set forth therein. Therefore, pursuant to the authority delegated to him by the Administrator, the Regional Administrator formally notified the Director of the Mississippi Bureau of Pollution Control by the following letter that authority to implement the administrative and technical portions of the PSD regulations was relinquished to the State of Mississippi.

U.S. Environmental Protection Agency,
Atlanta, Georgia 30308, June 14, 1979.

Mr. Charles H. Chisolm,
Acting Executive Director, Mississippi Air and Water Pollution Control Commission, Robert E. Lee Building, Jackson, Mississippi 39205.

Dear Mr. Chisolm: This is in response to your letter of May 10, 1979, requesting responsibility for implementation of the technical and administrative portions of the Prevention of Significant Air Quality Deterioration (PSD) program. We have reviewed the procedures for new source review of the State of Mississippi and determined that they provide an adequate and effective procedure for the implementation of the technical and administrative portions of the PSD program by the State of Mississippi. Therefore, pursuant to 40 CFR 52.21 (1978) and to 40 FR 26380-26410 (June 19, 1978) amending 40 CFR 52.21, and hereinafter referred to as 40 CFR 52.21, we hereby delegate our authority for the technical and administrative portions of the federal PSD program, as described in 40 CFR 52.21 to the State of Mississippi as follows:

A. EPA delegates its authority for all sources located or to be located in the State of Mississippi subject to review under the federal regulations for the Prevention of Significant Air Quality Deterioration promulgated in 40 CFR 52.21. The categories of new sources covered by the delegation are:

Fossil-fuel fired steam electric plants of more than 250,000,000 British thermal units per hour heat input
Coal cleaning plants (with thermal dryers)
Kraft pulp mills
Portland cement plants
Primary zinc smelters
Iron and steel mills
Primary aluminum ore reduction plants
Primary copper smelters
Municipal incinerators capable of charging more than 250 tons of refuse per day
Hydrofluoric acid plants
Sulfuric acid plants
Nitric acid plants
Petroleum refineries
Lime plants
Phosphate rock processing plants
Coke oven batteries
Sulfur recovery plants
Carbon black plant (furnace process)
Primary lead smelters
Fuel conversion plants
Sintering plants
Secondary metal production facilities
Chemical process plants
Fossil-fuel boilers of more than 250,000,000 British thermal units per hour heat input
Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels
Taconite ore processing facilities
Glass fiber processing plants
Charcoal production facilities

B. EPA delegates to the State of Mississippi its authority and procedures for public participation promulgated in 40 CFR 52.21(r), but not its authority under 40 CFR 52.21(r)(vii) and (viii) to take final action on an appliation, or its authority to take enforcement action.

C. For purposes of and in accordance with paragraph B above, the State of Mississippi shall follow the procedures in 40 CFR 52.21(r), except that the word "State" shall be substituted for the word "Administrator". A copy of the State's preliminary determination, a copy of all materials submitted by the owner or operator, a copy or summary of other materials (if any) considered by the State in making its preliminary determination, and a copy of the notice pursuant to 40 CFR 52.21(r)(iii) shall be sent to the EPA regional office immediately upon issuance of a Preliminary Determination. Immediately upon issuance of a Final Determination, the State shall forward a copy of the final analysis to the EPA regional office. Upon receipt of the State's final analysis, the EPA regional office shall take final action on an application pursuant to 40 CFR 52.21(r)(vii) and (viii).

D. This delegation is based upon the following conditions:

1. Quarterly reports containing pertinent information relating to the status of sources subject to 40 CFR 52.21 (or other reports as required by the Regional Administrator) will be submitted to EPA by the State of Mississippi as part of the existing quarterly reports normally submitted to EPA through program plan reporting.

2. Upon approval of the Regional Administrator of Region IV, the Executive Director of the Mississippi Air and Water Pollution Control Commission may subdelegate his authority to implement the technical and administrative portions of PSD to local air pollution control authorities in the State when such authorities have demonstrated that they have equivalent or more stringent programs in force.

3. This technical and administrative authority delegated to the State of Mississippi does not include the authority to implement PSD for sources owned or operated by the United States, which are located in the State. This condition in no way relieves any federal facility from meeting the requirements of 40 CFR 52.21.

4. If at any time there is a conflict between a State regulation and a federal regulation (40 CFR 52.21), the federal regulation must be applied if it is more stringent than that of the State. If the State does not have the authority to implement a federal regulation that is more stringent that the applicable State regulation, the pertinent portion of the delegation may be revoked.

5. If the Regional Administrator determines that the State procedure for implementing the technical and administrative portions of PSD is inadequate, or is not being effectively carried out, this delegation may be revoked in whole or in part. Any such revocation shall be effective as of the date specified in a Notice of Revocation to the Mississippi Air and Water Pollution Control Commission.

6. Acceptance of this delegation of presently promulated PSD regulations does not commit the State of Mississippi to request or accept technical and administrative review authority of future standards and requirements. A new request for authority will be required for any standards not included in Paragraph A above.

7. Public availability of information shall be in accordance with 40 CFR 52.21(r).

The State and EPA will develop a system of communication sufficient to guarantee a program that includes the items described below:

a. Each agency is informed of the current compliance status of subject sources in the State of Mississippi.

b. Prior EPA concurrence is obtained on any matter involving interpretation of 40 CFR 52.21 (including unique questions of applicability of the standards).

c. PSD reviews (including requests for information and enforcement actions based thereon) already initiated by EPA prior to this delegation, shall be completed by EPA.

d. The State is informed of the data of receipt by EPA, of any and all completed applications for PSD review affecting a

source owned or operated by the United States and located or to be located in the State, and of the results of each such PSD review conducted; and EPA is informed of any State PSD reviews and progress that might affect the PSD review conducted by EPA.

A notice announcing this delegation will be published in the **Federal Register** in the near future. The notice will state, among other things, that effective immediately, all reports required pursuant to PSD by sources located or to be located in the State of Mississippi should be submitted to the Mississippi Air and Water Pollution Control Commission, P.O. Box 827, [this number has since been changed to P.O. Box 10385], Robert E. Lee Building, Jackson, Mississippi 39205. Any such reports which have been or may be received by EPA, Region IV, will be promptly transmitted to the State agency.

Since this delegation is effective immediately, there is no requirement that the State notify EPA of its acceptance. Unless EPA receives from the State written notice of objections within ten (10) days of receipt of this letter, the State will be deemed to have accepted all of the terms of the delegation.

Sincerly yours,

John C. White,

Regional Administrator.

Copies of the request for delegation of authority are available for public inspection at the Environmental Protection Agency, Region IV Office, 345 Courtland Street, NE., Atlanta, Georgia 30308.

Effective immediately, all reports required pursuant to PSD regulations should not be submitted to the EPA Region IV Office, but instead should be submitted to the State agency at the following address:

Department of Natural Resources, Bureau of Pollution Control, P.O. Box 10385, Jackson, Mississippi 39209.

Application for PSD review in process at the time of this delegation shall be processed through to completion by the EPA Region IV Office.

This notice is issued under the authority of Sections 101, 110, and 301 of the Clean Air Act, as amended (42 U.S.C. 7401, 7410, and 7601).

Dated: May 10, 1980.

Rebecca W. Hammer,

Regional Administrator.

[FR Doc. 80-15716 Filed 5-21-80; 8:45 am]

BILLING CODE 6560-01-M

FEDERAL TRADE COMMISSION

Early Termination of the Waiting Period of the Premerger Notification Rules

AGENCY: Federal Trade Commission.

ACTION: Granting of request for early termination of the waiting period of the premerger notification rules.

SUMMARY: Thiokol Corporation is granted early termination of the waiting period provided by law and the premerger notification rules with respect to the proposed acquisition of voting securities of Cincinnati Milacron Chemicals, Inc. and related assets from Cincinnati Milacron, Inc. The grant was made by the Federal Trade Commission and the Assistant Attorney General in charge of the Antitrust Division of the Department of Justice in response to a request for early termination submitted by Cincinnati Milacron, Inc. Neither agency intends to take any action with respect to this acquisition during the waiting period.

EFFECTIVE DATE: May 8, 1980.

FOR FURTHER INFORMATION CONTACT: Joan S. Truitt, Attorney, Premerger Notification Office, Bureau of Competition, Room 303, Federal Trade Commission, Washington, D.C. 20580, (202-523-3894).

SUPPLEMENTARY INFORMATION: Section 7A of the Clayton Act, 15 U.S.C. 18a, as added by Title II of the Hart-Scott-Rodino Antitrust Improvements Act of 1976, requires persons contemplating certain mergers or acquisitions to give the Commission and Assistant Attorney General advance notice and to wait designated periods before consummation of such plans. Section 7A(b)(2) of the Act permits the agencies, in individual cases, to terminate this waiting period prior to its expiration and requires that notice of this action be published in the **Federal Register.**

By direction of the Commission.

James A. Tobin,

Acting Secretary.

[FR Doc. 80-15756 Filed 5-21-80; 8:45 am]

BILLING CODE 6750-01-M

GENERAL SERVICES ADMINISTRATION

National Archives and Records Service

Interlibrary Loan of National Archives Microfilm Publications

Notice is hereby given that the National Archives and Records Service will loan selected National Archives microfilm publications to libraries and research institutions in the United States, Canada, and Mexico from the Federal Archives and Records Center in Fort Worth, Texas. Effective July 31, 1980, no further loan of microfilm will be made from any other Federal Archives and Records Center. Loan of microfilm is made in general accordance with the American Library Association "National Inter-library Loan Code, 1968."

Effective August 1, 1980, all requests for interlibrary loan of National Archives microfilm publications should be sent to the following address:

Chief, Archives Branch, Federal Archives & Records Center, P.O. Box 6216, Fort Worth, TX 76115.

There will be an interruption in service in order to complete preparations for the new system; loan requests will be filled from Fort Worth beginning no later than October 1, 1980. All requests will be filled in the order in which they were received.

FOR FURTHER INFORMATION CONTACT: Charles South, General Services Administration (NNB), Washington, DC 20408 (202-523-3081).

Dated: May 9, 1980.

Walter W. Stender,

Acting Archivist of the United States.

[FR Doc. 80-15631 Filed 5-21-80; 8:45 am]

BILLING CODE 6820-26-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Alcohol, Drug Abuse, and Mental Health Administration

Notice of Meetings

In accordance with Section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. Appendix I), announcement is made of the following National Advisory bodies scheduled to assemble during the month of June 1980.

Basic Behavioral Processes Research Review Committee

June 4-7; 9:00 a.m., Shoreham Americana Hotel, 2500 Calvert Street, N.W., Washington, D.C. 20008. Open—June 4, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Emilie A. Embrey, Room 9C-26, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443-3936.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities in the fields of experimental and physiological psychology and comparative behavior, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:00 a.m. on June 4, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to

the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Alcohol Training Review Committee

June 5–6; 9:00 a.m., Ramada Inn, 1251 West Montgomery Avenue, Rockville, Maryland 20850. Open—June 5, 9:00 to 10:30 a.m. Closed—Otherwise. Contact: Jeanne G. Trumble, Room 14C–17, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–4640.

Purpose: The Committee is charged with the initial review of grant applications for Federal Assistance in the program areas administered by the National Institute on Alcohol Abuse and Alcoholism, relating to manpower and training activities and makes recommendations to the National Advisory Council on Alcohol Abuse and Alcoholism for final review.

Agenda: From 9:00 to 10:30 a.m. on June 5, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing inital review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Minority Group Mental Health Review Committee

June 5–7; 9:00 a.m., Shoreham Americana Hotel, 2500 Calvert Street, N.W., Washington, D.C. 20008. Open—June 5, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Edna M. Hardy Hill, Room 9C–08, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–1177.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities in the fields of minority mental health, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:00 a.m. on June 5, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing inital review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Social Work Education Review Committee

June 6; 9:00 a.m., Ramada Inn, 8400 Wisconsin Avenue, Bethesda, Maryland 20014. Open—June 6, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Judith Ann Lynch, Grants Technical Assistant, Room 9–105, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–4608.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities for education and manpower development support in the field of social work, including those which strongly reflect the recommendations of the President's Commission on Mental Health, and in accord to the degree to which these address one or more of the NIMH priority areas on behalf of social work education, i.e., categories of basic mental health education, continuing education, short-term mental health training, and special projects, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:00 a.m. on June 6, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Psychopathology and Clinical Biology Research Review Committee

June 9–11; 9:00 a.m., Potomac Sheraton Inn, 3 Research Court, Rockville, Maryland 20850. Open—June 9, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Mary M. Martin, Room 9C–24, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–6470.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance and activities in the fields of clinical psychopathology and clinical biology, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:00 a.m. on June 9, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing inital review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Epidemiologic and Services Research Review Committee

June 9–12; 9:00 a.m., Connecticut Room, Holiday Inn-Bethesda, 8120 Wisconsin Avenue, Bethesda, Maryland 20014. Open—June 9, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Shirley R. Margolis, Ph.D., Room 9C–24, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–6470.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities in the fields of mental health epidemiology, mental health systems research, and mental health services development, evaluation methodology and knowledge transfer, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9 to 10 a.m. on June 9, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Drug Abuse Clinical, Behavioral, and Psychosocial Research Review Committee

June 9–13; 9 a.m., Conference Rooms I and K, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. Open—June 9, 9 to 10 a.m. Closed—Otherwise. Contact: Daniel L. Mintz, Executive Secretary, Room 10–42, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–2620.

Purpose: The Committee is charged with the initial review of grant applications for Federal assistance in the program areas administered by the National Institute on Drug Abuse relating to research and research training activities and makes recommendations to the National Advisory Council on Drug Abuse for final review.

Agenda: From 9 to 10 a.m. on June 9, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public, in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Drug Abuse Resource Development Review Committee

June 9–13; 9 a.m., Conference Room M, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. Open—June 9, 9 to 10 a.m. Closed—Otherwise. Contact: Mary C. Knipmeyer, Ph.D., Executive Secretary, Room 10–42, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–6664.

Purpose: The Committee is charged with the initial review of grant applications for Federal assistance in the program areas administered by the National Institute on Drug Abuse relating to demonstration treatment services, prevention and education, and training activities and makes recommendations to the National Advisory Council on Drug Abuse for final review.

Agenda: From 9 to 10 a.m. on June 9, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the

Committee will be performing initial review of the grant applications for Federal assistance and will not be open to the public, in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Community Processes and Social Policy Review Committee

June 11–13; 9 a.m., Holiday Inn—Key Bridge, Cardinal Room, 1850 N. Fort Myer Drive, Arlington (Rosslyn), Virginia 22209. Open—June 11, 9 to 10 a.m. Closed—Otherwise. Contact: Mrs. Rachel Driver, Room 9C–08, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–1177.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities in the field of institutional and organizational environments, and community social relationships and processes, as these relate to social problems, social policy and individual and family mental health, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9 to 10 a.m. on June 11, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public, in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Criminal and Violent Behavior Review Committee

June 11–13; 9 a.m., The Holiday Inn, Adams and Benjamin Franklin Rooms, 5520 Wisconsin Avenue, Chevy Chase, Maryland.

Open—June 11, 9:00 to 10:30 a.m. Closed—Otherwise. Contact: Mrs. Ruby Vaughan, Room 9C–08, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–4868.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities in the fields of crime and delinquency, related law and mental health interactions, individual violent behavior, and sexual assault, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:30 a.m. on June 11, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Mental Health Research Education Review Committee

June 11–14; 9:00 a.m., Ramada Inn, 1251 West Montgomery Avenue, Rockville, Maryland 20850. Open—June 12, 9:00 to 10:30 a.m. Closed—Otherwise. Contact: Barbara Spelman, Room 9–102, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of research training activities in the fields of the biological sciences, the psychological sciences, and the social sciences and social problems areas, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:30 a.m. on June 12, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Basic Psychopharmacology and Neuropsychology Research Review Committee

June 12–13; 9:00 a.m. Holiday Inn, 8777 Georgia Avenue, Silver Spring, Maryland 20910. Open—June 12, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Jean Pierce, Room 9C–26, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–3936.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities in the fields of basic psychopharmacology and neuropsychology, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:00 a.m. on June 12, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Treatment Development and Assessment Research Review Committee

June 12–13; 9:00 a.m., Shoreham Americana Hotel, 2500 Calvert Street, N.W., Washington, D.C. 20008. Open—June 12, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Pamela J. Mitchell, Room 9C–24, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–6470.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities in the fields of treatment development and assessment research, e.g., psychosocial and biobehavioral treatments; psychopharmacological, biological, and physical treatments; and clinical program-projects and clinical research centers, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:00 a.m. on June 12, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Paraprofessional Education Review Committee

June 12–14; 9:00 a.m., The Executive Room, Ramada Inn, 8400 Wisconsin Avenue, Bethesda, Maryland 20014. Open—June 12, 9:00 to 12:00 noon. Closed—Otherwise. Contact: Mrs. Carolyn N. Snowden, Room 9C–15, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–1737.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities for paraprofessional education, the primary focus of which is on the development, production, and integration of paraprofessional mental health workers into service systems to meet NIMH service priorities such as providing services to unserved and underserved populations, increasing the supply of trained minority mental health service manpower, and providing mental illness prevention services, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 12:00 noon on June 12, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Cognition, Emotion, and Personality Research Review Committee

June 13–15; 9:00 a.m., Connecticut Inn Motel, 4400 Connecticut Avenue, N.W., Washington, D.C. 20008. Open: June 13, 9:00

to 10:00 a.m. Closed—Otherwise. Contact: Shirley Maltz, Room 9C–26, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–3944.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activity in the fields of personality, cognition, emotion, and higher mental processes, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:00 a.m. on June 13, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Mental Health Services Manpower Development Review Committee

June 16–17; 1:00 p.m., Conference Rooms 1709A–B, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. Open—June 16, 1:00 to 2:00 p.m. Closed—Otherwise. Contact: Mrs. Barbara McCracken, Room 9C–02, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–1220.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities for state mental health manpower development projects, and research and demonstration projects concerning mental health services manpower, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 1:00 to 2:00 p.m. on June 16, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Alcohol Abuse Prevention Review Committee

June 16–18; 9:00 a.m., Sheraton Hotel, 8127 Colesville Road, Silver Spring, Maryland 20910. Open—June 16, 9:00 to 10:30 a.m. Closed—Otherwise. Contact: Robert E. Davis, Room 16C–26, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–2860.

Purpose: The Committee is charged with the initial review of grant applications for Federal assistance in the program areas administered by the National Institute on Alcohol Abuse and Alcoholism, ADAMHA, relating to prevention activities and makes recommendations to the National Advisory Council on Alcohol Abuse and Alcoholism for final review.

Agenda: From 9:00 to 10:30 a.m. on June 16, the meeting will be open for discussion of administrative reports, announcements, and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Life Course Review Committee

June 18–20; 9:00 a.m., Terrace Room A and Terrace Room B, Ramada Inn, 8400 Wisconsin Avenue, Bethesda, Maryland 20014. Open—June 18, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Mrs. Diana Souder, Room 9C–18, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–1367.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities in the fields of child, family, and aging, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:00 a.m. on June 18, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Community Alcoholism Services Review Committee

June 18–23; 7:00 p.m., Sheraton Inn, 8727 Colesville Road, Silver Spring, Maryland 20910. Open—June 18, 7:00 to 9:30 p.m. Closed—Otherwise. Contact: Mr. Phillip Dawes, Room 16C–26, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–4273.

Purpose: The Committee is charged with the initial review of grant applications for Federal assistance in the program area administered by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) relating to alcoholism service activities and makes recommendations to the National Advisory Council on Alcohol Abuse and Alcoholism for final review.

Agenda: From 7:00 to 9:30 p.m. on June 18, the meeting will be open for discussion of administrative, legislative, and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Mental Health Small Grant Review Committee

June 19–21; 1:00 p.m., North Scott Room and Parkview Room, The Gramercy Inn, 1616 Rhode Island Avenue, NW., Washington, D.C. 20036. Open—June 19, 1:00 to 2:00 p.m. Closed—Otherwise. Contact: LaVerl P. Klein, Room 9–104, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–4843.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities for research in all disciplines pertaining to alcohol, drug abuse, and mental health, including psychology, sociology, anthropology, psychiatry, and the biological sciences, and makes recommendations to the National Advisory Councils of the respestive Institutes for final review.

Agenda: From 1:00 to 2:00 p.m. on June 19, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug, Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Psychiatric Nursing Education Review Committee

June 24–25; 9:00 a.m., Conference Room G, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. Open—June 24, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Barbara A. Graves, Room 9–105, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–1737.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities characteristically innovative in educational design methodology, to increase the number of Master prepared nurses for practice in public mental health facilities, i.e., State mental health hospitals, community mental health/health centers, State mental health departments, long-term care facilities, located in underserved or unserved geographic areas, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 10:00 a.m. on June 24, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d), of Pub. L. 92–463 (5 U.S.C. Appendix I).

Alcohol Biomedical Research Review Committee

June 25–27; 9:00 a.m., Rosslyn Westpark Hotel, 1900 N. Fort Myer Drive, Arlington, Virginia 22209. Open—June 25, 9:00 to 11:00 a.m. Closed—Otherwise. Contact: Diana Widner, Room 16C–26, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–6106.

Purpose: The Committee is charged with the initial review of grant applications for Federal assistance in the program areas administered by the National Institute on Alcohol Abuse and Alcoholism, relating to research activities and makes recommendations to the National Advisory Council on Alcohol Abuse and Alcoholism for final review.

Agenda: From 9:00 to 11:00 a.m. on June 25, the meeting will be open for discussion of administrative reports, announcements, and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Alcohol Psychosocial Research Review Committee

June 25–27; 9:00 a.m., The Holiday Inn, 8120 Wisconsin Avenue, Bethesda, Maryland 20014. Open—June 25, 9:00 to 11:00 a.m. Closed—Otherwise. Contact: James C. Teegarden, Room 16C–26, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–6106.

Purpose: The Committee is charged with the initial review of grant applications for Federal assistance in the program areas administered by the National Institute on Alcohol Abuse and Alcoholism, relating to research activities and makes recommendations to the National Advisory Council on Alcohol Abuse and Alcoholism for final review.

Agenda: From 9:00 to 11:00 a.m. on June 25, the meeting will be open for discussion of administrative reports, announcements, and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Basic Sociocultural Research Review Committee

June 26–28; 9:00 a.m., Holiday Inn-Chevy Chase, 5520 Wisconsin Avenue, Chevy Chase, Maryland 20015. Open—June 26, 9:00 to 9:30 a.m. Closed—Otherwise. Contact: Marilyn Andersen, Room 9C–26, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–3936.

Purpose: The Committee is charged with the initial review, based on the scientific and technical merit of applications submitted to the NIMH for Federal assistance of activities in the fields of social psychology, sociology, anthropology, and other social sciences focusing on social and cultural behaviors, processes, and institutions, and makes recommendations to the National Advisory Mental Health Council for final review.

Agenda: From 9:00 to 9:30 a.m. on June 26, the meeting will be open for discussion of administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Drug Abuse Biomedical Research Review Committee

June 30–July 3; 9:00 a.m., Conference Room M, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. Open—June 30, 9:00 to 10:00 a.m. Closed—Otherwise. Contact: Camilla Holland, Room 10–42, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, (301) 443–2620.

Purpose: The Committee is charged with the initial review of grant applications for Federal assistance in the program areas administered by the National Institute on Drug Abuse relating to research and research training activities and makes recommendations to the National Advisory Council on Drug Abuse for final review.

Agenda: From 9:00 to 10:00 a.m. on June 30, the meeting will be open for discussion of general research topics, administrative announcements and program developments. Otherwise, the Committee will be performing initial review of grant applications for Federal assistance and will not be open to the public, in accordance with the determination by the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, pursuant to the provisions of Section 552b(c)(6), Title 5 U.S. Code and Section 10(d) of Pub. L. 92–463 (5 U.S.C. Appendix I).

Substantive information may be obtained from the contact persons listed above. Summaries of the meetings and rosters of committee members for NIMH will be furnished by the Office of the Associate Director for Extramural Programs, Room 9–95, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, telephone: (301) 443–4333. For NIAAA: Mr. Paul Garner, Acting Associate Director for Public Affairs, Room 11A–17, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, telephone: (301) 443–3306. For NIDA: Ms. Mary Carol Kelly, Information Officer, Room 10A–56, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, telephone: (301) 443–6245.

Dated: May 19, 1980.

Elizabeth A. Connolly,

Committee Management Officer, Alcohol, Drug Abuse, and Mental Health Administration.

[FR Doc. 80–15685 Filed 5–21–80; 8:45 am]

BILLING CODE 4110–88–M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

Area Managers, Las Cruces District: Redelegation of Authority

1. Pursuant to the authority contained in Part III Section 3.1 of bureau Order No. 701 of July 23, 1964, as amended, I hereby redelegate to Area Managers, Las Cruces District, within their areas of responsibility, authority to take all actions on the matters listed in Part III, Section 3.2(b), 3.3(b), 3.3(d), 3.6(m), 3.6(n), Section 3.7(a)(2), (2), and (3), 3.7(b), 3.7(c), 3.7(d), 3.7(e), 3.7(f), 3.8(a), Section 3.9(g) material other than forest products not exceeding $5,000 in value and free use permits for materials other than forest products not exceeding $5,000 in value, section 3.9(m), 3.9(o), and 3.9(z).

2. All previously published orders of redelegation pursuant to the authority of Bureau Order 701, as amended, which pertain to the Area Managers, Las Cruces District, and which are inconsistent with this order are hereby cancelled and superseded.

3. Effective date. This redelegation will become effective May 14, 1980.

Dated: may 14, 1980.

Daniel C. B. Rathbun,

District Manager.

Dated: May 12, 1980.

Larry L. Woodard,

Acting State Director.

[FR Doc. 80–15633 Filed 5–21–80; 8:45 am]

BILLING CODE 4310–84–M

Baker District Office, Oregon Emergency Restrictions of Public Lands for Motorized Vehicles and Overnight Camping

Notice is hereby given that use on certain public lands administered by the Bureau of Land Management is limited in accordance with the provisions of 43 CFR 8340 and 43 CFR 8363.

Vehicular use on the affected lands is restricted to designated roads and trail. Vehicular use of lands off these designations is prohibited.

Overnight camping within the boundaries of the area is prohibited.

The area affected by these restrictions total approximately 880 acres of public land described as:

T. 4 N., R. 37 E., Willamette Meridian:
Section 10, S½NE¼, SE¼NW¼, E½SE¼
Section 11, W½SW¼, SE¼SW¼, S½SE¼
Section 14, N½
Section 15, N½NE¼, NE¼NW¼,

This area is currently being seriously damaged by ORV and overnight camping use. These restrictions are needed to prevent further damage to the vegetation, watershed and soils in the area. After consultation with the Oregon Department of Fish and Game, surrounding landowners, Umatilla County and a local Ad Hoc committee appointed by the county, these measures are deemed necessary to protect the area.

Maps showing the area described above are available at the Bureau of Land Management, Baker District Office, P.O. Box 987, Baker, Oregon 97814. These restrictions take effect on May 21, 1980. The camping restriction will remain in effect until further notice; the vehicular restriction will remain in effect until the area can be designated under the Standard ORV designation process.

Dated: May 15, 1980.

Gordon R. Staker,

District Manager.

[FR Doc. 80-15634 Filed 5-21-80; 8:45 am]

BILLING CODE 4310-84-M

Montana Wilderness Inventory; Overthrust Belt—Butte District

May 13, 1980.

Background

The intended final inventory decision for Bureau of Land Management (BLM) administered lands within the Montana portion of the Overthrust Belt was announced in the February 22, 1980, **Federal Register**. Another notice appeared in the March 28, 1980, **Federal Register** announcing a 30-day protest period beginning March 30, 1980, and ending at 4:30 p.m., April 30, 1980.

The February 22 notice described 21 inventory units totaling 131,768 acres which were recommended for wilderness study status. Another 27 inventory units totaling 249,360 acres were recommended to be dropped from further wilderness consideration. All of these lands are located in the Butte BLM District.

Final Decision

There were no valid protests received for the following inventory units and the decision to drop these units from futher wilderness consideration is now final:

Unit number	Unit name	Acreage
MT-076-004...	Big Spring Gulch	43,327
MT-076-009...	Antelope Flats	14,130
MT-076-010...	Basin Creek South	10,815
MT-076-024...	Camp Creek South	7,200
MT-076-031...	Cold Spring Creek	7,100
MT-076-042...	Red Rock River Island No. 2	3
MT-076-047...	Jimmy New Creek	6,275
MT-076-051...	Maiden Rock Islands	1
MT-076-054...	Nez Perce Hollow	12,743
MT-076-071...	Elk Gulch	10,292
MT-075-124...	Missouri River Island	12
MT-075-125...	Missouri River Island	5
MT-075-126...	Missouri River Island	17
MT-075-134...	Yellowstone River Island	23
Total acreage		111,943

Deferred Decision

The decision on the following inventory units is under formal protest and the effective final decision date is deferred pending a decision on the protests:

I. Units Recommended for Wilderness Study Status

Unit number	Unit name	Acreage identified for WSA status	Acreage recommended to be dropped from wilderness consideration
MT-076-001...	Ruby Mountains	26,357	5,643
MT-076-002...	Blacktail Mountains	19,189	2,261
MT-076-007...	E. Fork of Blacktail Deer Creed.	6,180	.....
MT-076-022...	Hidden Pasture Creek.	15,475	.....
MT-076-026...	Bell/Limekin Canyons.	6,629	16,100
MT-076-028...	Henneberry Ridge	10,111	27,589
MT-076-034...	Farlin Creek	1,260	80
MT-076-063...	Tobacco Root Tack-Ons.	860	.....
MT-076-069...	Axolotl Lakes	6,578	866
MT-076-079...	Madison Tack-Ons	1,469	51
MT-075-102...	Blind Horse Creek	4,927	.....
MT-075-105...	Chute Mountain	3,085	.....
MT-075-106...	Deep Creek/Battle Creek.	3,086	.....
MT-075-107...	N. Fork of Sun River	196	.....
MT-075-110...	Beaver Meadows	595	.....
MT-075-114...	Elkhorn	3,585	2,113
MT-075-115...	Black Sage	5,976	.....
MT-075-133...	Yellowstone River Island.	53	.....
MT-074-151a.	Hoodoo Mountain	11,380	1,293
MT-074-151b.	Gallagher Creek	4,257	1,670
MT-074-155...	Quigg West	520	.....
Total		131,768	57,666

II. Areas Not Recommended as Wilderness Study Areas

Unit number	Unit name	Acreage recommended to be dropped from wilderness consideration
MT-076-003...	Blacktail Mountains West	2,130
MT-076-006...	White Hills South	6,850
MT-076-008...	Basin Creek North	17,960
MT-076-011...	Lima Reservoir	5,360
MT-076-015...	Red Rocks Refuge North	440
MT-076-025...	McCartney Mtn./Sandy Hollow	16,380
MT-076-029...	Bachelor Mountain	13,000
MT-076-033...	Garrett Hill	1,120
MT-076-059...	Block Mountain	6,700
MT-076-070...	Sweetwater	7,749
MT-075-123...	Missouri River Island	22

II. Areas Not Recommended as Wilderness Study Areas—Continued

Unit number	Unit name	Acreage recommended to be dropped from wilderness consideration
MT-075-138...	Missouri River Island	40
Total		79,751

All inventory units under formal protest will remain under wilderness interim management until the protests have been resolved.

Further information may be obtained by contacting the follwing BLM offices:

Montana State Office (931), Bureau of Land Management, P.O. Box 30157, 222 North 32nd Street, Billings, Montana 59107.

Bureau of Land Management, Butte District Office, P.O. Box 3388, Butte, Montana 59701

Kannon Richards,

Acting State Director.

[FR Doc. 80-15632 Filed 5-21-80; 8:45 am]

BILLING CODE 4310-84-M

Uinta-Southwestern Utah Regional Coal Team, Colorado and Utah; Meeting

AGENCY: Bureau of Land Management, Interior.

ACTION: Announcement and Notice of Uinta-Southwestern Utah Federal Regional Coal Team Meeting.

DATE: June 17, 1980—8:30 am.

ADDRESS: The meeting will be held in the Oquirrh Room, 23rd Floor of the University Club Building, 136 East South Temple, Salt Lake City, Utah.

SUMMARY: Pursuant to the responsibilities assigned under 43 CFR 3400.4(b), the Regional Coal Team for the Uinta-Southwestern Utah Federal Coal Production Region will meet on June 17, 1980, to consider the detailed cumulative analysis and final tract ranking and selection of Federal coal lease tracts for sale scheduled to start in mid-1981. The Team will also consider other issues pertaining to tract delineation, site specific analyses, and the Regional Coal Environmental Impact Statement.

FOR FURTHER INFORMATION CONTACT: Edward F. Spang, Regional Coal Team Chairperson, (702) 784-5451.

Dated: May 14, 1980.

William G. Leavell,

Associate Utah State Director.

[FR Doc. 80-15635 Filed 5-21-80; 8:45 am]

BILLING CODE 4310-84-M

California Desert Conservation Area Advisory Committee; Meeting

Notice is hereby given in accordance with Pub. L. 92–463 and 94–579 that the California Desert Conservation Area Advisory Committee to the Bureau of Land Management, U.S. Department of the Interior, will meet June 5–7, 1980, in San Bernardino, California. The purpose of the meeting is to: review public documents on the draft California desert plan alternatives; review the issues, options, and proposed planning decisions; and advise on development of the proposed plan and final environmental impact statement for the management plan for the California Desert Conservation Area.

The meeting will be held in Room LC–500(N), California State College at San Bernardino, 5500 State College Parkway, San Bernardino, California 92407, begining at 8 a.m. June 5, 6 and 7, and may be continued on June 8 if the authorized Federal representative and the Committee chairman find it to be necessary to complete the agenda. The meeting is open to the public, and interested persons may attend and file statements with the Advisory Committee.

Further information may be obtained from Mr. Clayton A. Record, Jr., Chairman, California Desert Conservation Area Advisory Committee, c/o Desert Plan Staff, Bureau of Land Management, 3610 Central Avenue, Suite 402, Riverside, California 92506.

Dated: May 14, 1980.

James B. Ruch,

State Director

[FR Doc. 80–15741 Filed 5–21–80; 8:45 am]

BILLING CODE 4310–84–M

National Public Lands Advisory Council; Meeting

AGENCY: Bureau of Land Management, Interior.

ACTION: Meeting of the National Public Lands Advisory Council.

SUMMARY: Notice is hereby given that the National Public Lands Advisory Council will meet June 26 and June 27, 1980. The meeting will be held at the Howard Johnson Hotel, 122 West South Temple Street, Salt Lake City, Utah. The meeting hours will be 8:30 a.m. to 5:30 p.m. on the 26th, and 8:00 a.m. to 5:00 p.m. on the 27th. The proposed agenda for the two-day meeting is:

Thursday, June 26: (1) Address by Utah Governor Scott Matheson, expressing his views on management of the public lands; (2) Update on the Bureau of Land Management (BLM) four-year authorization request to Congress; (3) Panel discussion on the proposed MX missile system, focusing on impacts on the public lands, particularly natural resources, environment, and management; and (4) Public statements.

Friday, June 27: (1) Public lands wilderness review policy issues; (2) The proposed Energy Mobilization Board and the public lands; (3) Public lands recreation policy and program; (4) Protection of cultural/historic values on the public lands; (5) Storage of toxic and hazardous wastes on the public lands; and (6) Meetings of Council committees and of other Council working groups, and discussion of Council old and new business, including agenda for the Council's next meeting, September 22 and 23, at Boise, Idaho.

The Council's Issues and Agenda Committee will meet prior to the Council meeting—on Wednesday evening, June 25, from 7:30 to 9:30 o'clock, also at the Howard Johnson Hotel—to discuss details of the June 26–27 meeting.

DATES: June 26 and 27, 1980—Council Meeting; June 26, 1980—Public Statements.

ADDRESS: Copies of public statements may be mailed in advance of the meeting to: Chairman Craig Ritchey, National Public Lands Advisory Council, c/o Director (660), Bureau of Land Management, Department of the Interior, 18th and C Streets, N.W., Washington, D.C. 20249.

FOR FURTHER INFORMATION CONTACT: Dave Johnson, Office of Cooperative Relations (660), at BLM's Washington Office, telephone (202) 343–8947; or Jack Reed, Public Affairs Officer, Utah State Office, BLM, 136 East South Temple Street, Salt Lake City, Utah, 84111; telephone (801) 524–4227.

SUPPLEMENTARY INFORMATION: The Council advises the Secretary of the Interior through the Director, Bureau of Land Management, as to policies, plans, and programs for management of the public lands and related resources administered by the Bureau.

All meetings of the Council are open to the public. Opportunity will be provided for members of the public to make oral statements to the Council, from 3:30 to 5:30 p.m., Thursday, June 26.

Such statements should not exceed 10 minutes, should address specific national public lands issues, and should also be submitted in writing and at least two copies filed with the Council Chairman. In addition, written statements alone may be filed with the Council. Early filing or mailing of such statements is encouraged to facilitate consideration by the Council members.

Copies of the detailed agenda may be requested from Dave Johnson, BLM's Washington Office, or from Jack Reed, BLM's Utah State Office, at the addresses or telephone numbers given above.

Dated: May 19, 1980.

Ed Hastey,

Associate Director, Bureau of Land Management.

[FR Doc 80–15751 Filed 5–21–80; 8:45 am]

BILLING CODE 4310–84–M

Chief, Oil and Gas Section, Division of Technical Services, New Mexico State Office; Redelegation of Authority

May 15, 1980.

1. The redelegation of authority promulgated in the February 5, 1972, **Federal Register** (37 FR 2793) to the Chief, Branch of Lands and Minerals Operations, is hereby revoked.

2. Pursuant to the authority contained in Part I, section 1.1(a) of Bureau Order No. 701 of July 23, 1964, as amended, I hereby redelegate to the Chief, Oil and Gas Section in the Division of Technical Services, authority to take action on the matters listed in Part II–A, sections 2.6 (a), (c), (h) and (n) of Bureau Order No. 701 of July 23, 1964, as amended.

3. The Chief, Division of Technical Services may, in his discretion, personally exercise any authority hereby delegated to the Chief, Oil and Gas Section.

4. The Chief, Oil and Gas Section may redelegate the authority vested in him by this delegation to any qualified employee under his jurisdiction. Any order or redelegation must be approved by the State Director and published in the **Federal Register.**

5. The Chief, Oil and Gas Section may, by written order, designate any qualified employee of the Section to perform the functions of this position in his absence. Such order will be approved by the Chief, Division of Technical Services.

6. Effective date. This redelegation will become effective May 30, 1980.

Arthur W. Zimmerman,

State Director.

[FR Doc. 80–15739 Filed 5–21–80; 8:45 am]

BILLING CODE 4310–84–M

[NM 40704]

New Mexico; Application

May 13, 1980.

Notice is hereby given that, pursuant to Section 28 of the Mineral Leasing Act of 1920 (30 U.S.C. 185), as amended by

the Act of November 16, 1973 (87 Stat. 576), El Paso Natural Gas Company has applied for one 4½ inch natural gas pipeline right-of-way across the following land:

New Mexico Principal Meridian, New Mexico

T. 16 S., R. 28 E.,
Sec. 6, lots 12, 13, 16, and E½SW¼;
Sec. 7, E½W½;
Sec. 18, W½E½ and NE¼NW¼;
Sec. 19, SW¼NE¼ and W½SE¼;
Sec. 30, W½E½;
Sec. 31, E½SE¼ and NW¼SE¼.

T. 17 S., R. 28 E.,
Sec. 6, lot 1, SE¼NE¼ and E½SE¼.

This pipeline will convey natural gas across 6.437 miles of public land in Eddy County, New Mexico.

The purpose of this notice is to inform the public that the Bureau will be proceeding with consideration of whether the application should be approved, and if so, under what terms and conditions.

Interested persons desiring to express their views should promptly send their name and address to the District Manager, Bureau of Land Management, P.O. Box 1397, Roswell, New Mexico 88201.

Pauline T. Brown,

Acting Chief, Lands Section.

[FR Doc. 80-15738 Filed 5-21-80; 8:45 am]

BILLING CODE 4310-84-M

Western Powder River Basin Management Framework Plan

May 16, 1980.

This notice is to advise you that the Casper, Wyoming District Office of the Bureau of Land Management is reviewing and will amend portions of the Western Powder River Basin Management Framework Plan (MFP). The reasons for the review and amendment is to make certain the MFP reflects, as completely as possible, current statutory requirements and policies, and to continue carrying out the requirements of Section 522 of the Surface Mining Control and Reclamation Act of 1977.

Background standards and procedures for this MFP review and amendment preparation are contained in the **Federal Register**, Vol. 44, No. 140, 42584–42652 of July 19, 1979; and Vol. 44, No. 153, 46386–46401 of August 7, 1970. The standards for this review are also discussed in a final environmental statement describing the Secretary of the Interior's preferred coal program and alternatives, released in April 1979.

The MFP amendment, planned for completion by April 1981, will identify areas acceptable for further consideration for coal leasing. The amendment will be followed by activity planning which includes the identification of tracts for lease, their ranking by economic and environmental factors, and preparation of a regional environmental impact statement for lease sales.

The review area is part of the Powder River Coal Region. Located in Sheridan, Johnson and Campbell Counties, Wyoming, this includes an area 6 to 18 miles wide along the western edge of Campbell County, most of Sheridan County, both north and east of the City of Sheridan, the northeast one-third of Johnson County, and some small areas in southern Johnson County, northeast of the town of Kaycee, and east and south of the town of Sussex. This area includes numerous coal seams in the Wasatch Formation and Ft. Union Formation which have high and moderate development potential.

A major anticipated planning issue is the ability of local communities to absorb growth associated with additional coal development.

An interdisciplinary team will complete the review and amendment. Disciplines to be represented include archeology, geology, hydrology, realty, recreation, socioeconomics, soils and wildlife.

Public participation opportunities will be provided in the following ways: (1) A public information meeting, combined with a meeting to discuss results of an initial application of Coal Unsuitability Criteria, will be held in October 1980 in Buffalo and Sheridan, Wyoming. (2) A draft MFP amendment will be distributed for public review in December 1980. Ninety days will be provided for public review and comment. A public meeting and hearing, in Buffalo and Sheridan, Wyoming, will be held during the 90-day review period.

Public comments will be considered in preparation for the final amendment which will be completed and available to the public in April 1981.

Definite dates and locations for public meetings and hearings will be announced through local news media and correspondence mailed to interested members of the public.

For further information contact Don Whyde at the Bureau of Land Management, Casper District Office, 951 Union Boulevard, Casper, Wyoming 82601, phone (307) 265–5550, ext. 5101. Documents relevant to the planning process are also available to the above address.

Robert E. Wilber,

District Manager.

[FR Doc. 80-15748 Filed 5-21-80; 8:45 am]

BILLING CODE 4310-84-M

[W-71198 Amendment]

Wyoming; Application

May 16, 1980.

Notice is hereby given that pursuant to Sec. 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185), the Michigan Wisconsin Pipe Line Company of Detroit, Michigan filed an amendment application for a right-of-way to construct an 8 inch O.D. natural gas gathering line for the purpose of connecting a well head to their Lysite gathering system across the following described public lands:

Sixth Principal Meridian, Wyoming

T. 39 N., R. 91 W.,
Sec. 28, E½SW¼, S½SW¼SW¼;
Sec. 29, S½S½SE¼;
Sec. 32, NW¼NE¼, NE¼NW¼.

The purpose of this notice is to inform the public that the Bureau will be proceeding with consideration of whether the application should be approved, and if so, under what terms and conditions.

Interested persons desiring to express their views should do so promptly. Persons submitting comments should include their name and address and send them to the District Manager, Bureau of Land Management, 1300 Third Street, P.O. Box 260, Rawlins, Wyoming 82301.

Harold G. Stinchcomb,

Chief, Branch of Lands and Minerals Operations.

[FR Doc. 80-15740 Filed 5-21-80; 8:45 am]

BILLING CODE 4310-84-M

Geological Survey

Oil and Gas and Sulphur Operations in the Outer Continental Shelf; Receipt of Proposed Development and Production Plan

AGENCY: U.S. Geological Survey, Department of the Interior.

ACTION: Notice of the Receipt of a Proposed Development and Production Plan.

SUMMARY: This Notice announces that Chevron U.S.A. Inc., Unit Operator of the Main Pass Block 40 Federal Unit, Agreement No. 14–08–001–3847, submitted on May 8, 1980, a proposed Supplemental Plan of Development/Production describing the activities it

proposes to conduct on the Main Pass Block 40 Federal Unit, offshore Louisiana.

The purpose of this Notice is to inform the public, pursuant to Section 25 of the OCS Lands Act Amendments of 1978, that the Geological Survey is considering approval of the Plan and that it is available for public review at the offices of the Conservation Manager, Gulf of Mexico OCS Region, U.S. Geological Survey, 3301 N. Causeway Blvd., Room 147, Metairie, Louisiana 70002.

FOR FURTHER INFORMATION CONTACT: U.S. Geological Survey, Public Records, Room 147, open weekdays 9:00 a.m. to 3:30 p.m., 3301 North Causeway Blvd., Metairie, Louisiana 70002, Phone 837–4720, Ext. 226.

SUPPLEMENTARY INFORMATION: Revised rules governing practices and procedures under which the U.S. Geological Survey makes information contained in Development and Production Plans available to affected States, executives of affected local governments, and other interested parties became effective on December 13, 1979 (44 FR 53685). Those practices and procedures are set out in a revised § 250.34 of Title 30 of the Code of Federal Regulations.

Dated: May 15, 1980.

Lowell G. Hammons,

Conservation Manager, Gulf of Mexico OCS Region.

[FR Doc. 80-15743 Filed 5-21-80; 8:45 am]

BILLING CODE 4310-31-M

Oil and Gas and Sulphur Operations in the Outer Continental Shelf; Receipt of Proposed Development and Production Plan

AGENCY: U.S. Geological Survey, Department of the Interior.

ACTION: Notice of the Receipt of a Proposed Development and Production Plan.

SUMMARY: This Notice announces that Kerr-McGee Corporation, Unit Operator of the Ship Shoal Block 28 Federal Unit, Agreement No. 14–08–001–2942, submitted on May 7, 1980, a proposed Supplemental Plan of Development/Production describing the activities it proposes to conduct on the Ship Shoal Block 28 Federal Unit, offshore Louisiana.

The propose of this Notice is to inform the public, pursuant to Section 25 of the OCS Lands Act Amendments of 1978, that the Geological Survey is considering approval of the Plan and that it is available for public review at the offices of the Conservation Manager, Gulf of Mexico OCS Region, U.S. Geological Survey, 3301 N. Causeway Blvd., Room 147, Metairie, Louisiana 70002.

FOR FURTHER INFORMATION CONTACT: U.S. Geological Survey, Public Records, Room 147, open weekdays 9:00 a.m. to 3:30 p.m., 3301 North Causeway Blvd., Metairie, Louisiana 70002, Phone 837–4720, Ext. 226.

SUPPLEMENTARY INFORMATION: Revised rules governing practices and procedures under which the U.S. Geological Survey makes information contained in Development and Production Plans available to affected States, executives of affected local governments, and other interested parties became effective on December 13, 1979 (44 FR 53685). Those practices and procedures are set out in a revised § 250.34 of Title 30 of the Code of Federal Regulations.

Dated: May 15, 1980.

Lowell G. Hammons,

Conservation Manager, Gulf of Mexico OCS Region.

[FR Doc. 80-15742 Filed 5-21-80; 8:45 am]

BILLING CODE 4310-31-M

INTERSTATE COMMERCE COMMISSION

[Volume No. 167]

Permanent Authority Decisions; Decision-Notice

Decided: May 6, 1980.

The following applications, filed on or after March 1, 1979, are governed by Special Rule 247 of the Commission's *Rules of practice* (49 CFR 1100.247). These rules provide, among other things, that a petition for intervention, either in support of or in opposition to the granting of an application, must be filed with the Commission within 30 days after the date notice of the application is published in the **Federal Register.** Protests (such as were allowed to filings prior to March 1, 1979) *will be rejected.* A petition for intervention without leave must comply with Rule 247(k) which requires petitioner to demonstrate that it (1) holds operating authority permitting performance of any of the service which the applicant seeks authority to perform, (2) has the necessary equipment and facilities for performing that service, and (3) has performed service within the scope of the application either (a) for those supporting the application, or, (b) where the service is not limited to the facilities of particular shippers, from and to, or between, any of the involved points.

Persons unable to intervene under Rule 247(k) may file a petition for leave to intervene under Rule 247(l) setting forth the specific grounds upon which it is made, including a detailed statement of petitioner's interest, the particular facts, matters, and things relied upon, including the extent, if any, to which petitioner (a) has solicited the traffic or business of those supporting the application, or, (b) where the identity of those supporting the application is not included in the published application notice, has solicited traffic or business identical to any part of that sought by applicant within the affected marketplace. The Commission will also consider (a) the nature and extent of the property, financial, or other interest of the petitioner, (b) the effect of the decision which may be rendered upon petitioner's interest, (c) the availability of other means by which the petitioner's interest might be protected, (d) the extent to which petitioner's interest will be represented by other parties, (e) the extent to which petitioner's participation may reasonably be expected to assist in the development of a sound record, and (f) the extent to which participation by the petitioner would broaden the issues or delay the proceeding.

Petitions not in reasonable compliance with the requirements of the rule may be rejected. An original and one copy of the petition to intervene shall be filed with the Commission indicating the specific rule under which the petition to intervene is being filed, and a copy shall be served concurrently upon applicant's representative, or upon applicant if no representative is named.

Section 247(f) provides in part, that an applicant which does not intend to timely prosecute its application shall promptly request that it be dismissed, and that failure to prosecute an application under the procedures of the Commission will result in its dismissal.

If an applicant has introduced rates as an issue it is noted. Upon request, an applicant must provide a copy of the tentative rate schedule to any protestant.

Further processing steps will be by Commission notice, decision, or letter which will be served on each party of record. *Broadening amendments will not be accepted after the date of this publication.*

Any authority granted may reflect administrative acceptable restrictive amendments to the service proposed below. Some of the applications may have been modified to conform to the Commission's policy of simplifying grants of operating authority.

Findings:

With the exception of those applications involving duly noted problems (e.gs., unresolved common control, unresolved fitness questions, and jurisdictional problems) we find, preliminarily, that each common carrier applicant has demonstrated that its proposed service is required by the present and future public convenience and necessity, and that each contract carrier applicant qualifies as a contract carrier and its proposed contract carrier service will be consistent with the public interest and the transportation policy of 49 U.S.C. § 10101. Each applicant is fit, willing, and able properly to perform the service proposed and to conform to the requirements of Title 49, Subtitle IV, United States Code, and the Commission's regulation. Except where specifically noted, this decision is neither a major Federal action significantly affecting the quality of the human environment nor a major regulatory action under the Energy Policy and Conservation Act of 1975.

In those proceedings containing a statement or note that dual operations are or may be involved we find, preliminarily and in the absence of the issue being raised by a petitioner, that the proposed dual operations are consistent with the public interest and the transportation policy of 49 U.S.C. § 10101 subject to the right of the Commission, which is expressly reserved, to impose such terms, conditions or limitations as it finds necessary to insure that applicant's operations shall conform to the provisions of 49 U.S.C. 10930(a) [formerly section 210 of the Interstate Commerce Act]

In the absence of legally sufficient petitions for intervention, filed on or before June 23, 1980 (or, if the application later becomes unopposed), appropriate authority will be issued to each applicant (except those with duly noted problems) upon compliance with certain requirements which will be set forth in a notification of effectiveness of the decision-notice. To the extent that the authority sought below may duplicate an applicant's other authority, such duplication shall be construed as conferring only a single operating right.

Applicants must comply with all specific conditions set forth in the following decision-notices on or before June 23, 1980, or the application shall stand denied.

By the Commission, Review Board Number 3, Members Parker, Hill, and Fortier.

Agatha L. Mergenovich,

Secretary.

Note.—All applications are for authority to operate as a common carrier, by motor vehicle, in interstate or foreign commerce, over irregular routes, except as otherwise noted.

MC 2860 (Sub-195F), filed January 11, 1980, and previously noticed in **Federal Register** issue of April 3, 1980. Applicant: NATIONAL FREIGHT, INC., 71 West Park Ave., Vineland, NJ 08360. Representative: Peter J. Nickles, 888 Sixteenth St., NW., Washington, DC 20006. Transporting *such commodities* as are dealt in or used by container manufacturers (except commodities in bulk, and those which because of size or weight require the use of special equipment), between the facilities of Glass Container Corporation, at points in the United States (except AK and HI). (Hearing site: Washington, DC.)

Note.—This republication reflects the correct territorial description.

MC 2860 (Sub-196F), filed January 11, 1980, and previously noticed in **Federal Register** issue of April 3, 1980. Applicant: NATIONAL FREIGHT, INC., 71 West Park Ave., Vineland, NJ 08360. Representative: Peter J. Nickles, 888 Sixteenth St., NW., Washington, DC 20006. Transporting *paper and paper products, and materials, equipment and supplies* used in the manufacture and distribution of paper and paper products, (except commodities in bulk, in tank vehicles), between the facilities of Scott Paper Company, at points in the United States (except AK and HI). (Hearing site: Washington, DC.)

Note.—This republication reflects the correct territorial description.

MC 2860 (Sub-197F), filed January 11, 1980, and previously noticed in **Federal Register** issue of April 3, 1980. Applicant: NATIONAL FREIGHT, INC., 71 West Park Ave., Vineland, NJ 08360. Representative: Peter J. Nickles, 888 Sixteenth St., NW., Washington, DC 20006. Transporting *such commodities* as are dealt in or used by container manufacturers (except commodities in bulk and those which because of size or weight require the use of special equipment), between the facilities of Glenshaw Glass Company, Inc., at points in the United States (except AK and HI). (Hearing site: Washington, DC.)

Note.—This republication reflects the correct territorial description.

MC 4941 (Sub-90F), filed November 27, 1979, and previously noticed in the **Federal Register** issue of March 20, 1980. Applicant: QUINN FREIGHT LINES, INC., 1093 N. Montello St., Brockton, MA 02403. Representative: Russell S. Callahan (same address as applicant). Transporting (1) *paper and paper products, plastic materials, furniture,* and (2) *materials, equipment, and supplies* used in the manufacture and distribution of the commodities in (1) above, (except commodities in bulk), betwen the facilities of Scott Paper Company, at points in DE, ME, NJ, NY, OH, PA and VA, on the one hand, and, on the other, points in CT, DE, MA, MD, ME, NH, NJ, NY, OH, PA, RI, VA, VT, WV, and DC. (Hearing site: Boston, MA, or Washington, DC.)

Note.—This republication clarifies territorial description.

MC 6741 (Sub-11F), filed February 22, 1980. Applicant: WILLEY'S EXPRESS, INC., 118 Hall St., P.O. Box 2009, Concord, NH 03301. Representative: Frank J. Weiner, 15 Court Square, Boston, MA 02108. Transporting *general commodities* (except those of unusual value, classes A and B explosives, household goods as defined by the Commission, commodities in bulk, and those requiring special equipment), serving points in NH as off-route points in connection with applicant's otherwise authorized regular-route operations. (Hearing site: Boston, MA, or Concord, NH.)

MC 19311 (Sub-69F), filed August 17, 1979. Applicant: CENTRAL TRANSPORT, INC., 34200 Mound Road, Sterling Heights, MI 48077. Representative: Leonard R. Kofkin, 39 South La Salle St., Chicago, IL 60603 (A) OVER REGULAR ROUTES, transporting *general commodities,* (except those of unusual vlaue, classes A and B explosives, household goods as defined by the Commission, commodities in bulk, and those requiring special equipment), (1) between Mackinaw City and Detroit, MI, from Mackinaw City over U.S. Hwy 23 to junction U.S. Hwy 10, then over U.S. Hwy 10 to Detroit and return over the same route, (2) between Saginaw and Standish, MI, over U.S. Hwy 13, (3) between Oscoda and Alpena, MI, over Iosco, Alcona, and Alpena County Roads, (4) between Alpena and Rogers City, MI, over Alpena and Presque Isle County Roads, (5) between Alpena and Liske, MI, from Alpena over U.S. Hwy 23 to Lakewood, then over county roads and U.S. Hwy 23 to Liske, and return over the same route, (6) between Hawks, MI and Junction Presque Isle County Road and U.S. Hwy 23 near Huron Beach, MI, over Presque County Road, (7) between Onaway and Huron Beach, MI, from Onaway, over MI Hwy 211 to Black Lake, then over County Roads to Huron Beach, and return over the same route, (8) between Point Lookout, MI and junction U.S. Hwy 23 and Point Lookout Road, over Point Lookout Road, (9) between Tawas Beach, MI and junction U.S. Hwy 23 and Tawas Beach Road, over Tawas Beach Road, (10) between Afton, MI and

junction U.S Hwy 23 and MI Hwy 33, from Afton over MI Hwy 68 to junction MI Hwy 33, then over MI Hwy 33 to junction U.S. Hwy 23, and return over the same route, (11) between Rogers City and Indian River, MI, over MI Hwy 68, (12) between Hawks and Alpena, MI, over Presque Isle and Alpena County Roads, (13) between Tawas City, MI and junction MI Hwy 55 and MI Hwy 65, over MI Hwy 55, (14) between Whittemore, MI and junction MI Hwy 55 and Iosco County Road, over Iosco County Road, (15) between junction U.S. Hwy 23 and MI Hwy 65 (east of Rogers City, MI) and junction MI Hwy 65 and U.S. Hwy 23 (west of Au Gres, MI), over MI Hwy 65, (16) between Cheboygan and Atlanta, MI, over MI Hwy 33, (17) between Cheboygan, MI and Junction MI Hwy 68 and Cheboygan County Road near Tower, MI, over Cheboygan County Road, (18) between Harrisville, MI and junction MI Hwy 65 and MI Hwy 72, over MI Hwy 72, (19) between junction Hubbard Lake Road and Werth Road and junction Werth Road and MI Hwy 65, over Worth Road, (20) between Long Lake and junction U.S. Hwy 23 and Beck road, over Presque Isle and Alpena County Roads on the east side of Long Lake, (21) between Lincoln and Hubbard Lake, MI, over Alcona and Alpena County Roads, (22) between Alcona and Lincoln, MI, over Alcona County Roads, (23), between Greenbush and Curtisville, MI, over Alcona and Oscoda County Roads, (24) between Oscoda, MI and junction MI Hwy 65 and River Road, over River Road, (25) between East Tawas, MI and junction Silver Creek Road and River Road, over Silver Creek Road, (26) between Hawks and Hillman, MI, over Presque Isle and Montmorency County Roads, serving all intermediate points in (1) through 26, (B) Alternate Routes for operating convenience only, over regular routes, transporting *general commodities,* (1) serving the facilities of Ford Motor Company, at Romeo, MI, as an off-route point in connection with applicant's otherwise authorized service, (2) between Gaylord and Afton, MI, from Gaylord over Interstate Hwy 75 to junction MI Hwy 68, then over MI Hwy 68 to Afton and return over the same route, and (3) between Detroit and Standish, over Interstate Hwy 75, (4) between detroit, MI and junction U.S. Hwy 23 and Interstate Hwy 75, at or near Flint, MI, from Detroit over Interstate Hwy 96 to junction U.S. Hwy 23, then over U.S. Hwy 23 to junction Interstate Hwy 75, and return over the same route, subject to the following restrictions: (a) restricted against service to points not otherwise authorized, (b) access routes may be used only for connection with intersecting routes otherwise authorized and (c) access routes may be utilized within commercial zones of points otherwise authorized. (C) over irregular routes, transporting (1) *artistic fencing,* between alpena and Greenbush, MI, on the one hand, and, on the other, points in MI, (2) *paper, paper mill supplies, and empty containers,* between Alpena, MI, on the one hand, and, on the other, points in MI, (3) *household goods, store fixtures, and office furniture,* between points in MI. (Hearing site: Detroit, MI.)

Note.—This application is related, but not directly, to a proceeding entitled *Central Transport, Inc.—Conversion and Elimination of Restrictions,* Docket No. MC–19311 Sub 66F, which proceeding is in turn directly related to a finance proceeding *Central Transport, Inc.—Control and Merger—Mulvena Truck Line, Inc.,* Docket No. MC–F–14126F. This application is filed in the event for any reason all or any portion of the application in the directly related proceeding is denied.

MC 53841 (Sub-43F), filed February 4, 1980. Applicant: W. H. CHRISTIE & SONS, INC., Box 517, East State St., Knox, PA 16232. Representative: John A. Pillar, 1500 Bank Tower, 307 Fourth Ave., Pittsburgh, PA 15222. Transporting *glass containers, closures for glass containers, plastic articles, and fiberboard boxes,* from the facilities of Glass Containers Corporation, at Knox, Parker, and Marienville, PA, to points in NJ and NY. (Hearing site: Pittsburgh, PA, or Washington, DC.)

MC 77061 (Sub-32F), filed February 25, 1980. Applicant: SHERMAN BROS., INC., 29534 Airport Rd., Box 706, Eugene, OR 97401. Representative: Russell M. Allen, 1200 Jackson Tower, Portland, OR 97205. Transporting (1) *plastic pipe,* and (2) *accessories* for plastic pipe, (a) from the facilities of Simpson Extruded Plastics Co., at Eugene, OR, to points in WA, CA, and ID, and (b) from the facilities of Simpson Extruded Plastics Co., at Sunnyside, WA, to points in OR, CA, and ID. (Hearing site: Portland or Eugene, OR.)

MC 78400 (Sub-83F), filed January 25, 1980. Applicant: BEAUFORT TRANSFER COMPANY, P.O. Box 151, Gerald, MO 63037. Representative: Ernest A. Brooks II, 1301 Ambassador Bldg., St. Louis, MO 63101. Transporting (1) *milking machines, peening machines, tanks, and industrial cleaning equipment* (except those requiring special equipment), from Washington, and Berger, MO, to points in the U.S. (except AK and HI), and (2) *materials, equipment, and supplies* used in the manufacture and distribution of the commodities in (1) above, in the reverse direction. (Hearing site: St. Louis, MO.)

MC 84450 (Sub-3F), filed January 25, 1980. Applicant: S.R.T. MOTOR FREIGHT, INC., 1801 S. Pennsylvania Ave., Morrisville, PA 19067. Representative: Alan Kahn, 1920 Two Penn Center Plaza, Philadelphia, PA 19102. Transporting *iron and steel articles,* from the facilities of Bredero Price, Inc., in Falls Township (Bucks County), PA, to points in MA, RI, and VA. (Hearing site: Washington, DC, or Philadelphia, PA.)

MC 110420 (Sub-847F), filed February 25, 1980. Applicant: QUALITY CARRIERS, INC., 100 Waukegan Rd., P.O. Box 1000, Lake Bluff, IL 60044. Representative: John R. Sims, Jr., 915 Pennsylvania Bldg., 425 13th St., NW., Washington, DC 20004. Transporting *sodium bicarbonate,* in bulk, in tank vehicles, from Old Fort, OH, to points in the U.S. (except AK and HI). (Hearing site: Washington, DC.)

MC 115331 (Sub-520F), filed October 10, 1979, and previously noticed in FR issue of March 18, 1980. Applicant: TRUCK TRANSPORT INCORPORATED, 29 Clayton Hills Lane, St. Louis, MO 63131. Representative: J. R. Ferris, 11040 Manchester Rd., St. Louis, MO 63122. Transporting *oils,* in bulk, from Opelousas, LA, to points in the U.S. (except AK and HI). (Hearing site: Washington, DC, or New Orleans, LA.)

Note.—This republication corrects the commodity description.

MC 115651 (Sub-86F), filed February 21, 1980. Applicant: KANEY TRANSPORTATION, INC., 7222 Cunningham Rd., Rockford, IL 61102. Representative: E. Stephen Heisley, 666 11th St., Washington, DC 20001. Transporting *liquefied petroleum gas,* in bulk, in tank vehicles, from Blue Island, IL, to points in IN. Condition: The certificate shall be limited to 5 years from its date of issuance. (Hearing site: Chicago, IL, or Milwaukee, WI.)

MC 118130 (Sub-118F), filed February 21, 1980. Applicant: SOUTH EASTERN XPRESS, INC., P.O. Box 6459, Fort Worth, TX 76115. Representative: Billy R. Reid, 1721 Carl Street, Fort Worth, TX 76103. Transporting (1) *malt beverages,* and (2) *materials and supplies* used in and dealt with by breweries, (a) from points in Jefferson County CO, to points in AR, and (b) from points in AR, to points in Jefferson County, CO. (Hearing site: Fort Worth, TX, or Denver, CO.)

MC 118420 (Sub-8F), filed February 21, 1980. Applicant: BULLDOG TRUCKING OF GEORGIA, INC., P.O. Box 357, Carnesville, GA 30521. Representative: K. Edward Wolcott, P.O. Box 872, Atlanta, GA 30301. Transporting *insulating materials,* and *glass fibre*

products, from the facilities of Certain-Teed Products Corp. in Clarke County, GA to Savannah, GA, restricted to traffic having a subsequent movement by water. (Hearing site: Atlanta, GA, or Washington, DC.)

MC 120181 (Sub-19F), filed March 21, 1980. Applicant: MAIN LINE HAULING CO., INC., Box C, St. Louis, MO 63077. Representative: William H. Shawn, Suite 501, 1730 M St., N.W., Washington, DC 20036. Transporting *such commodities* as are sold by retail hardware and department stores, between points in AL, AR, GA, IL, IN, IA, KS, KY, LA, MI, MO, MN, MS, NE, NC, OH, OK, SC, TN, TX, VA, WV and WI. (Hearing site: St. Louis, MO.)

MC 133101 (Sub-7F), filed November 16, 1979. Applicant: PENINSULA AIR DELIVERY, P.O. Box 668, Mountain View, CA 94042. Representative: Thomas Donahue (same address as applicant). Transporting *general commodities* (except those of unusual value, classes A and B explosives, household goods as defined by the Commission, commodities in bulk, and those requiring special equipment), between points in CA and OR. (Hearing site: San Francisco, CA, or Portland, OR.)

MC 134150 (Sub-24F), filed December 26, 1979. Applicant: SOUTHWEST EQUIPMENT RENTAL, INC., d.b.a. SOUTHWEST MOTOR FREIGHT, 2931 S. Market St., Chattanooga, TN 37410. Representative: Patrick E. Quinn, P.O. Box 9596, Chattanooga, TN 37412. *Contract carrier,* transporting *paper and paper products,* from the facilities of Container Corporation of America, at or near St. Louis, MO, to those points in the U.S. in and west of MT, WY, CO, and NM, under continuing contract(s) with Container Corporation, of America of Ft. Worth, TX. (Hearing site: Dallas, TX.)

Note.—Dual operations may be involved.

MC 134890 (Sub-10F), filed June 25, 1979, and previously noticed in FR issue of February 5, 1980. Applicant: MARION TRANSFER, INC., 3011 North 30th St., Milwaukee, WI 53210. Representative: Richard C. Alexander, 710 North Plankinton Ave., Milwaukee, WI 53203. *Contract carrier,* transporting *chemicals, and tanning extracts and chemicals,* (except commodities in bulk), in vehicles equipped with with mechanical refrigeration, from points in CT, MA, NH, NJ, NY, PA, and RI, to the facilities of Gebhardt-Vogel Tanning Co., at Wilwaukee, WI, under continuing contract(s) with Gebhardt-Vogel Tanning Co., of Milwaukee, WI. (Hearing site: Milwaukee, WI, or Chicago, IL.)

Note.—This republication shows NY as an origin point.

MC 135861 (Sub-65F), filed February 21, 1980. Applicant: LISA MOTOR LINES, INC., P.O. Box 4550, Fort Worth, TX 76106. Representative: Billy R. Reid, 1721 Carl St., Fort Worth, TX 76103. *Contract carrier,* transporting *meats, meat products, and meat byproducts,* and *articles distributed by meat-packing houses,* as described in Sections A and C of Appendix 1 to the report in *Descriptions in Motor Carrier Certificates, 61 M.C.C.* 209 and 766, (except hides and commodities in bulk), from Palestine, TX, to poins in the U.S. (except AK and HI), under continuing contract(s) with Vernon Calhoun Packing Company of Palestine, TX. (Hearing site: Fort Worth, or Houston, TX.)

MC 136680 (Sub-1F), filed January 28, 1980. Applicant: E. H. STRALOW TRUCKING, an indiviudal, 101 East Morris St., Morrison, IL 61270. Representative: Leonard R. Kofkin, 39 South La Salle St., Chicago, IL 60603. *Contract carrier,* transporting *such commodities* as are dealt in by manufacturers of iron and steel articles, between the facilities of Northwestern Steel and Wire Company, at Rock Falls and Sterling, IL, on the one hand, and, on the other, points in IA, IN, MN, MO, OH, and WI, under continuing contract(s) with Northwestern Steel and Wire Company, of Sterling, IL. (Hearing site: Chicago, IL.)

MC 138000 (Sub-66F), filed February 21, 1980. Applicant: ARTHUR H. FULTON, INC., P.O. Box 86, Stephens City, VA 22655. Representative: Dixie C. Newhouse, 1329 Pennsylvania Ave., P.O. Box 1417, Hagerstown, MD 21740. Transporting *non-carbonated beverages, beverage compounds,* and *beverage containers,* (1) between Baltimore and Havre De Grace, MD, and New York, NY, on the one hand, and, on the other, points in PA, OH, NY, NJ, MD, VA, WV, NC, MI, and DC, and (2) between Detroit, MI, on the one hand, and, on the other, points in PA, OH, NY, NJ, MD, NC, WV, and DC. (Hearing site: Detroit, MI.)

Note.—Dual operations may be involved.

MC 138741 (Sub-80F), filed June 18, 1979. Applicant: AMERICAN CENTRAL TRANSPORT, INC., 2005 North Broadway, Joliet, IL 60435. Representative: Tom B. Kretsinger, 20 East Franklin, Liberty, MO 64068. Transporting *metal and metal articles,* between the facilities of S–G Metals Industries, Inc., at Kansas City, KS, on the one hand, and, on the other, points in AR, MO, and OK. (Hearing site: Kansas City, MO.)

MC 138960 (Sub-17F), filed January 28, 1980. Applicant: ROKO EXPRESS, INC., 819 West Fifth Ave., Columbus, OH 43212. Representative: H. Barney Firestone, 10 S. La Salle St., Suite 1600, Chicago, IL 60603. Transporting *foodstuffs, drugs, plastic articles, and rubber articles,* and *health care products,* from the facilites of Ross Labs, Inc. at or near (a) Columbus, OH, and (b) Sturgis, MI, to points in AL, AR, KY, GA, LA, MS, and TN, restricted to traffic originating at the named facilities of Ross Labs, Inc. and destined to the indicated destinations. (Hearing site: Columbus, OH, or Chicago, IL.)

MC 142310 (Sub-27F), filed February 4, 1980. Applicant: H. O. WOLDING, INC., Box 56, Nelsonville, WI. Representative: Wayne W. Wilson, 150 East Gilman St., Madison, WI. Transporting *foodstuffs* (except in bulk), from Wethersfield, CT to points in MI. (Hearing site: Madison, WI, or Boise, ID.)

MC 143471 (Sub-22F), filed January 21, 1980, and previously noticed in **Federal Register** issue of April 3, 1980. Applicant: DAKOTA PACIFIC TRANSPORT, INC., 308 West Blvd., Rapid City, SD 57701. Representative: J. Maurice Andren, 1734 Sheridan Lake Road, Rapid City, SD 57701. *Contract carrier,* transporting *lumber and lumber products,* (a) from points in AR, TX, OK, LA, and MS, to the facilities of Whitewood Post and Pole, at Whitewood, SD, and (b) from the facilities of Whitewood Post and Pole, at Whitewood, SD, to points in IA, MN, ND, MT, WI, WY, and CO, under continuing contract(s) with Whitewood Post and Pole Co., Inc., of Whitewood, SD. (Hearing site: Rapid City or Whitewood, SD.)

Note.—This republication shows ND as a destination State in lieu of NS.

MC 144030 (Sub-11F), filed February 21, 1980. Applicant: DRUE CHRISMAN, INC., P.O. Box 264, Lawrenceburg, IN 47025. Representative: Norbert B. Flick, 715 Executive Bldg., Cincinnati, OH 45202. Transporting *beer,* between Eden, NC, and Cincinnati, OH. (Hearing site: Cincinnati, OH, and Indianapolis, IN:)

MC 145491 (Sub-5F), filed January 2, 1980. Applicant: PIGGYBACK TRANSPORTATION SERVICE, INC., P.O. Box 662, Greenwood, IN 46142. Representative: Donald W. Smith, P.O. Box 40248, Indianapolis, IN 46240. Transporting *general commodities* (except those of unusual value, classes A and B explosives, household goods as defined by the Commission, commodities in bulk, and those requiring special equipment), between points in IL, IN, KY and OH, and St. Louis, MO, on the one hand, and, on the other,

points in IL, IN, KY, and OH, and St. Louis, MO (except between Carbondale, Danville, Decatur, East St. Louis, Mattoon, Morton, Peoria, Quincy, and Villa Grove, IL, on the one hand, and, on the other, points in IN, and Carbondale and West Salem, IL, restricted to traffic having a prior or subsequent movement by rail. (Hearing site: Indianapolis, IN.)

MC 147620 (Sub-2F), filed January 28, 1980. Applicant: K. M. TRUCKING, INC., P.O. Box 254, Stephens City, VA 22655. Representative: Edward N. Button, 580 Northern Avenue, Hagerstown, MD 21740. Transporting *apple products,* and *apple juices,* from Martinsburg, WV, and Winchester, Timberville, and Mt. Jackson, VA, to points in TX, LA, AR, MS, and OK. (Hearing site: Winchester, VA, or Martinsburg, WV.)

MC 148490 (Sub-5F), filed October 3, 1979. Applicant: C & N EVANS TRUCKING CO., INC., RFD 2, Box 39–E, Stoneville, NC 27048. Representative: Clarence B. Evans (same address as applicant). Transporting *wearing apparel,* from Alexander City, AL, Griffin, GA, Asheboro, Madison, Mayadon, and Statesville, NC, and Martinsville, VA, to Appleton, WI, and Dallas, TX. (Hearing site: Raleigh or Charlotte, NC.)

MC 149170 (Sub-5F), filed January 25, 1980. Applicant: ACTION CARRIER, INC., 1000 East 41st Street, Sioux Falls, SD 57105. Representative: Carl L. Steiner, 39 South LaSalle Street, Chicago, IL 60603. Transporting *general commodities* (except those of unusual value, classes A and B explosives, household goods as defined by the Commission, commodities in bulk, and those requiring special equipment because of size or weight), between points in AL, AR, IL, IN, IA, KY, LA, MI, MN, MS, MO, NE, ND, OH, OK, SD, TN, TX, and WI, restricted to the transportation of traffic moving to, from or between the facilities of Minnesota Mining & Manufacturing Co. (Hearing site: Minneapolis, MN.)

Note.—Common control may be involved.

MC 149360 (Sub-1F), filed February 20, 1980. Applicant: L. B. TRANSPORT SERVICES, INC., 19114 Pioneer Blvd., Cerritos, CA 90701. Representative: Miles L. Kavaller, 315 S. Beverly Dr., Suite 315, Beverly Hills, CA 90212. *Contract carrier,* transporting *sinks, vanities, toilets, bathroom accessories, mirrors and glass shelves,* (1) from Torance, CA, to points in the U.S. (except AK and HI), and (2) from Charlotte, SC, and Kingsport, TN, to Torrance, CA, under continuing contract(s) with Perma Bilt Industries, of Torrance, CA. (Hearing site: Los Angeles, CA.)

Note.—Dual operations may be involved.

MC 150090F, filed February 19, 1980. Applicant: CHEMLINE DELIVERY SERVICE, INC., 2700 River Road, Des Plaines, IL 60018. Representative: Edward G. Bazelon, 39 South LaSalle St., Chicago, IL 60603. *Contract carrier,* transporting *acids and chemicals,* in bulk, in tank vehicles, betwen points in IL, IN, IA, KY, MI, MN, MO, NY, OH, PA, WV, and WI, under continuing contracts with K. A. Steel Chemicals, Inc. (Hearing site: Chicago, IL.)

MC 150270F, filed February 5, 1980. Applicant: PEIRONE PRODUCE COMPANY, a corporation, East 524 Trent Ave., Spokane, WA 99202. Representative: James I. Morrow (same address as applicant). *Contract carrier,* transporting *animal feed,* in sacks, from Spokane, WA, to the port of entry on the international boundary line between the U.S. and Canada at or near Oroville, WA, under continuing contract(s) with (1) Ralston Purina Company, of Spokane, WA, and (2) Chow Town, a division of Frandel Farms Ltd., of Penticton, B.C., Canada. (Hearing site: Spokane, WA, or Coeur d'Alene, ID.)

MC 147310 (Sub-1F), filed January 10, 1980. Applicant: RUSTAD BUS SERVICE, INC., Kerkhoven, MN 56252. Representative: Robert P. Sack, P.O. Box 6010, West St. Paul, MN 55118. Transporting (1) *passengers and their baggage,* in the same vehicle with passengers, and (2) *baggage* of passengers, in a separate vehicle, in round-trip charter and special operations, beginning and ending at points in Swift County, MN, and extending to points in the U.S. (including AK, but excluding HI). (Hearing site: St. Cloud or St. Paul, MN.)

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[Volume No. 13]

Petitions, Applications, Finance Matters (Including Temporary Authorities), Alternate Route Deviations, Intrastate Applications, Gateways, and Pack & Crate.

Petitions for Modification, Interpretation or Reinstatement of Motor Carrier Operating Rights Authority

The following petitions seek modification or interpretation of existing motor carrier operating rights authority, or reinstatement of terminated motor carrier operating rights authority.

All pleadings and documents must clearly specify the suffix numbers (e.g., M1F, M2F) where the docket is so identified in this notice.

The following petitions, filed on or after March 1, 1979, are governed by Special Rule 247 of the Commission's General Rules of Practice (49 CFR 1100.247). These rules provide, among other things, that a *petition to intervene either with or without leave* must be filed with the Commission or or before June 23, 1980 with a copy being furnished the applicant. Protests to these applications will be *rejected.*

A petition for intervention without leave must comply with Rule 247(k) which requires petitioner to demonstrate that if (1) holds operating authority permitting performance of any of the service which the applicant seeks authority to perform, (2) has the necessary equipment and facilities for performing that service, and (3) has performed service within the scope of the application either (a) for those supporting the application, or, (b) where the service is not limited to the facilities of particular shippers, from and to, or between, any of the involved points.

Persons unable to intervene under Rule 247(k) may file a petition for leave to intervene under Rule 247(l). in deciding whether to grant leave to intervene, the Commission considers, among other things, whether petitioner has (a) solicited the traffic or business of those persons supporting the application, or (b) where the identity of those supporting the application is not included in the published application notice, has solicited traffic or business identical to any part of that sought by applicant within the affected marketplace. Another factor considered is the effects of any decision on petitioner's interests.

Samples of petitions and the text and explanation of the intervention rules can be found at 43 FR 50908, as modified at 43 FR 60277. Petitions not in reasonable compliance with these rules may be rejected. Note that Rule 247(e), where not inconsistent with the intervention rules, still applies. Especially refer to Rule 247(e) for requirements as to supplying a copy of conflicting authority, serving the petition on applicant's representative, and oral hearing requests.

MC 73688 (Sub-50) (M1F) (notice of filing of petition to modify certificate), filed March 10, 1980. Petitioner: SOUTHERN TRUCKING CORPORATION, 1500 Orenda Ave., P.O. Box 7195, Memphis, TN 38107. Representative: Diane Price, Route 6, Box 15, North Little Rock, AR 72118. Petitioner holds a motor *common carrier* Certificate in MC 73688 Sub 50 issued December 9, 1974, authorizing transportation over irregular routes, of *aluminum, aluminum products,*

aluminum articles, and iron and steel articles, from the facilities of Planet Corporation, at or near Birmingham, AL, to points in the U.S. in and east of TX, OK, KS, NE, SD, and ND (except AL, GA, and FL), restricted to traffic originating at the above-named facilities. By the instant petition, petitioner seeks to modify the above authority by (1) deleting the plantsite origin of Planet Corporation, (2) deleting the territorial exceptions of AL, GA, and FL, and (3) deleting the plantsite restriction "restricted to traffic originating at the above-named facilities".

MC 89697 (MIF), and MC 89697 E1 (MIF), (notice of filing of petition to delete restrictions), filed March 27, 1980. Petitioner: KRAJACK TANK LINES, INC., 480 Westfield Ave., Roselle Park, NJ 07204. Representative: Morton E. Kiel, Suite 1832, Two World Trade Center, New York, NY 10048. Petitioner holds motor common carrier authority in Certificate No. MC 89697 issued March 31, 1955, and MC 89697 (Sub-No. E-1), published in the FR issue of November 26, 1974, as pertinent, transporting in lead (1) *commercial solvents, paint, lacquer, and cleaning solvents,* ether, alcohol, and acetates, in bulk, in tank trucks, between Carteret and Bound Brook, NJ, and points in Bergen, Essex, Hudson, and Union Counties, NJ, on the one hand, and, on the other, points in CT, DE, MA, NJ, NY, and PA within 250 miles of Elizabeth, NJ, and (2) *liquid chemicals,* in bulk, in tank vehicles, between South Bound Brook, NJ, and points in Middlesex County, NJ, on the one hand, and, on the other, points in RI, CT, MA, NY, and PA, within 250 miles of Elizabeth, NJ, and in E1 Notice (3) *such commercial solvents, paint, lacquer, and cleaning solvents, ether, alcohol, and acetates* in bulk, in tank trucks as are liquid chemicals, (a) between points in MA, RI, and CT, on the one hand, and, on the other, points in that part of DE and that part of PA within 250 miles of Elizabeth, NJ, (b) between points in DE on the one hand, and, on the other, points in that part of NY within 250 miles of Elizabeth, NJ, (except between points in DE, on the one hand, and, on the other, points in Chautauqua, Cattaraugus, Allegany, and Steuben Counties, NY), and (c) between New York, NY, and points in Nassau and Suffolk Counties, NY, on the one hand, and, on the other, points in that part of PA 250 miles of Elizabeth, NJ (except between New York, NY, on the one hand, and, on the other, points in Pike County, PA), (4) *lacquer solvents, cleaning solvents, industrial alcohol, and acetates,* in bulk, in tank trucks, from points in NJ, DE, and that part of PA within 250 miles of Elizabeth, NJ, to New York, NY, and East Berlin, CT (Hudson County, NJ), and (5) inflammable alcohols, acetates, commercial solvents, and paint, lacquer, and cleaning solvents, in bulk, in tank trucks, from points in that part of DE, that part of NJ, and that of PA, within 250 miles of Elizabeth, NJ, to points and places in Bristol and Providence Counties, RI. By the instant petition, petitioner seeks to delete the restriction in each of the above proceedings which reads: "within 250 miles of Elizabeth, NJ".

MC 107544 (Sub-138M1F), filed March 5, 1980. Applicant: LEMMON TRANSPORT CO., INC., P.O. Box 580, Marion, VA 24354. Representative: E. Stephen Hiesley, 805 McLachlen Bank Bldg., 666 Eleventh St., N.W., Washington, DC 20001. Petitioner holds motor *common* carrier Certificate in MC-107544 Sub 138F, issued April 2, 1979. MC-107544 Sub 138F, authorizes transportation, over irregular routes, of *chemicals,* in bulk, in tank or hopper-type vehicles, (1) from the plantsite of Tennessee Eastman Company, at Kingsport, TN, to points in the United States in and east of MN, IA, NE, KS, OK, and TX, and (2) from those points in the United States in and east of MN, IA, NE, KS, OK, and TX, to points in TN. Restriction: The Commission reserves the right to impose such terms, conditions, or limitations in the future as it may find necessary to insure that carrier's operations conform to the provisions of Section 210 of the Act. This certificate may not be tacked or joined with the carrier's other irregular-route authority. By the instant petition, petitioner seeks to modify the Certificate by changing the territorial description.

MC 108393 (Sub-142) (MIF) (notice of filing of petition to modify permit), filed March 28, 1980. Petitioner: SIGNAL DELIVERY SERVICE, INC., 201 East Ogden Avenue, Hinsdale, IL 60521. Representative: Edward F. Schiff, 1333 New Hampshire Avenue, NW, Washington, DC 20036. Petitioner holds a motor *contract carriers* permit in MC-108393 Sub 142, issued December 13, 1979, to transport in interstate or foreign commerce, over irregular routes, such *merchandise* as is dealt in or used by retail departments stores and mail order houses, (except commodities in bulk, in tank vehicles), between points in the US (except AK and HI), under continuing contract(s) with Sears, Roebuck and Co., of Chicago, IL. By the instant petition, petitioner seeks to modify the authority as follows: add an additional shipper, namely, Simpsons-Sears Limited of Toronto, Ontario, Canada.

MC 125687 (Sub-14) (M1F), (notice of filing of petition to modify territorial descriptions), filed March 31, 1980. Petitioner: EASTERN STATES TRANSPORTATION, PA., INC., 1060 Lafayette St., York, PA 17405. Representative: Jeremy Kahn, 1511 K St., NW, Suite 733, Investment Bldg., Washington, DC 20005. Petitioner holds motor common carrier, authority in Certificate No. MC-125687 Sub 14, issued November 4, 1976, authorizing the transportation of (1) malt beverages in containers, from the facilities of the Jos. Schlitz Brewing Company, at Lysander, NY, to points in CT, DE, ME, MD, MA, NH, NJ, PA, RI, and VT, and (2) empty malt beverage containers, from the named destination States in (1) above, to the named facility, at Lysander, NY. By the instant petition, petitioner seeks to modify the territorial descriptions in (1) so as to read: from Lysander, NY, to points in CT, DE, ME, MD, MA, NH, NY, PA, RI, and VT, and in (2) so as to read: From the named destination States in (1) above, to Lysander, NY.

MC 142268 and Subs 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 14, 18, 24, 28, 29, 30, and 33 (M1F) (notice of filing of petition to remove restrictions) filed January 2, 1980. Petitioner: GORSKI BULK TRANSPORT, INC., R.R. #4 Harrow, Ontario, Canada, NOR 1GO. Petitioner holds motor *common carrier* Certificates (1) in MC 142268 issued November 18, 1977, authorizing transportation over irregular routes, of (a) *alcoholic beverages,* in bulk, in tank vehicles, from points on the U.S.-Canada Boundary line at or near Champlain, Rouses Point, and Trout River, NY, and Derby Line and Newport, VT, and on the Niagara and St. Lawrence Rivers, to the plantsite of Heublein, Inc., at Hartford, CT; (b) *alcoholic beverages,* in containers, from the plantsite of Heublein, Inc., at Allen Park, MI, to points in AL, AR, KY (except Louisville and points in its commercial zone as defined by the Commission), LA, MS, MO, and TN; (c) *plastic resins* (except in bulk), from the plantsite of Marbon Division of Borg-Warner Corporation, at Washington, WV, and Ottawa, IL, to ports of entry on the U.S.-Canada Boundary line at or near Rouses Point and Champlain, NY, and Derby Line and Newport, VT, and points on the St. Clair, Detroit, Niagara, and St. Lawrence Rivers; (d) *methylene diphenyl diisocyanate,* in bulk, in tank vehicles, from the plantsite of Uniroyal, Inc., at Geismar, LA, to ports of entry on the U.S.-Canada Boundary line located on the Detroit, St. Clair, Niagara and St. Lawrence Rivers, and a Champlain,

Rouses Point, and Trout River, NY, and Derby Line and Newport, VT; (e) *synthetic rubber,* from the plantsite of Uniroyal, Inc. at Geismar, LA, to ports of entry on the U.S.-Canada Boundary line located on the Detroit, St. Clair, Niagara and St. Lawrence Rivers, and at Champlain, Rouses Point and Trout River, NY, and Derby Line and Newport VT; (f) *plastic resins,* in bulk, from the plant site of Uniroyal, Inc., located at Detroit, MI, to ports of entry on the U.S.-Canada Boundary line on the Detroit and St. Clair Rivers; (g) *plastic resins,* from the plantsite of Uniroyal, Inc., at Baton Rouge, LA, to ports of entry on the U.S.-Canada Boundary line on the Detroit, St. Clair, Niagara, and St. Lawrence Rivers, and at Champlain, Rouses Point, and Trout River, NY, and Derby Line and Newport, VT, restricted in (f) and (g) above to the transportation of traffic originating at the named plantsites; (h) *chemicals* (except in bulk), from Painesville, OH, to ports of entry on the U.S.-Canada Boundary line located on the Detroit, St. Clair, Niagara and St. Lawrence Rivers, and at Champlain, Rouses Point and Trout River, NY, and Derby Line and Newport, VT; (i) *methylene diphenyl diisocyanate,* in bulk, in tank vehicles, and *toluene diisocyanate,* in bulk, in tank vehilces, from the plantsite of Uniroyal, Inc., at Painesville, OH, to ports of entry on the U.S.-Canada Boundary line located on the Detroit, St. Clair, Niagara and St. Lawrence Rivers, and Champlain, Rouses Point and Trout River, NY, and Derby Line and Newport, VT; (j) *ammonium sulfide solution,* in bulk, in tank vehicles, from Phillipsburg, NJ, to ports of entry on the U.S.-Canada Boundary line located at Detroit, MI, restricted in (j) above to traffic destined to the plantsite of Allied Chemical Limited, located at Amherstburg, Ontario, Canada; (k) *alcoholic beverages* (except wine), in bulk, in tank vehicles, between the port of entry on the U.S.-Canada Boundary line located at or near Detroit, MI, and Peoria, IL; and (1) *empty bottles and barrels,* between Hillsboro and Peoria, IL, on the one hand, and, on the other, the port of entry on the U.S.-Canada Boundary line located at or near Detroit, MI; (2) in MC-142268 Sub 2 issued November 8, 1977, authorizing transportation over irregular routes, of (a) *alcoholic beverages,* in bulk, in tank vehicles, from ports of entry on the U.S.-Canada Boundary line, located at points in MI and NY, to Paducah, KY, restricted to the transportation of shipments originating at Toronto, Ontario, Canada; and (b) *alcoholic beverages* (except whisky in bulk), from the facilities of Heublein, Inc., at or near Paducah, KY, to points in AL, AR, FL, GA, IL, IN, KS, LA, MI, MS, MO, NC, OH, OK, SC, TN, TX, VA, and WV, restricted to the transportation of shipments originating at the plantsite facilities of Heublein, Inc., at or near Paducah, KY; (3) in MC 142268 Sub 3 issued November 25, 1977, authorizing transportation over irregular routes, of *alcholic beverages,* in bulk, in tank vehicles, from Bardstown, KY, to points on the U.S.-Canada Boundary line, located in MI, NY, NH, and VT, restricted to the transportation of traffic destined to Montreal, Quebec, Canada; (4) in MC 142268 Sub 4 issued January 17, 1978, authorizing transportation over irregular routes, of *alcoholic beverages,* in bulk, in tank vehicles, between points of entry on the U.S.-Canada Boundary line located in MI, on the one hand, and, on the other, Allen Park, MI, restricted to the transportation of shipments originating at Toronto, Ontario, and the port of Montreal, Quebec; (5) in MC 142268 Sub 5 issued November 8, 1977, authorizing transportation over irregular routes, of *animal feed* (except in bulk), from Sherburne, NY, to ports of entry on the U.S.-Canada Boundary line located in NY, MI, MN, ND, MT, ID, and WA, restricted to the transportation of shipments destined to Winnipeg, Manitoba, and Vancouver, British Columbia, Canada; (6) in MC 142268 Sub 6 issued November 7, 1977, authorizing transportation over irregular routes, of *liquid synthetic latex* in bulk, in tank vehicles, from ports of entry on the U.S.-Canada Boundary line located on the Detroit, St. Clair, Niagara and St. Lawrence Rivers, to points in CT, GA, IL, KY, KS, ME, MA, MI, MN, MO, NE, NY, NC, OH, OK, PA, SC, TN, TX, and WI; (7) in MC 142268 Sub 7 issued November 8, 1977, authorizing transportation over irregular routes, of *corn products and blends* containing corn products, in bulk, in tank vehicles, from Detroit, MI, and Decatur, IL, and from the facilities of Clinton Corn Processing Company at Montezuma, NY, and Clinton, IA, to ports of entry on the U.S.-Canada Boundary line located in ME, MI, NH, NY, and VT, restricted to the transportation of shipments destined to points in Ontario and Quebec; (8) in MC 142268 Sub 9 issued November 7, 1977, authorizing transportation over irregular routes, of *alcoholic beverages,* in bulk, in tank vehicles, from the ports of entry on the U.S.-Canada Boundary line located at or near Buffalo and Niagara Falls, NY, to Boston, MA, restricted to the transportation of shipments originating at the plant of L. J. McGuiness & Co. Limited, at Toronto, Ontario, Canada; (9) in MC 142268 Sub 10 issued November 7, 1977, authorizing transportation over irregular routes, of *alcoholic beverages,* in bulk, in tank vehicles, from the ports of entry on the U.S.-Canada Boundary line located at or near Port Huron, and Detroit, MI, and Buffalo and Niagara Falls, NY, to Bardstown, KY, restricted to traffic originating at the plant of Gilbey's Canada Limited at Toronto, Ontario, Canada, and destined to the plantsite of Barton Brands, Inc., at Bardstown, KY; (10) in MC 142268 Sub 11 issued December 30, 1977, authorizing transportation over irregular routes, of *alcoholic beverages,* in bulk, in tank vehicles, from the ports of entry on the U.S.-Canada Boundary line, located in NY and MI, to Cleveland, OH, restricted to the transportation of shipments moving in foreign commerce; (11) in MC 142268 Sub 14 issued April 3, 1978, authorizing transportation over irregular routes, of (a) *plastics, plastic products, and chemicals* (except liquid commodities in bulk), from the plant sites and storage facilities of Arco-Polymers, Inc., at or near Monaca, PA, to ports of entry on the International Boundary line between the U.S. and Canada located in MI, NY, VT, NH, and ME, and (b) *plastics, plastic products and chemicals,* (except commodities in bulk), from the plantsites and storage facilities of Arco-Polymers, Inc., at or near Port Arthur, TX, to ports of entry on the International Boundary line between the U.S. and Canada located in MI, NY, VT, NH, and ME, restricted to shipments destined to points in Ontario and Quebec Provinces, Canada; (1) in MC 142268 Sub 18 issued October 26, 1978, authorizing transportation over irregular routes, of *liquid corn syrup,* in bulk, in tank vehicles, from Chicago, IL, to ports of entry on the international boundary line between the U.S. and Canada located in MI and NY, restricted to the transportation of traffic destined to points in Ontario and Quebec, Canada; (13) in MC 142268 Sub 24 issued November 17, 1977, authorizing transportation over irregular routes, of *alcoholic beverages,* in bulk, in tank vehicles, from the ports of entry on the U.S.-Canada Boundary line located in MI, MT, and ND, to Cincinnati, OH, restricted to traffic originating at Calgary, Alberta, Canada; (14) in MC 142268 Sub 28 issued November 9, 1979, authorizing transportation over irregular routes, of (a) *ethyl alcohol, alcoholic liquors, neutral spirits, distilled spirits, wine, and brandies,* in bulk, in tank vehicles, (i) from ports of entry on the International Boundary line between the U.S. and Canada in ME, NH, VT, NY, the Lower Peninsula of MI, MN, and WA, to

Peoria, IL, Scobeyville, NJ, and Burlingame, CA, restricted to traffic in foreign commerce; (ii) from Peoria, IL, to ports of entry on the International Boundary line between the U.S. and Canada in MN, NY, and the Lower Peninsula of MI, restricted to traffic in foreign commerce; (iii) from Peoria, IL to Burlingame, CA and Scobeyville, NJ, and (iv) from Elizabeth, NJ to Peoria, IL; (b) *wine*, in bulk, in tank vehicles, from points in Kern, Kings, Tulare, and San Bernadino Counties, CA to Peoria, IL; and (c) *ethyl alcohol, alcoholic liquors, neutral spirits, distilled spirits, wine, and brandies* (except in bulk), (i) from Peoria, IL, to points in NJ, MD, KY, CA, and the Lower Peninsula of MI; (ii) from Burlingame, CA, to Peoria, IL; (iii) from Scobeyville, NJ, to points in MD; (iv) from Detroit, MI, to points in NJ, IL, and MD, (v) from ports of entry on the International Boundary line between the U.S. and Canada in WA to points in CA, restricted to traffic in foreign commerce; (vii) from Burlingame, CA, to ports of entry on the International Boundary line between the U.S. and Canada in WA, restricted to traffic in foreign commerce, and (vii) from ports of entry on the International Boundary line between the U.S. and Canada in MN and the Lower Peninsula of MI to Detroit, MI, and and Peoria, IL, restricted to the transportation of traffic in foreign commerce; (15) in MC 142268 Sub 29 issued January 9, 1978, authorizing transportation over irregular routes, of *alcoholic beverages*, in bulk, in tank vehicles, from Lawrenceburg, IN, to ports of entry on the U.S.–Canada Boundary line, located in MI and NY; (16) in MC 142268 Sub 30 issued April 13, 1978, authorizing transportation over irregular routes, of (a) *alcoholic beverages*, in bulk, between ports of entry on the U.S.–Canada Boundary line, located in MI, NY, NH, VT, and ME, on the one hand, and, on the other, Plainfield, IL, Owensboro, KY, and Dayton, NJ, restricted in (a) above with respect to those originating in Canada shall be restricted to those from Bridgetown, Nova Scotia, Toronto, Ontario, and Montreal, Quebec, and that shipments originating in the U.S. shall be restricted to those from Owensboro, KY, and further restricted with respect to shipments moving to or from Montreal having a prior or subsequent movement by water; (b) *alcoholic beverages*, in bulk, from Owensboro, KY, to Dayton, NJ; (c) *alcohol and alcoholic beverages*, in bulk, from Clinton, IA, to Plainfield, IL, and Dayton, NJ; (d) *alcoholic beverages* (except in bulk), from ports of entry on the U.S.–Canada Boundary line, located in MI, NY, NH, VT, and ME to Plainfield, IL, and Dayton, NJ, restricted in (d) above to the transportation of shipments originating at Montreal, Quebec, Toronto, Ontario and Bridgetown, Nova Scotia, Canada, and further restricted to the transportation of those shipments originating at Montreal having a prior movement by water; (e) *alcoholic beverages* (except in bulk), from Baltimore, MD, New York, NY, and Norfolk, VA, to Plainfield, IL, restricted in (e) above to the transportation of shipments having a prior movement by water; (f) *alcoholic beverages* (except in bulk), between Plainfield, IL, and Dayton, NJ; (g) *Alcoholic beverages*, in bulk, between New Orleans, LA, on the one hand, and, on the other, Ownesboro, KY, and Plainfield, IL, restricted in (g) above to the transportation of shipments having a prior or subsequent movement by water; (h) *empty containers*, between Plainfield, IL, and Dayton, NJ, restricted in parts (a) through (h) above, to shipments destined to or originating at the facilities of the Fleischmann Distilling Corporation, at Dayton, NJ, Plainfield, IL, or Owensboro, KY; and (17) in MC 142268 Sub 33F, issued October 29, 1979, authorizing transportation over irregular routes, of *frozen egg substitutes*, from St. Louis, MO, to ports of entry on the International Boundary line between the U.S. and Canada located at points in MI and NY, restricted to the transportation of traffic destined to points in the Provinces of Ontario and Quebec, Canada. By the instant petition, petitioner seeks to delete from each of the above authorities the restrictions to specific ports of entry and Canadian origins and destinations.

MC 143691 (Sub-19) (M1F) (notice of filing of petition to modify permit) filed January 24, 1979 and amended April 3, 1979. Petitioner: PONY EXPRESS COURIER CORPORATION, P.O. Box 4313, Atlanta, GA 30302. Representative: Francis J. Mulcahy (same address as petitioner). Petitioner operates motor *contract carrier* authority in MC 143691, (to be issued under Sub-19), pursuant to MCF 13469, decided August 9, 1978, served August 22, 1978, and consummated December 30, 1978. In this MCF proceeding, the operating rights of Financial Courier Corporation in MC 133683 and Sub-4, issued March 8, 1971, and June 8, 1972, respectively, were merged into MC 143691 (petitioner), as follows: MC 133683 pursuant to MCF 13469 authorizes transportation over irregular routes of (a) *such commercial papers, documents, written instruments, and business records* (except currency and negotiable securities) as are used in the business of banks and banking institutions, between Asheville, Charlotte, Greenville, Raleigh, and Winston, Salem, NC, on the one hand, and on the other, points in NC, SC, VA, and points in Johnson, Sullivan, Hawkins, Hancock, Claiborne, Carter, Washington, Greene, Unicoi, Cocke, Sevier, Blount, Jefferson, Knox, Loudon, Anderson, Union, and Grainger Counties, TN, and Richmond and Columbia Counties, GA, under continuing contract(s) with banks and banking institutions, and Wachovia Services, Inc., (b) *audit and data processing media* and *other business and governmental records*, except as are used in the business of banks and banking institutions, between Asheville, Charlotte, Greenville, Raleigh, and Winston-Salem, NC, and between Asheville, Charlotte, Greenville, Raleigh, and Winston-Salem, NC, on the one hand, and, on the other, points in NC, SC, VA, and points in Johnson, Sullivan, Hawkins, Hancock, Clairborne, Carter, Washington, Greene, Unicoi, Cocke, Sevier, Blount, Jefferson, Knox, Loudon, Anderson, Union, and Grainger Counties, TN, and Richmond and Columbia Counties, GA, under continuing contract(s) with Wachovia Services, Inc. MC 133683 Sub-4 authorizes transportation, over irregular routes, pursuant to MCF 13469 of *commercial papers, documents, written instruments, audit and data processing media*, and *business records* (except currency and negotiable securities), between Raleigh-Durham Airport at Greensboro, NC, Smith Reynolds Airport at Winston-Salem, NC, and Douglas Airport at Charlotte, NC, on the one hand, and, points in NC, on the other, between Tri-City Airport at Kingsport, TN, on the one hand, and, points in Johnson, Sullivan, Hawkins, Hancock, Claiborne, Carter, Washington, Greene, Unicoi, Cocke, Sevier, Blount, Jefferson, Knox, Loudon, Anderson, Union, and Grainger Counties, TN and Washington County, VA, on the other, restricted to the transportation of shipments having an immediately prior or subsequent movement by air, under continuing contract(s) with bank and banking institutions, and Wachovia Services, Inc. By the instant petition, petitioner seeks to modify the above authorities by adding Anacomp, Inc., and Automatic Data Processing, Inc. as contracting shippers.

MC 143978 (Sub-2) (M1F) (notice of filing of petition to add contracting shippers), filed January 23, 1980. Petitioner: EMERSON DELIVERY, INC., P.O. Box 652, Cedar Rapids, IA 52406.

Representative: George Hogan (same address as applicant). Petitioner holds a motor *contract carrier* Permit in MC 143978 Sub 2 issued February 25, 1980, authorizing transportation over irregular routes, of *machine parts*, between Cedar Rapids, IA, on the one hand, and, on the other, points in the U.S. in and east of ND, SD, WY, CO, OK, and TX, under a continuing contract(s) with FMC Corporation, of Cedar Rapids, IA. By the instant petition, petitioner seeks to add Iowa Mfg. Company, and Iowa Precision Industries, both of Cedar Rapids, IA, as additional contracting shippers to the above authority.

Republications of Grants of Operating Rights Authority Prior to Certification; Notice

The following grants of operating rights authorities are republished by order of the Commission to indicate a broadened grant of authority over that previously noticed in the **Federal Register.**

An original and one copy of a petition for leave to intervene in the proceeding must be filed with the Commission on or before June 23, 1980. Such pleading shall comply with Special Rule 247(e) of the Commission's *General Rules of Practice* (49 CFR 1100.2470 addressing specifically the issue(s) indicated as the purpose for republication, and including copies of intervenor's conflicting authorities and a concise statement of intervenor's interest in the proceeding setting forth in detail the precise manner in which it has been prejudiced by lack of notice of the authority granted. A copy of the pleading shall be served concurrently upon the carrier's representative, or carrier if no representative is named.

MC 55869 (Sub-91F) (republication), filed September 1, 1978. Published in the **Federal Register** issue of November 24, 1978, and republished this issue. Applicant: R-W SERVICE SYSTEM, INC., 20225 Goddard Road, Taylor, MI 48180. Representative: George E. Batty (same address as applicant). A Decision of the Commission, Review Board No. 2, decided September 7, 1979, and served September 21, 1979, find that the present and future public convenience and necessity require operations by applicant in interstate or foreign commerce as a *common carrier*, by motor vehicle, over irregular routes, transporting (1) *motor vehicle axles and off-highway vehicleaxles*, from Oshkosh, WI to St. Louis, MO, points in Illinois, Indiana, Michigan, Ohio, and those in Pennsylvania on and west of U.S. Hwy 219, and (2) *parts* used in the manufacture of the commodities in (1), above, from St. Louis, MO, points in Illinois, Indiana, Michigan, Ohio, and those in Pennsylvania on and west of U.S. Hwy 219 to Oshkosh, WI, that applicant is fit, willing, and able properly to perform such service and to conform to the requirements of the Interstate Commerce Act and the Commission's rules and regulations. The purpose of this republication is to modify the commodity and territorial description.

MC 109649 (Sub-26F) (republication), filed December 18, 1978. Published in the **Federal Register** issue of February 1, 1979, and republished this issue. Applicant: L. P. TRANSPORTATION, INC., Main and Cross Streets, Chester, NY 10918. Reentitled, PALMER TRANSPORTATION, INC. Representative: Roy A. Jacobs, 550 Mamaroneck Ave., Harrison, NY 10528. A Decision of the Commission, Review Board No. 1, decided November 28, 1979, and served December 3, 1979, finds that the present and future public convenience and necessity require operations by applicant in interstate or foreign commerce as a *common carrier*, by motor vehicle, over irregular routes, transporting *Liquefied petroleum gas*, in bulk, in tank vehicle from Philadelphia, PA, and Delaware City, DE, to points in Delaware, Maryland, and Virginia, limited in points of time to a period expiring 5 years from the date of issuance of the certificate that applicant is fit, willing, and able properly to perform such service and to conform to the requirements of the Interstate Commerce Act and the Commission's rules and regulations. The purpose of this republication is to modify the commodity and territorial description.

MC 114457 (Sub-490F) (republication), filed March 17, 1979. Published in the **Federal Register** issue of July 27, 1979, and republished this issue. Applicant: DART TRANSIT COMPANY, a corporation, 2102 University Avenue, St. Paul, MN 55114. Representative: James H. Wills (same address as applicant). A Decision of the Commission, Review Board No. 3, decided February 6, 1980, and served February 26, 1980, finds that the present and future public convenience and necessity require operations by applicant in interstate or foreign commerce as a *common carrier*, by motor vehicle, in interstate or foreign commerce, over irregular routes, transporting (1) *such commodities* as are dealt in or used by (a) grocery and food business houses, and (b) agricultural feed business houses, except commodities in bulk, and (2) *materials, equipment, and supplies* used in the manufacture, sale, development, and distribution of the products named in (1) above, (except commodities in bulk), between points in the United States (except Alaska and Hawaii), restricted in (1) and (2) above the transportation of traffic originating at or destined to the facilities of Ralston Purina Company. That applicant is fit, willing, able properly to perform such service and to conform to the requirements of the Interstate Commerce Act and the Commission's rules and regulations. The purpose of this republication is to modify the commodity and territorial description.

MC 121496 (Sub-3) (MIF) (notice of filing of petition to modify a certificate), filed March 26, 1980. Petitioner: CANGO CORPORATION, Suite 2900, 1100 Milam Bldg., Houston, TX 77002. Representative: E. Stephen Heisley, 805 McLachlen Bank Bldg., 666 11th St. NW., Washington, DC 20001. Petitioner holds motor common carrier authority in MC 121496 Sub-3, issued January 8, 1980, authorizing transportation over irregular routes, of (1) *petroleum products*, as described in Appendix XIII to the report in *Descriptions in Motor Carrier Certificates*, 61 M.C.C. 209 (except liquefied petroleum gases, anhydrous ammonia, and asphalt), in bulk, in tank vehicles, from points in Brazoria, Chambers, Calhoun, Galveston, Harris, Jefferson, Liberty, and Montgomery Counties, TX, to points in FL and TN; (2) *petroleum products*, as described in Appendix XIII to the report in *Descriptions in Motor Carrier Certificates*, 61 M.C.C. 209, in bulk, in tank vehicles, (a) from points in Brazoria, Calhoun, Galveston, Harris, and Jefferson Counties, TX, to points in AL, AR, GA, OK, and SC, (b) from points in Chambers and Montgomery Counties, TX, to points in AL, AR, GA, and SC, (c) from points in Orange Counties, TX, to points in AL, AR, and SC, (d) from points in Liberty County, TX to points in AR, and (e) from points in Matagorda County, TX, to points in AL; (3) *petroleum products* (except liquefied petroleum gases), in bulk, in tank vehicles, from points in Brazoria, Chambers, Calhoun, Galveston, Harris, Jefferson, Liberty, Montgomery, Orange, and Matagorda Counties, TX, to points in LA and MS (except points in Washington and Warren Counties); (4) *liquid petrochemicals* (except liquefied petroleum gases), in bulk, in tank vehicles, (a) from points in Brazoria, Galveston, Harris, and Jefferson Counties, TX, to points in AL, FL, GA, IL, KY, MS, NC, SC, and TN, (b) from points in Calhoun and Montgomery Counties, TX, to points in AL, FL, GA, KY, MS, NC, SC, and TN, (c) from points

in Chambers County, TX, to points in AL, FL, GA, KY, MS, SC, and TN, (d) from points in Orange County, TX, to points in AL, KY, MS, NC, and SC and (e) from points in Liberty County, TX, to points in FL and MS; and (5) *liquefied petroleum gases,* in bulk, in tank vehicles, (a) from points in Harris County, TX, to points in AR, LA, and MS, and (b) from points in Jefferson and Liberty Counties, TX, to points in LA, restricted in (1), (2), (3), (4), and (5) against the transportation of cryogenic liquids. By the instant petition, petitioner seeks to modify the commodity descriptions in (1) through (4) so as to read: "petroleum products, in bulk, in tank vehicles"; petitioner also seeks to modify (3) by deleting the restriction in the territorial description which reads "(except points in Washington and Warren Counties)".

MC 123997 (Sub-3F) (republication), filed March 20, 1978 Published in the **Federal Register** issue of May 11, 1978, and republished this issue. Applicant: COMET FAST FREIGHT INC., 101 Wellham Ave. NE., Glen Burnie, MD 21061. Representative: Ralph L. Smith (same address as applicant). A Decision of the Commission, Division 1, Acting as an appellate Division, decided February 15, 1980, and served March 12, 1980, find that the present and future public convenience and necessity require operations by applicant in interstate or foreign commerce as a *common carrier,* by motor vehicle, in interstate or foreign commerce, over irregular routes, transporting *glass containers, closures for glass containers, fibre board boxes, and equipment, materials, and supplies used or useful in the manufacture and shipment of glass containers* (except commodities in bulk), between the facilities of Chattanooga Glass Co. at or near Keyser, WV, and Baltimore, MD, on the one hand, and, on the other, points in Connecticut, Delaware, Georgia, Illinois, Indiana, Kentucky, Maryland, Michigan, Mississipi, Ohio, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Tennessee, Virgina, West Virginia, Wisconsin, and the District of Columbia. That applicant is fit, willing, and able properly to perform such service and to conform to the requirement of the Interstate Commerce Act and the Commission rules and regulation. The purpose of this republication is to modify the commodity and territorial description.

MC 124947 (Sub-92F) (republication), filed December 20, 1977 published in the **Federal Register** issue of February 16, 1978, and republished this issue. Applicant: MACHINERY TRANSPORTS, INC., 116 Allied Road, Stroud, Oklahoma 74079. Representative: Roy A. Jacobs, 550 Mamaroneck Ave., Harrison, NY 10528. A Decision of the Commission, Division No. 2, decided February 1, 1980 and served February 11, 1980, finds that the present and future public convenience and necessity require operations by applicant in interstate or foreign commerce as a *common carrier,* by motor vehicle, over irregular routes, transporting (1) *commodities, the transportation of which because of size or weight require the use of special equipment,* and (2) *self-propelled vehicles, each weighing 15,000 pounds or more* (except motor vehicles as defined in Title 49, Subtitle IVm U.S. Code, sect. 10102 (14)) from points in New Mexico to points in Texas, restricted against the transportation of oilfield and pipeline commodities used in the petroleum industry as defined in *Mercer Extension—Oil Field Commodities,* 74 M.C.C. 459. That applicant is fit, willing, and able properly to perform such service and to conform to the requirements of the Interstate Commerce Act and the commission's rules and regulation. The purpose of this republication is to modify the commodity and territorial description.

MC 138157 (Sub-101F), (republication) filed November 21, 1978. Published in the **Federal Register** issue of February 23, 1979, and republished this issue. Applicant: SOUTHWEST EQUIPMENT RENTAL, INC., d.b.a. SOUTHWEST MOTOR FREIGHT, a California corporation, 2931 South Market Street, Chattanooga, TN 37412. Representative: Patrick E. Quinn, P.O. Box 9596, Chattanooga, TN 37412. A Decision of the Commission, Review Board No. 1, decided October 23, 1979, and served October 29, 1979, find that the present and future public convenience and necessity require operations by applicant in interstate or foreign commerce as a *common carrier,* by motor vehicle, over irregular routes, transporting *canned fish and canned pet food* from Terminal Island, CA, to those points in the United States in and east of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas. That applicant is fit, willing, and able properly to perform such service and to conform to the requirements of the Interstate Commerce Act and the commission's rules and regulation. The purpose of this republication is to modify the commodity and territorial description.

MC 144027 (Sub-5F) (republication), filed September 5, 1978, published in the **Federal Register** issue of November 14, 1978, and republished this issue. Applicant: WARD CARTAGE AND WAREHOUSING, INC., Route #4, Glasgow, KY 42121. Representative: Walter Harwood, P.O. Box 15215, Nashville, TN 37215. A Decision of the Commission, Division 1, acting as an Appellate Division, decided April 17, 1980 and finds that the present and future public convenience and necessity require operations by applicant in interstate or foreign commerce as a *common carrier,* by motor vehicle, in interstate or foreign commerce, over irregular routes, transporting (1) *tobacco, tobacco products, and cigarette making kits, and* (2) *commodities used in the manufacture, sale and distribution of tobacco, tobacco products, and cigarette making kits* between Louisville, KY, and Chicago, IL, that applicant is fit, willing, and able properly to perform such service and to conform to the requirements of the Interstate Commerce Act and the commission's rules and regulations. The purpose of this republication is to modify the commodity and territorial description.

MC 146406F (republication), filed February 28, 1979. Published in the **Federal Register** issue of July 19, 1979, and republished this issue. Applicant: PATRICK HILLER LYONS, GERALD L. ROBINSON, d.b.a. L and R TRANSPORT, 1520 Fairmont Court, Clovis, NM 88101. Representative: J. Michael Alexander, 5801 Marnin D. Lone Freeway, Dallas, TX 75237. A Decision of the Commission, Review Board No. 1 decided February 8, 1980 and served February 14, 1980, finds that the present and future public convenience and necessity require operations by applicant in interstate or foreign commerce as a *common carrier,* by motor vehicle over irregular routes, transporting *general commodities* (except those of unusual value, classes A and B explosives, household goods as defined by the commission, commodities in bulk, and those requiring the use of special equipment) between Amarillo and Lubbock, TX, on the one hand, and, on the other, Clovis, Hobbs, Carlsbad, Roswell, and Portales, NM, El Paso, TX, and the facilities of Lyons' Angus Ranch, Inc., at or near Cuervo, NM. That applicant is fit, willing, and able properly to perform such service and to conform to the requirements of the Interstate Commerce Act and the commission's rules and regulation. The purpose of this republication is to modify the commodity and territorial description.

Motor Carrier Operating Rights Applications

The following applications, filed on or after March 1, 1979, are governed by Special Rule 247 of the Commission's General Rules of Practice (49 CFR 1100.247). These rules provide, among other things, that a *petition to intervene either with or without leave* must filed with the Commission on or before June 23, 1980, with a copy being furnished the applicant. Protests to these applications *will be rejected.*

A petition for intervention without leave must comply with Rule 247(k) which requires petitioner to demonstrate that it (1) holds operating authority permitting performance of any of the service which the applicant seeks authority to perform, (2) has the necessary equipment and facilities for performing that service, and (3) has performed service within the scope of the application either (a) for those supporting the application, or, (b) where the service is not limited to the facilities of particular shippers, from and to, or between, any of the involved points.

Persons unable to intervene under Rule 247(k) may file a petition for leave to intervene under Rule 247(l). In deciding whether to grant leave to intervene, the Commission considers, among other things, whether petitioner has (a) solicited the traffic or business of those persons supporting the application, or, (b) where the identity of those supporting the application is not included in the published application notice, has solicited traffic or business identical to any part of that sought by applicant within the affected marketplace. Another factor considered is the effects of any decision on petitioner's interests.

Samples of petitions and the text and explanation of the intervention rules can be found at 43 FR 50908, and modified at 43 FR 60277. Petitions not in reasonable compliance with these rules may be rejected. Note that Rule 247(e), where not inconsistent with the intervention rules, still applies. Especially refer to Rule 247(e) for requirements as to supplying a copy of conflicting authority, serving the petition on applicant's representative, and oral hearing requests.

MC 61264 (Sub-35F), filed March 12, 1980. Applicant: PILOT FREIGHT CARRIERS, INC., a North Carolina corporation, P.O. Box 615, Winston-Salem, NC 27102. Representative: William F. King, Suite 400, Overlook Building, 6121 Lincolnia Road, Alexandria, VA 22312. Authority sought to operate as a *common carrier,* by motor vehicle, over regular routes, transporting *General Commodities* (except those of unusual value, Classes A and B explosives, household goods as defined by the Commission, commodities in bulk, and those requiring special equipment), (1) between Tuscaloosa, AL and Atlanta GA, serving all intermediate points: From Tuscaloosa over Interstate Hwy 20 to Atlanta, and return over the same route; (2) between Montgomery, AL and Atlanta, GA, serving all intermediate points: From Montgomery over Interstate Hwy 85 to Atlanta, and return over the same route; (3) between Mobile, AL and Nashville, TN, serving all intermediate points: From Mobile over US Hwy 43 (also AL Hwy 13) to Florence, AL, then over US Hwy 43 to junction US Hwy 431, then over US Hwy 431 to Nashville, and return over the same route; (4) between Tuscaloosa, AL and Alachua, FL, serving all intermediate points: From Tuscaloosa over US Hwy 82 to Montgomery, AL, then over US Hwy 231 to Dothan, AL, then over US Hwy 84 to Bainbridge, GA, then over US Hwy 27 to High Springs, FL, then over US Hwy 441 to Alachua, and return over the same route; (5) between Florence, AL and Chattanooga, TN, serving all intermediate points: From Florence over US Hwy 72 to junction Interstate Hwy 24, then over Interstate Hwy 24 to Chattanooga, and return over the same route; 46) between Winfield, AL and Jacksonville, FL, serving all intermediate points: From Winfield over US Hwy 78 to Birmingham, AL, then over US Hwy 280 to junction GA Hwy 55, then over GA Hwy 55 to junction US Hwy 82, then over US Hwy 82 to Waycross, GA, then over US Hwy 1 to Jacksonville, and return over the same route; (7) between Evergreen, AL and Midway, GA, serving all intermediate points: From Evergreen over US Hwy 84 to Waycross, GA, then over US Hwy 82 to Midway, and return over the same route; (8) between Montgomery, AL and Savannah, GA, serving all intermediate points: From Montgomery over US Hwy 82 to Dawson, GA, then over GA Hwy 118 to junction US Hwy 280, then over US Hwy 280 to junction Interstate Hwy 16, then over Interstate Hwy 16 to Savannah, and return over the same route; (9) between Florence, AL and Huntsville, AL, serving all intermediate points: From Florence over Alternate US Hwy 72 to Huntsville, and return over the same route; (10) between Montgomery, AL and Huntville, AL, serving all intermediate points: From Montgomery over US Hwy 231 to Huntsville, and return over the same route; (11) between Dothan, AL and Huntsville, AL, serving all intermediate points: From Dothan over US Hwy 431 to Huntsville, and return over the same route; (12) between Dothan, AL and Junction US Hwy 231 and Interstate Hwy 10, serving all intermediate points:
From Dothan over US Hwy 231 to junction Interstate Hwy 10, and return over the same route; (13) between Ashville, AL and Calhoun, GA, serving all intermediate points: From Ashville over US Hwy 411 to Rome, GA, then over GA Hwy 53 to Calhoun, and return over the same route; (14) between Decatur, AL and Cedartown, GA, serving all intermediate points: From Decatur over AL Hwy 67 to junction US Hwy 231, then over US Hwy 231 to junction US Hwy 278, then over US Hwy 278 to Cedartown, and return over the same route; (15) between Sylacauga, AL and Summerville, GA, serving all intermediate points: From Sylacauga, over Alternate US Hwy 231 to junction AL Hwy 21, then over AL Hwy 21 to Piedmont, AL, then over AL Hwy 9 to junction AL Hwy 68, then over AL Hwy 68 to junction GA Hwy 114, then over GA Hwy 114 to Summerville, and return over the same route; (16) between Scottsboro, AL and Summerville, GA, serving all intermediate points: From Scottsboro over AL Hwy 35 to junction AL Hwy 40, then over AL Hwy 40 to junction AL Hwy 117, then over AL Hwy 117 to junction GA Hwy 48, then over GA Hwy 48 to Summerville, and return over the same route; (17) between Eufaula, AL and Bainbridge, GA, serving all intermediate points: From Eufaula over US Hwy 82 to junction GA Hwy 39, then over GA Hwy 39 to junction US Hwy 27, then over US Hwy 27 to Bainbridge, and return over the same route; (18) between Evergreen, AL and Pensacola, FL, serving all intermediate points: From Evergreen over US Hwy 31 to Brewton, AL, then over US Hwy 29 to Pensacola, and return over the same route; (19) between Montgomery, AL and Ft. Walton Beach, FL, serving all intermediate points: From Montgomery over US Hwy 331 to Florala, AL, then over FL Hwy 85 to Ft. Walton Beach, and return over the same route; (20) between Eufaula, AL and Dudley, GA, serving all intermediate points: From Eufaula over US Hwy 82 to junction GA Hwy 27, then over GA Hwy 27 to Richland, GA, then over US Hwy 280 to Americus, GA, then over GA Hwy 27 to Hawkinsville, GA, then over Alternate US Hwy 129 to Cochran, GA, then over GA Hwy 26 to Dudley, and return over the same route; (21) between Albany, GA and Capps, FL, serving all intermediate points: From Albany over US Hwy 19 to Capps, and return over

the same route; (22) between Albany, GA and Winfield, FL, serving all intermediate points: From Albany over GA Hwy 133 to Moultrie, GA, then over GA Hwy 94 to Valdosta, GA, then over US Hwy 41 to Winfield, and return over the same route; (23) between Phenix City, AL and Blakely, GA, serving all intermediate points: From Phenix City over US Hwy 280 to junction US Hwy 27, then over US Hwy 27 to Blakely, and return over the same route; (24) between Dothan, AL and Cordele, GA, serving all intermediate points: From Dothan over AL Hwy 52 to GA Hwy 62, then over GA Hwy 62 to Albany, GA, then over GA Hwy 257 to Cordele, and return over the same route; (25) between Phenix City, AL and Brunswick, GA, serving all intermediate points: From Phenix City over US Hwy 280 to junction GA Hwy 26, then over GA Hwy 26 to Hawkinsville, GA, then over US Hwy 341 to Brunswick, and return over the same route; (26) between Macon, GA and Junction US Hwys 23 and 1 near Alma, GA, serving all intermediate points: From Macon over US Hwy 23 to junction US Hwy 1, and return over the same route; (27) between Demopolis, AL and Columbus, GA, serving all intermediate points: From Demopolis over US Hwy 80 to Columbus, and return over the same route; (28) between Mobile, AL and Jacksonville, FL, serving all intermediate points: From Mobile over Interstate Hwy 10 to Jacksonville, and return over the same route; (29) between Mobile, AL and Jacksonville, FL, serving all intermediate points: From Mobile over US Hwy 90 (also over Alternate US Hwy 90) to Jacksonville, and return over the same route; (30) between Tuscaloosa, AL and Rouses Point, NY, serving all intermediate points: From Tuscaloosa over US Hwy 11 to junction US Hwy 11W, then over US Hwy 11W (also over US Hwy 11E) to junction US Hwy 11, then over US Hwy 11 to Rouses Point, and return over the same route; (31) between Tuscaloosa, AL and Alexandria Bay, NY, serving all intermediate points: From Tuscaloosa over Interstate Hwy 59 to junction Interstate Hwy 24, then over Interstate Hwy 24 to Chatanooga, TN, then over Interstate Hwy 75 to Knoxville, TN, then over Interstate Hwy 81 to junction NY Hwy 12, then over NY Hwy 12 to Alexandria Bay, and return over the same route; (32) between Mobile, AL and Boston, MA, serving all intermediate points: From Mobile over US Hwy 31 to junction AL Hwy 59, then over AL Hwy 59 to junction Interstate Hwy 65, then over Interstate Hwy 65 to Louisville, KY, then over Interstate Hwy 71 to Cincinnati, OH, then over Interstate Hwy 75 to Toledo, OH, then over Interstate Hwy 90 (also US Hwy 20) to Boston (also over Interstate Connector Hwys I264 at Louisville and I275 at Cincinnati), and return over the same route; (33) between Evergreen, AL and Cleveland, OH, serving all intermediate points: From Evergreen over US Hwy 31 to junction US Hwy 31W, then over US Hwy 31W to Louisville, KY, then over US Hwy 42 to Cleveland, and return over the same route; (34) between Knoxville, TN and Cleveland, OH, serving all intermediate points: From Knoxville over Interstate Hwy 75 to Cincinnati, OH, then over Interstate Hwy 71 to Cleveland (also over Interstate Connector Hwy I270 at Columbus, OH), and return over the same route; (35) between Wytheville, VA and Cleveland, OH, serving all intermediate points: From Wytheville over Interstate Hwy 77 to Cleveland, and return over the same route; (36) between Junction US Hwy 23 and Interstate Hwy 64 and Erie, PA, serving all intermediate points: From junction US Hwy 23 over Interstate Hwy 64 to Charleston, WV, then over Interstate Hwy 79 to Erie, and return over the same route; (37) between Asheville, NC and Toledo, OH, serving all intermediate points: From Asheville over US Hwy 23 to Toledo, and return over the same route; (38) between Chattanooga, TN and Cincinnati, OH, serving all intermediate points: From Chattanooga over US Hwy 27 to Cincinnati, and return over the same route; (39) between Paris, KY and Niagara Falls, NY, serving all intermediate points: From Paris over US Hwy 68 to Washington, KY, then over US Hwy 62 to Niagara Falls, and return over the same route; (40) between Morgantown, WV and Hamburg, NY, serving all intermediate points: From Morgantown over US Hwy 119 to junction US Hwy 219, at or near West Liberty, PA, then over US Hwy 219 to Hamburg, and return over the same route; (41) between North Ridgeville, OH and Youngstown, OH, serving all intermediate points: From North Ridgeville over Interstate Hwy 80 to Youngstown, and return over the same route; (42) between Beaver Dam, OH and East Liverpool, OH, serving all intermediate points: From Beaver Dam over US Hwy 30 to East Liverpool, and return over the same route; (43) between Richmond, IN and Wheeling, WV, serving all intermediate points: From Richmond over Interstate Hwy 70 (also over US Hwy 40) to Wheeling, and return over the same route; (44) between Lawrenceburg, IN and Parkersburg, WV, serving all intermediate points: From Lawrenceburg over US Hwy 50 to Parkersburg, and return over the same route; (45) between Cincinnati, OH and Weirton, WV, serving all intermediate points: From Cincinnati over US Hwy 22 to Weirton, and return over the same route; (46) between Junction Interstate Hwy 75 and Ohio Hwy 25 at Cygnet, OH and Toledo, OH, serving all intermediate points: From junction Interstate Hwy 75 over OH Hwy 25 to Toledo, and return over the same route; (47) between Carey, OH and Findlay, OH, serving all intermediate points: From Carey over OH Hwy 15 to Findlay, and return over the same route; (48) between Chillicothe, OH and Richmond, IN, serving all intermediate points: From Chillicothe over US Hwy 35 to Richmond, and return over the same route; (49) between Huntsville, OH and Lima, OH, serving all intermediate points: From Huntsville over OH Hwy 117 to Lima, and return over the same route; (50) between Wapakoneta, OH and Athens, OH, serving all intermediate points: From Wapakoneta over US Hwy 33 to Athens, and return over the same route; (51) between Cincinnati, OH and Eaton, OH, serving all intermediate points: From Cincinnati over US Hwy 127 to Eaton, and return over the same route; (52) between Wooster, OH and Avery, OH, serving all intermediate points: From Wooster over US Hwy 250 to Avery, and return over the same route; (53) between Lodi, OH and Youngstown, OH, serving all intermediate points: From Lodi over US Hwy 224 to junction Interstate Hwy 76, then over Interstate Hwy 76 to junction Interstate Hwy 680, then over Interstate Hwy 680 to Youngstown, and return over the same route; (54) between Cleveland, OH and Akron, OH, serving all intermediate points: From Cleveland over OH Hwy 8 to Akron, and return over the same route; (55) between Bellaire, OH and Ashtabula, OH, serving all intermediate points: From Bellaire over OH Hwy 7 to junction OH Hwy 11, then over OH Hwy 11 to Ashtabula, and return over the same route; (56) between junction Interstate Hwy 90 and Interstate Hwy 271 and junction Interstate Hwy 271 and Interstate Hwy 71, serving all intermediate points: From junction Interstate Hwy 90 over Interstate Hwy 271 to junction Interstate Hwy 71, and return over the same route; (57) between junction Interstate Hwy 77 and OH Hwy 21, at or near Strasburg, OH, and Cleveland, OH, serving all intermediate points: From junction Interstate Hwy 77 over OH Hwy 21 to Cleveland, and return over the same route; (58) between Conneaut, OH and New Bedford, MA,

serving all intermediate points: From Conneaut over US Hwy 20 to junction US Hwy 6N, then over US Hwy 6N to junction US Hwy 6, then over US Hwy 6 to New Bedford, and return over the same route; (59) between Binghamton, NY and Troy, NY, serving all intermediate points: From Binghamton over NY Hwy 7 (and also over completed portions of Interstate Hwy 88) to Troy, and return over the same route; (60) between Lucketts, VA and Rochester, NY, serving all intermediate points; From Lucketts over US Hwy 15 to junction NY Hwy 17, then over NY Hwy 17 to junction Interstate Hwy 390, then over Interstate Hwy 390 to junction NY Hwy 15, then over NY Hwy 15 (also over NY Hwy 15A) to Rochester, and return over the same route; (61) between junction Interstate Hwy 276 and US Hwy 130 and Champlain, NY, serving all intermediate points: From junction Interstate Hwy 276 over US Hwy 130 to junction US Hwy 1, then over US Hwy 1 to New York, NY, then over Interstate Hwy 87 to Albany, NY, then over Interstate Hwy 87 (also over US Hwy 9) to Champlain, and return over the same route; (62) between Westfield, NY and Binghamton, NY, serving all intermediate points: From Westfield over NY Hwy 17 to Binghamton, and return over the same route; (63) between junction Interstate Hwys 76 and 276 and junction Interstate Hwy 276 and New Jersey Turnpike, serving all intermediate points: From junction Interstate Hwy 76 over Interstate Hwy 276 to junction New Jersey Turnpike, and return over the same route; (64) between junction Interstate Hwy 81 and Interstate Hwy 78 and New York City, NY, serving all intermediate points: From junction Interstate Hwy 81 over Interstate Hwy 78 to junction Interstate Hwy 287, then over Interstate Hwy 287 to junction US Hwy 22, then over US Hwy 22 to junction Interstate Hwy 78, then over Interstate Hwy 78 to New York City, and return over the same route; (65) between Perth Amboy, NJ and junction US Hwy 202 and Interstate Hwy 87, serving all intermediate points: From Perth Amboy over Interstate Hwy 287 to junction US Hwy 202, near Montville, NJ, then over US Hwy 202 to junction Interstate Hwy 87, and return over the same route; (66) between Albany, NY and Boston, MA, serving all intermediate points: From Albany over Interstate Hwy 787 to junction NY Hwy 2, then over NY Hwy 2 to junction MA Hwy 2, then over MA Hwy 2 to Boston, and return over the same route; (67) between Harrisburg, PA and Baltimore, MD, serving all intermediate points: From Harrisburg over Interstate Hwy 83 to Baltimore, and return over the same route; (68) between Winchester, VA and Baltimore, MD, serving all intermediate points: From Winchester over VA Hwy 7 to junction US Hwy 340, then over US Hwy 340 to Frederick, MD, then over Interstate Hwy 70 to Baltimore, and return over the same route; (69) between Morgantown, WV and Hagerstown, MD, serving all intermediate points: From Morgantown over US Hwy 48 to Cumberland, MD, then over US Hwy 40 to Hancock, MD, then over Interstate Hwy 70 to Hagerstown, and return over the same route; (70) between Junction Interstate Hwy 95 and Interstate Hwy 295, at or near Newport, DE, and Elizabeth, NJ, serving all intermediate points: From junction Interestate Hwy 95 over Interstate Hwy 295 to junction New Jersey Turnpike, then over New Jersey Turnpike to Elizabeth, and return over the same route; (71) between Baltimore, MD and Trenton, NJ, serving all intermediate points: From Baltimore over US Hwy 40 to junction Interstate Hwy 295, then over Interstate Hwy 295 to junction US Hwy 130, then over US Hwy 130 to junction US Hwy 206, then over US Hwy 206 to Trenton, and return over the same route; (72) between junction US Hwy 1 and Virginia Hwy 207 and Trenton, NJ, serving all intermediate points: From junction US Hwy 1 over VA Hwy 207 to junction US Hwy 301, then over US Hwy 301 to junction US Hwy 301S, then over US Hwy 301S to junction US Hwy 13, then over US Hwy 13 to junction US Hwy 1, then over US Hwy 1 to Trenton, and return over the same route; (73) between Abingdon, VA and Independence, VA, serving all intermediate points: From Abingdon over US Hwy 58 to Independence, and return over the same route; (74) between Murphy, NC and Chattanooga, TN, serving all intermediate points: From Murphy over US Hwy 64 to Chattanooga, and return over the same route; (75) between Arlington, VA and Baltimore, MD, serving all intermediate points: From Arlington over US Hwy 29 to Baltimore, and return over the same route; (76) between Junction Interstate Hwy 295 and New Jersey Hwy 413, at or near Burlington, NJ, and Levittown, PA, serving all intermediate points: From junction Interstate Hwy 295 over NJ Hwy 413 to junction PA Hwy 413, then over PA Hwy 413 to Levittown, and return over the same route; (77) between Bridgeport, NJ and Chester, PA, serving all intermediate points: From Bridgeport over US Hwy 322 to Chester, and return over the same route; (78) between Philadelphia, PA and Port Jervis, NY, serving all intermediate points: From Philadelphia over US Hwy 611 to junction US Hwy 209, then over US Hwy 209 to Port Jervis, and return over the same route; (79) between Newark, NJ and Junction New York Hwy 17 and Interstate Hwy 87, serving all intermediate points: From Newark over NJ Hwy 17 to junction NY Hwy 17, then over NY Hwy 17 to junction Interstate Hwy 87, and return over the same route; (80) between Alexandria, VA to Boston, MA, serving all intermediate points: From Alexandria over US Hwy 1 to Boston, and return over the same route; (81) between Alexandria, VA and Boston, MA, serving all intermediate points: From Alexandria over Interstate Hwy 95 (also over Interstate Hwy 495 and Interstate Hwy 395 at Washington, DC; Interstate Hwy 695 (Baltimore Beltway) and the Harbor Tunnel Thruway at Baltimore, MD) to Boston, and return over the same route; (82) between junction US Hwy 301 and Delaware Hwy 300 and Dover, DE, serving all intermediate points: From junction US Hwy 301 over MD Hwy 300 to junction DE Hwy 44, then over DE Hwy 44 to Dover, and return over the same route; (83) between Junction US Hwy 50 and Junction Maryland Hwy 404 and Georgetown, DE, serving all intermediate points: From junction US Hwy 50 over MD Hwy 404 to junction DE Hwy 404, then over DE Hwy 404 to junction DE Hwy 18, then over DE Hwy 18 to Georgetown, and return over the same route; (84) between Denton, MD and Milford, DE, serving all intermediate points: From Denton over MD Hwy 404 to junction MD Hwy 313, then over MD Hwy 313 to junction MD Hwy 317, then over MD Hwy 317 to DE Hwy 14, then over DE Hwy. 14 to Milford, and return over the same route; (85) between Laurel, DE and Junction US Hwy 9 and US Hwy 1, serving all intermediate points: From Laurel over US Hwy 9 to Lewes, DE, then over the Delaware River to Cape May, NJ, then over US Hwy 9 to junction US Hwy 1, and return over the same route; (86) between Suffolk, VA and Junction US Hwy 202 and Pennsylvania Hwy 3, serving all intermediate points: From Suffolk over US Hwy 13 to junction DE Hwy 141, then over DE Hwy 141 to Wilmington, DE, then over US Hwy 202 to junction PA Hwy 3, and return over the same route; (87) between Junction Interstate Hwy 95/495 and Interstate Hwy 295 (Washington, DC) and Baltimore, MD, serving all intermediate points: From junction Interstate Hwy 95/495 over Interstate Hwy 295 to junction MD Hwy 295, then over MD Hwy 295 to Baltimore, and return over the same route; (88) between Junction US Hwy 50 and

George Washington Memorial Parkway and Junction George Washington Memorial Parkway and US Hwys 29/211, serving all intermediate points: From junction US Hwy 50 over George Washington Memorial Parkway to junction US Hwys 29/211, and return over the same route; (89) between Baltimore, MD and Junction Maryland Hwy 2 and US Hwys 50/301, serving all intermediate points: From Baltimore over MD Hwy 2 to junction US Hwys 50/301, and return over the same route; (90) between Frederick, MD and Washington, DC, serving all intermediate points: From Frederick over Interstate Hwy 270 to Washington, and return over the same route; (91) between Georgetown, DE and Dover, DE, serving all intermediate points: From Georgetown over US Hwy 113 to Dover, and return over the same route; (92) between Oakton, VA and Junction US Hwys 50 and 301, serving all intermediate points: From Oakton over US Hwy 50 to junction US Hwy 301, and return over the same route; (93) between Queenstown, MD and Salisbury, MD, serving all intermediate points: From Queenstown over US Hwy 50 to Salisbury, and return over the same route; (94) between Philadelphia, PA and Atlantic City, NJ, serving all intermediate points: From Philadelphia over US Hwy 30 to Atlantic City, and return over the same route; (95) between Danbury, CT and Junction US Hwys 44 and 202, at or near Canton, CT, serving all intermediate points: From Danbury over US Hwys 7/202 to New Milford, CT, then over US Hwy 202 to junction US Hwy 44, and return over the same route; (96) between Bridgeport, CT and Junction Massachusetts Hwy 8 and Interstate Hwy 90 at or near East Lee, MA, serving all intermediate points: From Bridgeport over CT Hwy 8 to the CT–MA State Line, then over MA Hwy 8 to junction Interstate Hwy 90, and return over the same route; (97) between Winsted, CT and Hartford, CT, serving all intermediate points: From Winsted over US Hwy 44 to Hartford, and return over the same route; (98) between New Haven CT and Greenfield, MA, serving all intermediate points: From New Haven over US Hwy 5 to Greenfield, and return over the same route; (99) between Hartford, CT and junction Interstate Hwy 86 and Interstate Hwy 90 at Interchange #9 in MA, serving all intermediate points: From Hartford over Interstate Hwy 86 to junction Interstate Hwy 90, and return over the same route; (100) betweeen Hartford, CT and Norwich, CT, serving all intermediate points: From Hartford over CT Hwy 2 to Norwich, and return over the same route; (101) between New Haven, CT, and Sandy Hook, CT, serving all intermediate points: From New Haven over CT Hwy 34 to Sandy Hook, and return over the same route; (102) between Marion, CT and Williamantic, CT, serving all intermediate points: From Marion over CT Hwy 66 to junction US Hwy 6, then over US Hwy 6 to Willimantic, and return over the same route; (103) between East Lyme, CT and Danielson, CT, serving all intermediate points: From East Lyme over CT Hwy 52 (Connecticut Turnpike) to Danielson, and return over the same route; (104) between Norwalk, CT and Danbury, CT, serving all intermediate points: From Norwalk over US Hwy 7 to Danbury, and return over the same route; (105) between Milford, CT and Meriden, CT, serving all intermediate points: From Milford over CT Hwy 15 to Meriden, and return over the same route; (106) between Old Saybrook, CT and Hartford, CT, serving all intermediate points: From Old Saybrook over US Hwy 1 to junction CT Hwy 9, then over CT Hwy 9 to junction Interstate Hwy 91, and return over the same route; (107) between Scranton, PA and Bolton Center, CT, serving all intermediate points: From Scranton over Interstate Hwy 84 to Bolton Center, and return over the same route; (108) between Providence, RI and Worcester, MA, serving all intermediate points: From Providence over RI Hwy 146 to the RI–MA State Line, then over MA Hwy 146 to Worcester, and return over the same route; (109) between Providence, RI and junction Connecticut Hwys 52 and 138, serving all intermediate points: From Providence over US Hwy 6 to junction RI Hwy 114, then over RI Hwy 114 to junction RI Hwy 138, then over RI Hwy 138 to junction RI Hwy 4, then over RI Hwy 4 to junction RI Hwy 102, then over RI Hwy 102 to junction RI Hwy 165, then over RI Hwy 165 to CT Hwy 138, then over CT Hwy 138 to junction CT Hwy 52, and return over the same route; (110) between Providence, RI, and junction Interstate Hwy 95 and Connecticut Hwy 184, serving all intermediate points: From Providence over RI Hwy 2 to junction RI Hwy 3, then over RI Hwy 3 to junction Interstate Hwy 95, at or near Hopkinton, RI, then over Interstate Hwy 95 to junction CT Hwy 184, and return over the same route; (111) between junction Interstate Hwy 95 and Interstate Hwy 295 at or near Attleboro, MA and junction Interstate Hwy 295 and Interstate Hwy 95 at or near Warwick, RI, serving all intermediate points: From junction Interstate Hwy 95 over Interstate Hwy 205 to junction Interstate Hwy 95, and return over the same route; (112) between Bristol Ferry, RI and Fall River, MA, serving all intermediate points: From Bristol Ferry over RI Hwy 24 to the RI–MA State Line, then over MA Hwy 24 to Fall River, and return over the same route. Serving all points in AL, OH, MA, CT, RI, NY, NJ, PA on and west of a line beginning at the MD–PA state line over US Hwy 11 to the junction of Interstate Hwy 81 at or near Middlesex, PA, then over Interstate Hwy 81 to the junction of US Hwy 15, then over US Hwy to the PA–NY state line, MD, DE, DC, those points in GA on and south of US Hwy 80, and those in FL in and west of Leon and Wakulla Counties, FL as off-route points in connection with carrier's operations over Routes 1 through 112 described above. (Hearing sites: Hartford, CT; Richmond, VA; Akron, OH; Charlotte, NC; Atlanta, GA; Tampa, FL; Birmingham, AL.)

Broker, Water Carrier, and Freight Forwarder Operating Rights Applications

The following applications are governed by Special Rule 247 of the Commission's General Rules of Practice (49 CFR 1100.247). These rules provide, among other things, that a protest to the granting of an application must be filed with the Commission on or before June 23, 1980. Failure to seasonably file a protest will be construed as a waiver of opposition and participation in the proceeding. A protest under these rules should comply with Section 247(e)(3) of the rules of practice which requires that it set forth specifically the grounds upon which it is made, contain a detailed statement of protestant's interest in the proceeding (including a copy of the specific portions of its authority which protestant believes to be in conflict with that sought in the application, and describing in detail the method—whether by joinder, interline, or other means—by which protestant would use such an authority to provide all or part of the service proposed), and shall specify with particularity the facts, matters, and things relied upon, but shall not include issues of allegations phrased generally, protests not in reasonable compliance with the requirements of the rules may be rejected.

Permanent Authority Decisions Volume; Decision-Notice

Decided: April 30, 1980.

The following broker, freight forwarder or water carrier applications are governed by Special Rule 247 of the Commission's *Rules of Practice* (49 CFR

1100.247). These rules provide, among other things, that a protest to the granting of an application must be filed with the Commission on or before June 23, 1980. Failure to file a protest within 30 days will be considered as a waiver of opposition to the application. A protest under these rules shall comply with Rule 247(e)(3) of the Rules of Practice which requires that it set forth specifically the grounds upon which it is made, contain a detailed statement of protestant's interest in the proceeding, as specifically noted below), and specify with particularity the facts, matters, and things relied upon. The protest shall not include issues or allegations phrased generally. A protestant shall include a copy of the specific portion of its authority which it believes to be in conflict with that sought in the application, and describe in detail the method—whether by joinder, interline, or other means—by which protestant would use this authority to provide all or part of the service proposed. Protests not in reasonable compliance with the requirements of the rules may be rejected. The original and one copy of the protest shall be filed with the Commission. A copy shall be served concurrently upon applicant's representative, or upon applicant if no representative is named. If the protest includes a request for oral hearing, the request shall meet the requirements of section 247(e)(4) of the special rules and shall include the certification required in that section.

Section 247(f) provides, in part, that an applicant which does not intend timely to prosecute its application shall promptly request that it be dismissed, and that failure to prosecute an application under the procedures of the Commission will result in its dismissal.

Further processing steps will be by Commission notice, decision, or letter which will be served on each party of record. *Broadening amendments will not accepted after the date of this publication.*

Any authority granted may reflect administratively acceptable restrictive amendments to the service proposed below. Some of the applications may have been modified to conform to the Commission's policy of simplifying grants of operating authority.

Findings: With the exceptions of those applications involving duly noted problems (e.g., unresolved common control, unresolved fitness questions, and jurisdictional problems) we find, preliminarily, that each applicant has demonstrated that its proposed service is either (a) required by the public convenience and necessity, or, (b) will be consistent with the public interest and the transportation policy of 49 U.S.C. § 10101. Each applicant is fit, willing, and able properly to perform the service proposed and to conform to the requirements of Title 49, Subtitle IV, United States Code, and the Commission's regulations. Except where specifically noted, this decision is neither a major Federal action significantly affecting the quality of the human environment nor a major regulatory action under the Energy Policy and Conservation Act of 1975.

In the absence of legally sufficient protests, filed within 30 days of publication of this decision-notice (or, if the application later becomes unopposed), appropriate authority will be issued to each applicant (except those with duly noted problems) upon compliance with certain requirements which will be set forth in a notification of effectiveness of this decision notice. To the extent that the authority sought below may duplicate an applicant's existing authority, such duplication shall not be construed as conferring more than a single operating right.

Applicants must comply with all specific conditions set forth in the grant or grants of authority within 90 days after the service of the notification of the effectiveness of this decision-notice, or the application of a non-complying applicant shall stand denied.

By the Commission, Review Board Number 3, Members Parker, Fortier, and Hill.

W-179 (Sub-1F), filed June 12, 1979, previously noticed in FR issue of February 12, 1980. Applicant: ZELLER MARINE SERVICE, INC., 660 Emerson Street, Woodmere, NY 11598. Representative: Gordon P. MacDougall, 1100 17th St., NW, Washington, DC. To operate as a *contract carrier* by water, in interstate or foreign commerce, in furnishing for compensation (under charter, lease, or other agreement) non-self-propelled hopper barges to persons other than carriers subject to the Interstate Commerce Act, to be used by such persons in the transportation of their own property. (Hearing site: New York, NY, or Newark, NJ.)

Note.—This republication removes the individual contracting shippers and the territory description.

W-1291 (Sub-7F), filed January 29, 1980. Applicant: ALUMINA TRANSPORT CORP., 6600 West Broad St., Richmond, VA 23261. Representative: Peter A. Greene, 900 17th St. NW., Washington, DC 20006. To operate as a *contract carrier*, by water, by self-propelled vehicles, in interstate or foreign commerce, transporting *phosphate rock*, in bulk, from Jacksonville, FL, to Crockett and Stockton, CA, via the Panama Canal. (Hearing site: Richmond, VA, or Washington, DC.)

MC 130621, filed October 25, 1979. Applicant's name and address are ACME DELIVERY SERVICE, INC., 4250 Oneida Street, Denver, CO 80216. The name under which operations will be performed is ACME DELIVERY SERVICE, INC. Applicant is represented by Jack L. K. Grunwald in this proceeding whose address is the same as applicant's. Following are the names and business addresses for all persons who are officer and directors, partners (including limited or "silent" partners), and first five principal shareholders, with their appropriate titles: Jack L. K. Grunwald, President, Officer, Director and shareholder, and Jerry B. Mangan, Senior Vice President, Officer, Director, and shareholder (same address as applicant. The daily operations will be managed by Jack L. K. Grunwald, whose business address is same as applicant. Applicant is affiliated with the following shipper or warehouse: None.

MC 130798F, filed February 4, 1980. Applicant's name and address is CONTRACT CARRIER CORPORATION, 25 Thomas Ave., Baltimore, MD 21225. The name under which operations will be performed is CONTRACT CARRIER CORPORATION. Applicant is represented by Walter T. Evans in this proceeding whose address is 7961 Eastern Ave., Silver Spring, MD 20910. Following are the names and business addresses for all persons who are officers and directors, partners (including limited or "silent" partners), and first five principal shareholders, with their appropriate titles: Clifton T. Phillips, President and Director, 303 Sycamore Rd., Linthicum, MD 21090; Lloyd E. Phillips, Vice-President and Director, 9917 Evergreen Ave., Columbia, MD 21046; George W. Betz, Vice-President, 7615 Perring Terrace, Baltimore, MD 21234; Frank C. Kolodiej, Vice-President, 634 Bruce St., Baltimore, MD 21225; Mary C. Higdon, Secretary and Director, 37 Tanglewood Rd., Baltimore, MD 21228; Elva D. Barbarika, Assistant Secretary and Director, 435 Maple Lane NW, Glen Burnie, MD 21060; and Jane S. Phillips, 303 Sycamore Rd., Linthicum, MD 21090. Phillips Brothers Warehousing & Distributing Corp. owns 100% of the stock of Applicant. The daily operations will be managed by Clifton T. Phillips, whose business address is 25 Thomas Ave., Baltimore, MD 21225. Applicant is affiliated with the following

warehouses: Phillips Brothers Warehousers, Inc.

MC 130800F, filed March 4, 1980. Applicant's name and address are WICKMAN TRAFFIC SERVICE, INC., Two North Riverside Plaza, Chicago, IL 60606. The name under which operations will be performed is WICKMAN TRAFFIC SERVICE, INC. Applicant is represented by Charles H. Wickman in this proceeding whose address is Two North Riverside Plaza, Suite 1435, Chicago, IL 60606. Following are the names and business addresses for all persons who are officers and directors, partners (including limited or "silent" partners), and first five principal shareholders, with their appropriate titles: Charles H. Wickman, President and shareholder, Dawn G. Wickman, Director and shareholder, and Harry G. Wickman, Director and shareholder (same address as applicant). The daily operations will be managed by Charles H. Wickman whose business address is Two North Riverside Plaza, Chicago, IL 60606. Applicant is affiliated with the following shipper or warehouse: None.

MC 130809F, filed March 18, 1980. Applicant's name and address are Gerard J. Trippitelli and Eugene C. Bonacci, 1241 Parkway Ave., P.O. Box 7127, W. Trenton, NJ 80628. The name under which operations will be performed is TRANSPLEX SYSTEMS COMPANY. Applicants are represented by themselves in this proceeding whose address is 1241 Parkway Ave., P.O. Box 7127, W. Trenton, NJ 08628. Following are names and business addresses for all persons who are officers and directors, partners (including limited or "silent" partners), and first five principal shareholders with their appropriate titles: Gerald J. Trippitelli, Partner, 1241 Parkway Ave., P.O. Box 7127, W. Trenton, NJ 08628; and Eugene C. Bonacci, Partner, 1241 Parkway Ave., P.O. Box 7127, W. Trenton, NJ 08628. The daily operations will be managed by Gerard J. Trippitelli and Eugene C. Bonacci, whose business address is the same as applicant. Applicant is affiliated with the following shipper or warehouse: None.

MC 130810F, filed March 19, 1980. Applicant: SEE THE WORLD TOURS, INC., Route 1, Box 143A, Seneca, SC 29678. Representative: Pickens M. Lindsay, P.O. Box 1633, Clemson, SC 29631. To engage in operations, in interstate or foreign commerce, as a *broker*, at Seneca, SC, in arranging for the transportation, by motor vehicle, of *passengers and their baggage*, in special and charter operations, between points in the U.S. (including AK and HI). (Hearing site: Clemson, or Greenville, SC.)

Note.—Applicant is cautioned that arrangements for charter parties or groups should be made in conformity with the requirements set forth in *Tauck Tours, Inc., Extension, New York, N.Y.*, 54 M.C.C. 291 (1952).

MC 130811F, filed March 10, 1980. Applicant: ABC TRAVEL, INC., 408 Rodi Road, Pittsburgh, PA 15235. Representative: Dennis S. Shilobod, 1530 Grant Bldg., Pittsburgh, PA 15219. To engage in operations, in interstate or foreign commerce, as a *broker*, at Pittsburgh, PA, in arranging for the transportation, by motor vehicle, of *passengers and their baggage*, in the same vehicle with passengers, in special and charter operations, beginning and ending at points in Allegheny County, PA, and extending to points in the U.S. (except AK and HI).

Note.—Applicant is cautioned that arrangements for charter parties or groups should be made in conformity with the requirements set forth in *Tauck Tours, Inc., Extension, New York, N.Y.*, 54 M.C.C. 291 (1952).

MC 130813F, filed March 13, 1980. Applicant: CHRISTIAN TRAVELERS, INC., P.O. Box 1068, Umatilla, FL 32784. Representative: Elbert Brown, Jr., P.O. Box 1378, Altamonte Springs, FL 32701. To engage in operations, in interstate or foreign commerce, as a *broker*, at Umatilla and Haines City, FL, in arranging for the transportation, by motor vehicle, of passengers and their baggage, in special and charter operations, beginning and ending at points in FL and extending to points in the US (including AK but excluding HI). (Hearing site: Orlando or Tampa, FL.)

MC 130818F, filed March 19, 1980. Applicant's name and address are THOMAS J. MILITELLO, 19 Rosetree Dr., Broomall, PA 19008. The name under which operations will be performed is TRAFFIC EXECUTIVE SERVICE COMPANY, INC. Applicant is represented by Robert B. Einhorn in this proceeding whose address is 3220 Philadelphia Saving Fund Bldg., Twelve South Twelfth St., Philadelphia, PA 19107. Following are the names and business addresses for all persons who are officers and directors, partners (including limited or "silent" partners), and first five principal share-holders, with their appropriate titles: Thomas J. Militello, President, Vice-President, Treasurer, Secretary, and sole shareholder, (same address as applicant). The daily operations will be managed by Thomas J. Militello, (same address as applicant). Applicant is affiliated with the following shipper or warehouse: None.

MC 130819F, filed March, 14, 1980. Applicant's name and address are WESTWAY FORWARDING INTERNATIONAL LIMITED, 7784 Martingrove Rd., W., Woodbridge, Ontario L4L 1A5. The name under which operations will be performed is WESTWAY FORWARDING INTERNATIONAL LIMITED. Applicant is represented by William L Hirsch in this proceeding, whose address is 43 Court St., Buffalo, NY 14202. Following are the names and business addresses for all persons who are officers and directors, partners (including limited or "silent"), and first five principal share-holders, with their appropriate titles: D. B. Swail, President, Director, and shareholder, 7784 Martingrove Rd. N, Unit 7, Woodbridge, Ontario L4L 1A5; D. R. Marseilles, Vice President, Director, and Shareholder, 7784 Martingrove Rd., N., Unit 7, Woodbridge, Ontario L4L 1A5; S. G. Aldis, Secretary and Shareholder, 1260 Lakeshore Rd., E., Mississauga, Ontario L5E 3B8; F. Guido, Shareholder, Box 630, Concord, Ontario L4K 1C7; E. J. Stebnicki, Shareholder, 600 Evans Ave., Vancouver B.C.; and W. Aston, Shareholder, 1260 Lakeshore Rd., E., Mississauga, Ontario L5E 1A5. The daily operations will be managed by S. G. Aldis, whose business address is 1260 Lakeshore Rd. E., Mississauga, Ontario L5E 3B8. The applicant is affiliated with th following shipper or warehouse: None.

MC 130829F, filed March 17, 1980. Applicant's name and address are: BOSTON CONSOLIDATION SERVICE, INC., P.O. Box 404, South Boston, MA 02127. The name under which operations will be performed is: BOSTON CONSOLIDATION SERVICE, INC. Applicant is represented by Robert J. Gallagher, in this proceeding whose address in Suite 1200, 1000 Connecticut Ave., NW, Washington, DC 20036. Following are the names and business addesses for all persons who are officers and directors, partners (including limited or "silent" partners) and first five shareholders, with their appropriate titles: Alfred E. Vesperi, Director, P.O. Box 404, South Boston, MA 02127, Joseph Pimentel, Director, P.O. Box 404, South Boston, MA 02127; and Robert T. Coyne, President, Director, and Major Stockholder, P.O. Box 404, South Boston, MA 02127. The daily operations will be managed by Robert T. Coyne, whose business address is P.O. Box 404, South Boston, MA 02127. Applicant is affiliated with the following shipper or warehouse: Boston Freight Terminals, Inc.

MC 130830F, filed March 28, 1980. Applicant's name and address are Dean

Forwarding Company, Inc., P.O. Box 1412, Huntington, Beach, CA 92647. The name under which operations will be performed is DEAN FORWARDING COMPANY, INC. Applicant is represented by Alan F. Wohlstetter in this proceeding whose address is 1700 K St., NW, Washington, D.C. 20006. Following are the names and business addesses for all persons who are officer and directors, partners (including limited or "silent"), and first five principal shareholders, with their appropriate titles: James E. Thompson, Jr., Director, and stockholder, 5722 John Chaffey Circle, Garden Grove, CA 92645, Hazel Gaines, President, Treasurer, and Director, 6601 Orangewood, Cypress, CA 90630, and Bernard Dannucci, Vice President, and Secretary, 4162 Trumbull Dr., Huntington Beach, CA 92649. The daily operations will be manged by Hazel Gaines, whose business address is 5252 Argosy Drive, Huntington Beach, CA 92647. Applicant is affiliated with the following shipper or warehouse: None.

MC 130831F, filed March 31, 1980. Applicant: TRAVELBOUND, INC., 1111 E. 54th St., #146, Indianapolis, IN 46220. Representative: Joan C. Miller (same address as applicant). To engage in operations, in interstate or foreign commerce, as a *broker*, at Indianapolis, IN, in arranging for the transportation, by motor vehicle, of *passengers and their baggage*, in the same vehicle with passengers, in special and charter operations, beginning and ending at points in Marion County, IN, and extending to points in the U.S. (including AK and HI). (Hearing site: Indianapolis, IN, or Chicago, IL.)

Note.—Applicant is cautioned that arrangements for charter parties or groups should be made in conformity with the requirements set forth in *Tauck Tours, Inc., Extension-New York, N.Y.* 54 M.C.C. 291 (1952).

MC 130843F, filed April 2, 1980. Applicant: VIGNERI ENTERPRISES, INC., 11436 Queens Dr. Omaha, NE 68164. Representative: Vincent S. Vigneri (same address as applicant). To engage in operations, in interstate or foreign commerce, as a *broker*, at Omaha, NE, in arranging for the transportation by motor vehicle, of *passengers and their baggage, in special and charter operations, between Omaha, NE, on the one hand, and, on the other, points in the U.S. (including AK but excluding HI). (Hearing site: Omaha, NE.)*

MC 130835F, filed March 28, 1980. Applicant: INGRAM BUS LINES, INC., 313 Jordan Ave., Tallassee, AL 36078. Representative: Don Ingram (same address as applicant). To engage in operations, in interstate or foreign commerce, as a *broker*, at Tallassee, AL, in arranging for the transportation by motor vehicle, of *passengers and their baggage*, in special and charter operations, between points in AL, on the one hand, and, on the other, points in the U.S. (including AK, but excluding HI). (Hearing site: Montgomery, AL.)

MC 130838F, filed March 31, 1980. Applicant's name and address are: EXECUTIVE TRANSPORTATION SERVICES, INC., 6309 Overcourt, Oklahoma City, OK 73132. The name under which operations will be performed is: EXECUTIVE TRANSPORTATION SERVICES, INC. Applicant is represented by Robert J. Gallagher, in this proceeding whose address is Suite 1112, 1000 Connecticut Ave., NW, Washington, DC 20036. Following are the names and business addresses for all persons who are officers and directors, partners (including limited or "silent" partners), and first five principal shareholders, with their appropriate titles: Wayne H. Theus, President and Major Shareholder, 6309 Overcourt, Oklahoma City, OK 73132; and Beverly H. Theus, Secretary-Treasurer, 6309 Overcourt, Oklahoma City, OK 73132. The daily operations will be managed by Wayne H. Theus whose business address is 6309 Overcourt, Oklahoma City, OK 73132. Applicant is affiliated with the following shipper or warehouse: None.

MC 130840F, filed March 13, 1980. Applicant's name and address are Peter Milone, doing business as P & R Enterprises, 51 East Aurora St., Waterbury, CT 06712. The name under which operations will be preformed is PETER MILONE, d.b.a. P & R ENTERPRISES. Applicant is represented by James M. Burns in this proceeding whose address is Suite 413, 1383 Main St., Springfield, MA 01103. The following are the names and business addresses for all persons who are officer and directors, partners (including limited or "silent" partners), and first five principal shareholders with their appropriate titles: Peter Milone, President (proprietorship), same address as applicant. The daily operations will be managed by Peter Milone whose business address is the same as applicant. Applicant is affiliated with the following shipper or warehouse: None.

MC 130842, filed April 14, 1980. Applicant's name and address are: PREFERRED SYSTEMS GROUP, LTD, 4940 N.E. 122nd Ave., Portland, OR, 97230. The name under which operations will be performed is: PREFERRED SYSTEMS GROUP, LTD. Applicant is represented by Louis A. Santiago in the proceeding whose address is: 1200 S.W. Main Bldg., Portland, OR 97205. Following are the names and business addresses for all persons who are officers and directors, partners (including limited or "silent" partners), and first five principal shareholders, with their appropriate titles: Eugene C. Bowman, President, Treasurer, Director and shareholder; Jane E. Bowman, Vice President, Secretary, Director and shareholder, whose addresses are same as applicant. The daily operations will be managed by Daniel D. Donnelly, whose business address is same as applicant. Applicant is affiliated with the following shippers or warehouse: None.

MC 130843F, filed April 11, 1980. Applicant: BLUE & WHITE TRAVEL AGENCY, INC., 516 West Plank St., Altoona, PA 16602. Representative: Charles A. Webb, Suite 800 South, 1800 M St. NW., Washington, DC 20036. To engage in operations as a *broker*, in interstate or foreign commerce, at Altoona, Johnstown, Huntingdon, Pittsburgh, Bedford, Indiana, Somerset, Lewiston, State College, and Monroeville, PA, and LaValle and Hagerstown, MD, in arranging for the transportation, by motor vehicle, of *passengers and their baggage*, in charter operations, between points in the U.S. (including AK and HI). (Hearing site: Pittsburgh, PA.)

Note.—Applicant is cautioned that arrangements for charter parties or groups should be made in conformity with the requirements set forth in *Tauck Tours, Inc., Extension, New York, N.Y.*, 54 M.C.C. 291 (1952).

MC 130853F, filed April 8, 1980. Applicant's name and address are ROBERT J. CRAIG, 10 Windgate Lane, Cherry Hill, NJ 08003. The name under which operations will be performed is CROSS-COUNTRY BROKERS. Applicant is represented by Steven M. Tannenbaum, Esquire, in this proceeding whose address is 133 N. 4th Street, Philadelphia, PA 19106. Following are the names and business addresses for all persons who are officers and directors, partners (including limited or "silent" partners), and first five principal shareholders, with their appropriate titles: Robert J. Craig, sole proprietor, no other officers, directors or partners, 10 Windgate Lane, Cherry Hill, NJ 08003. The daily operations will be managed by Robert J. Craig whose business address is 10 Windgate Lane, Cherry Hill, NJ 08003. Applicant is affiliated with the following shipper or warehouse: None.

MC 130859F, filed November 13, 1979. Applicant's name and address are GRADY MOVING & STORAGE, INC., P.O. Box Q, Jacksonville, NC 28540. The name under which operations will be performed is GRADY MOVING & STORAGE, INC. Applicant is represented by Robert J. Gallagher in this proceeding whose address is Suite 1200, 1000 Connecticut Ave., N.W. Washington, DC 20036. Following are the names and business addresses for all persons who are officers and directors, partners (including limited or "silent" partners), and first five principal shareholders, with their appropriate titles: Melvin W. Grady, President & Shareholder, Alex Warlick, Vice President & Shareholder, Edith C. Grady, Secretary/Treasurer & Shareholder, (same address as applicant). The daily operations will be managed by Melvin W. Grady, whose business address is same as applicant. Applicant is affiliated with the following warehouse or shipper: None.

Permanent Authority Decisions Volume, Decision-Notice

Decided: April 22, 1980.

The following broker, freight forwarder or water carrier applications are governed by Special Rule 247 of the Commission's *Rules of Practice* (49 CFR 1100.247). These rules provide, among other things, that a protest to the granting of an application must be filed with the Commission on or before June 23, 1980. Failure to file a protest within 30 days will be considered as a waiver of opposition to the application. A protest under these rules shall comply with Rule 247(e)(3) of the Rules of Practice which requires that it set forth specifically the grounds upon which it is made, contain a detailed statement of protestant's interest in the proceeding, as specifically noted below), and specify with particularity the facts, matters, and things relied upon. The protest shall not include issues or allegations phrased generally. A protestant shall include a copy of the specific portion of its authority which it believes to be in conflict with that sought in the application, and describe in detail the method—whether by joinder, interline, or other means—by which protestant would use this authority to provide all or part of the service proposed. Protests not in reasonable compliance with the requirements of the rules may be rejected. The original and one copy of the protest shall be filed with the Commission. A copy shall be served concurrently upon applicant's representative, or upon applicant if no representative is named. If the protest includes a request for oral hearing, the request shall meet the requirements of section 247(e)(4) of the special rules and shall include the certification required in that section.

Section 247(f) provides, in part, that an applicant which does not intend timely to prosecute its application shall promptly request that it be dismissed, and that failure to prosecute an application under the procedures of the Commission will result in its dismissal.

Further processing steps will be by Commission notice, decision, or letter which will be served on each party of record. *Broadening amendments will not be accepted after the date of this publication.*

Any authority granted may reflect administratively acceptable restrictive amendments to the service proposed below. Some of the applications may have been modified to conform to the Commission's policy of simplifying grants of operating authority.

Findings: With the exceptions of those applications involving duly noted problems (e.g., unresolved common control, unresolved fitness questions, and jurisdictional problems) we find, preliminarily, that each applicant has demonstrated that its proposed service is either (a) required by the public convenience and necessity, or, (b) will be consistent with the public interest and the transportation policy of 49 U.S.C. § 10101. Each applicant is fit, willing, and able properly to perform the service proposed and to conform to the requirements of Title 49, Subtitle IV, United States Code, and the Commission's regulations. Except where specifically noted, this decision is neither a major Federal action significantly affecting the quality of the human environment nor a major regulatory action under the Energy Policy and Conservation Act of 1975.

In the absence of legally sufficient protests, filed within 30 days of publication of this decision-notice (or, if the application later becomes unopposed), appropriate authority will be issued to each applicant (except those with duly noted problems) upon compliance with certain requirements which will be set forth in a notification of effectiveness of this decision-notice. To the extent that the authority sought below may duplicate an applicant's existing authority, such duplication shall not be construed as conferring more than a single operating right.

Applicants must comply with all specific conditions set forth in the grant or grants of authority within 90 days after the service of the notification of the effectiveness of this decision-notice, or the application of a non-complying applicant shall stand denied.

By the Commission, Review Board Number 2, Members Liberman, Eaton, and Jensen. Member Eaton not participating.

MC 130346 (Sub–1F), filed January 7, 1980. Applicant: HOLIDAY INTERNATIONAL, INC., 1605 Tartan Way, Louisville, KY 40205. Representative: J. Smiley Collins (same address as applicant). To operate as a *broker*, in interstate or foreign commerce, in arranging for the transportation by motor vehicle of *passengers and their baggage*, in special and charter operations, between points in the United States (including AK and HI). Condition: Prior or coincidental cancellation, at carrier's written request, of its license in MC–130346, issued September 2, 1977. (Hearing site: Louisville, KY.)

MC 130756F, filed January 3, 1980. Applicant: PACESETTER TOURS, INC., 1505 Dresden Circle, Nashville, TN 37215. Representative: Maxwell A. Howell, 1100 Investment Bldg., 1511 K St., NW., Washington, DC 20005. To operate as a *broker*, in interstate or foreign commerce at Nashville, TN, in arranging for the transportation by motor vehicle of *passengers and their baggage*, in special and charter operations, beginning and ending at points in Robertson, Cheatham, Dickson, Williamson, Davidson, Sumner, Wilson, and Rutherford Counties, TN, and extending to point in the United States, including AK but excluding HI. (Hearing site: Nashville, TN.)

Note.—Applicant is cautioned that arrangements for charter parties or groups should be made in conformity with the requirements set forth in Tauck Tours, Inc., Extension—New York, N.Y., 54 M.C.C. 291 (1954).

MC 130776F, filed January 4, 1980. Applicant: GRAY INTERNATIONAL AIR FORWARDING, INC., 1290 South Pearl, Denver, CO 80210. Representative: Robert J. Gallagher, 1000 Connecticut Ave., NW., Suite 1200, Washington, DC 20036. To operate as a *broker*, in interstate or foreign commerce, at Denver, CO, in arranging for the transportation by motor vehicle, of *household goods*, between points in the United States, including AK and HI. (Hearing site: Denver, CO.)

MC 130777F, filed February 8, 1980. Applicant's name and address are JOSEPH V. MILONE, 117 Patricia Ave., Delran, NJ, 08075. The name under which operations will be performed is CHASE ONE TRAFFIC SERVICE, INC. Applicant is represented by Joseph V. Milone, in this proceeding, whose address is the same as applicant.

Following are the names and business addresses for all persons who are officers and directors, partners (including limited or "silent" partners), and first five principal shareholders, with their appropriate titles: Joseph V. Milone, President, same address as applicant, Gerald L. Forte, Vice President, 202 Devon R., Cinnaminson, NJ, Mercedes Milone, Stockholder, same address as applicant, and Angela Forte Stockholder, 202 Devon Rd., Cinnaminson, NJ. The daily operations will be managed by Joseph Milone whose address is the same as applicant's. Applicant is affiliated with the following shipper or warehouse: None.

Permanent Authority Notices, Substitution Applications: Single-Line; Service for Existing Joint-Line Service

The following applications, filed on or after April 1, 1979, are governed by the special procedures set forth in Part 1062.2 of Title 49 of the Code of Federal Regulations (49 CFR 1062.2). These proposals are published as "service sought", (as opposed to decision-notices), because in each case it appears questionable as to whether all or part of the authority sought should be issued, weighing applicant's evidence under 49 CFR 1062.2. (For example, questions may be raised relating to applicant's contentions concerning why the involved joint-line service has been cancelled or is in a state of deterioration which warrant a decision on the merits, regardless of whether the application is opposed.)

The rules provide, in part, that carriers may file petitions with this Commission for the purpose of seeking intervention in these proceedings. Such petitions may seek intervention either with or without leave as discussed below. However, all such petitions must be filed in the form of verified statements, and contain all of the information offered by the submitting party in opposition. Petitions must be filed with the Commission on or before June 23, 1980.

Petitions for intervention without leave (i.e., automatic intervention), may be filed only by carriers which are, or have been, participating in the joint-line service sought to be replaced by applicant's single-line proposal, and then only if such participation has occurred within the one-year period immediately proceeding the application's filing. Only carriers which fall within this filing category can base their opposition upon the issue of the public need for the proposed service.

Petitions for intervention with leave may be filed by any carrier. The nature of the opposition, however, must be limited to issues other than the public need for the proposed service. The appropriate basis for opposition, i.e., applicant's fitness, may include challenges concerning the veracity of the applicant's supporting information, and the bona-fides of the joint-line service sought to be replaced (including the issue of its substantiality). Petitions containing only unsupported and undocumented allegations will be rejected.

Petitions not in reasonable compliance with the requirements of the rules may be rejected. An original and one copy of the petition to intervene shall be filed with the Commission, and a copy shall be served concurrently upon applicant's representative, or upon applicant if no representative is named.

Further processing steps will be by Commission notice, decision, or letter which will be served on each party of record. *Broadening amendments will not be accepted after the date of this publication.*

Notice of Correction

The following applications were published in the FR issue of February 22, 1980, in the incorrect section of Motor Carrier Operating Rights Applications. The correct heading is Permanent Authority Notices, Substitution Applications: Single-Line Service For Existing Joint-Line Service as noted above.

MC 136782 (Sub-21F), filed July 11, 1979. Applicant: R.A.N. TRUCKING COMPANY, a corporation, P.O. Box 128, Eau Claire, PA 16030. Representative: Daniel C. Sullivan, 10 South LaSalle Street, Suite 1600, Chicago, IL 60603.

MC 136782 (Sub-23F), filed August 3, 1979. Applicant: R.A.N. TRUCKING COMPANY, a corporation, P.O. Box 128, Eau Claire, PA 16030. Representative: Daniel C. Sullivan, 10 South LaSalle Street, Suite 1600, Chicago, IL 60603.

Note.—All petitions filed pursuant to the February 22, 1980, **Federal Register** will be disregarded. Petitions must comply with the requirements of Ex Parte No. MC 109.

Permanent Authority Decisions, Decision-Notice; Substitution Applications: Single-Line, Service for Existing Joint-Line Service

Decided; May 2, 1980.

The following applications, filed on or after April 1, 1979, are governed by the special procedures set forth in Part 1062.2 of Title 49 of the Code of Federal Regulations (49 CFR 1062.2).

The rules provide, in part, that carriers may file petitions with this Commission for the purpose of seeking intervention in these proceedings. Such petitions may seek intervention either with or without leave as discussed below. However, all such petitions must be filed in the form of verified statements, and contain all of the information offered by the submitting party in opposition. Petitions must be filed with the Commission on or before June 23, 1980.

Petitions for intervention without leave (i.e., automatic intervention), may be filed only by carriers which are, or have been, participating in the joint-line service sought to be replaced by applicant's single-line proposal, and then only if such participation has occurred within the one-year period immediately proceeding the application's filing. Only carriers which fall within this filing category can base their opposition upon the issue of the public need for the proposed service.

Petitions for intervention with leave may be filed by any carrier. The nature of the opposition, however, must be limited to issues other than the public need for the proposed service. The appropriate basis for opposition, i.e. applicant's fitness, may include challenges concerning the veracity of the applicant's supporting information, and the bona-fide of the joint-line service sought to be replaced (including the issue of its substantiality). Petitions containing only unsupported and undocumented allegations will be rejected.

Petitions not in reasonable compliance with the requirements of the rules may be rejected. An original and one copy of the petition to intervene shall be filed with the Commission, and a copy shall be served concurrently upon applicant's representative, or upon applicant if no representative is named.

Further processing steps will be by Commission notice, decision, or letter which will be served on each party of record. *Broadening amendments will not be accepted after the date of this publication.*

Any authority granted may reflect administratively acceptable restrictive amendments to the service proposed below. Some of the application may have been modified to conform to the Commission's policy of simplifying grants of operating authority.

Findings: With the exception of those applications involving duly noted problems (e.g., unresolved common control, unresolved fitness questions, and jurisdictional problems) we find, preliminarily, that each applicant has demonstrated that its proposed service is required by the present and future public convenience and necessity. Each applicant is fit, willing, and able

properly to perform the service proposed and to conform to the requirements of Title 49, Subtitle IV, United States Code, and the Commission's regulations. Except where specifically noted, this decision is neither a major Federal action significantly affecting the quality of the human environment nor a major regulatory action under the Energy Policy and Conservation Act of 1975.

In those proceedings containing a statement or note that dual operations are or may be involved we find, preliminarily and in the absence of the issue being raised by a petitioner, that the proposed dual operations are consistent with the public interest and the transportation policy of 49 U.S.C. 10101 subject to the right of the Commission, which is expressly reserved, to impose such terms, conditions or limitations as it finds necessary to insure that applicant's operations shall conform to the provisions of 49 U.S.C. 10930(a) (formerly section 210 of the Interstate Commerce Act).

In the absence of legally sufficient petitions for intervention, filed within 30 days of publication of this decision-notice (or, if the application later becomes unopposed), appropriate authority will be issued to each applicant (except those with duly noted problems) upon compliance with certain requirements which will be set forth in a notification of effectiveness of the decision-notice. To the extent that the authority sought below may duplicate an applicant's other authority, such duplication shall be construed as conferring only a single operating right.

Applicants must comply with all specific conditions set forth in the grant or grants of authority within 90 days after the service of the notification of the effectiveness of this decision-notice, or the application of a non-complying applicant shall stand denied.

By the Commission, Review Board Number 4, Members Fitzpatrick, Fisher, and Dowell. Member Dowell not participating.

MC 105120 (Sub-22F), filed November 29, 1979. Applicant: FREIGHTWAYS EXPRESS, INC., 2700 Sterick Bldg., Memphis, TN 38103. Representative: James N. Clay, III (same address as applicant). To operate as a common carrier, by motor vehicle, in interstate or foreign commerce, over irregular routes, transporting *general commodities* (except those of unusual value, classes A and B explosives, household goods as defined by the Commission, commodities in bulk, and those requiring special equipment), between Cairo, IL, on the one hand, and, on the other, points in IL. (Hearing site: Memphis, TN, or St. Louis, MO.)

Note.—Applicant intends to tack with existing authority at Cairo, IL. The purpose of this application is to substitute single-line for joint-line operations.

MC 113974 (Sub-68F), filed January 7, 1980. Applicant: PITTSBURGH & NEW ENGLAND TRUCKING CO., 211 Washington Ave., Dravosburg, PA 15034. Representative: James D. Porterfield (same address as applicant). To operate as a *common carrier*, by motor vehicle, in interstate or foreign commerce, over irregular routes, transporting (1) *commodities* which by reason of size or weight require the use of special handling or special equipment and (2) *iron and steel articles*, from points in CT, ME, MA, NH, NJ, NY, OH, PA, RI, VT, and points in MD within 150 miles of Norristown, PA, and points in WV within 125 miles of Wheeling, WV, to points in IL, IN, KY, MI, MN, MO, and WI. *The sole purpose of this application is to substitute single-line for joint-line operations.* (Hearing site: Washington, DC.)

Irregular-Route Motor Common Carriers of Property-Elimination of Gateway Letter Notices

The following letter-notices of proposals to eliminate gateways for the purpose of reducing highway congestion, alleviating air and noise pollution, minimizing safety hazards, and conserving fuel have been filed with the Interstate Commerce Commission under the Commission's *Gateway Elimination Rules* (49 CFR 1065), and notice thereof to all interested persons is hereby given as provided in such rules.

An original and two copies of protests against the proposed elimination of any gateway herein described may be filed with the Interstate Commerce Commission *within 10 days* from the date of this publication. A copy must also be served upon applicant or its representative. Protests against the elimination of a gateway will *not* operate to stay commencement of the proposed operation.

Successively filed letter-notices of the same carrier under these rules will be numbered consecutively for convenience in identification. Protests, if any, must refer to such letter-notices by number.

The following applicants seek to operate as a *common carrier*, by motor vehicles, over irregular routes.

MC 43038 (Sub-E3), filed June 4, 1974. Applicant: COMMERCIAL CARRIERS, INC., 10701 Middlebelt Road, Romulus, MI 48174. Representative: Paul H. Jones (same as above). *Automobiles, truck bodies, chassis* and *parts* thereof, in secondary movements, in truckaway and driveaway service, (1) between points in AR on and north of a line beginning at the OK–AR State line extending along U.S. Hwy 270 to junction U.S. Hwy 70, then to junction U.S. Hwy 49, then to the AR–MS State line, on the one hand, and, on the other, points in AL; (2) between points in AR, on the one hand, and, on the other, points in FL on and east of a line beginning at the GA–FL State line extending along U.S. Hwy 129 to Cheifland, then along FL Hwy 345 to junction FL Hwy 24, then to Cedar Key; (3) between points in GA, on the one hand, and, on the other, points in AR north and west of a line beginning at the AR–LA State line extending along U.S. Hwy 79 to junction U.S. Hwy 49, then to the AR–MS State line; (4) between points in AR, on the one hand, and, on the other, points in KY, MI, OH, and TN; (5) between points in FL on and east of a line beginning at the FL–GA State line extending along U.S. Hwy 27 to Tallahassee, then along FL Hwy 363 to junction U.S. Hwy 98, then to Carrabelle, on the one hand, and, on the other, points in AL; (6) between points in FL on and east of U.S. Hwy 231, on the one hand, and, on the other, points in IL, IN, KY, and TN; (7) between points in FL, on the one hand, and, on the other, points in GA north of U.S. Hwy 78, MI, and OH; (8) between points in KS, on the one hand, and on the other, points in FL on and east of FL Hwy 85, AL, LA, KY, MI, OH, and TN; (9) between points in LA on north and west of a line beginning at the TX–LA State line extending along U.S. Hwy 90 to junction U.S. Hwy 171, then along U.S. Hwy 171 to U.S. Hwy 8, then to LA Hwy 123, then to U.S. Hwy 165, then to the AR–LA State line, on the one hand, and, on the other, points in AL on and north of a line beginning at the MS–AL State line extending along U.S. Hwy 78 to junction U.S. Hwy 278, then along U.S. Hwy 278 to the AL–GA State line; and points in GA on and north of I Hwy 20; (10) between points in LA on, north and west of a line beginning at the TX–LA State line extending along U.S. Hwy 20 to junction U.S. Hwy, then along U.S. Hwy 165 to the AR–LA State line, on the one hand, and, on the other, points in FL on and south of a line beginning at Naples and extending along FL Hwy 84 to junction I Hwy 95, thence to FL Hwy 808, thence to Boca Raton; (11) between points in LA, on the one hand, and, on the other, points in MI; OH; points in KY on, north and west of a line beginning at the KY–TN State line extending along U.S. Hwy 27 to KY Hwy 95, then to U.S. Hwy 119, then to U.S. Hwy 421, then to

the KY–VA State line and points in TN on, west and north of a line beginning at the TN–AL State line extending along U.S. Hwy 231 to Murfreesboro, then along U.S. Hwy 70S to U.S. Hwy 70, then to Crossville, then along TN Hwy 62 to U.S. Hwy 27, then to the TN–KY State line. (12) between points in MS on, west and north of a line beginning at the AR–MS State line extending along U.S. Hwy 82 to U.S. Hwy 49W, then to MS Hwy 3, then to U.S. Hwy 61, then to the MS–TN State line, on the one hand, and, on the other, points in AL on and north of a line beginning at the MS–AL State line extending along U.S. Hwy 78 to U.S. Hwy 278 to the GA–AL State line; points in FL south of a line beginning at Sarasota extending along FL Hwy 72 to FL Hwy 70, to FL Hwy 710, to Riveria Beach and points in GA on and north of I Hwy 20, (13) between points in MS on and west of I Hwy 55 on the one hand, and, on the other, points in KY, and points in TN on, west and north of a line beginning at the TN–AL State line extending along U.S. Hwy 231 to TN Hwy 50 to TN Hwy 55, to U.S. Hwy 70S, to U.S. Hwy 70, to Knoxville, then U.S. Hwy 11W to the TN–VA State line. (14) between points in MS on the one hand, and, on the other, points in MI and OH. (15) between points in MO, on the one hand, and, on the other, points in AL, FL on and east of U.S. Hwy 231, TN, GA, KY, MI, and OK. (16) between points in OK north and west of a line beginning at the OK–AR State line extending along OK Hwy 63 to U.S. Hwy 271, to OK Hwy 7, to OK Hwy 99, to OK Hwy 78, to OK Hwy 12, to U.S. Hwy 70, to U.S. Hwy 81, to the OK–TX State line, on the one hand, and, on the other, points in AL. (17) between points in OK, on the one hand, and, on the other, points in FL on and east of a line beginning at the FL–GA, State line extending along U.S. Hwy 27 to Tallahassee, then along FL Hwy 363 to U.S. Hwy 98, to Carrabelle; points in GA, KY, MI, OH, and TN. (18) between Orange, TX, on the one hand, and, on the other, points in AL on and north of a line beginning at the MS–AL State line extending along U.S. Hwy 78 to U.S. Hwy 278, then to the AK–GA State line; GA on and north of I Hwy 20; KY; MI; OH; TN; AR; IL; IN; KS; LA; MS; MO; and OK. (19) between Texarkana, TX, on the one hand, and, on the other, points in AL on, north and east of a line beginning at the AL–FL State line extending along U.S. Hwy 331 to U.S. Hwy 80, then to the AL–MS State line; FL on and east of a line beginning at the FL–GA State line extending along U.S. Hwy to Tallahassee, then, FL Hwy 363 to U.S. Hwy 98, then to Carrabelle; GA; KY; MI; OH; TN; AR; IL; IN; KS; LA; MS; MO; and OK. (Gateways eliminated: points in GA and Memphis, TN.)

Agatha L. Mergenovich,

Secretary.

[FR Doc. 80-15649 Filed 5-21-80; 8:45 am]

BILLING CODE 7035-01-M

[Notice No. 181]

Assignment of Hearings

May 16, 1980.

Cases assigned for hearing, postponement, cancellation or oral argument appear below and will be published only once. This list contains prospective assignments only and does not include cases previously assigned hearing dates. The hearings will be on the issues as presently reflected in the Official Docket of the Commission. An attempt will be made to publish notices of cancellation of hearings as promptly as possible, but interested parties should take appropriate steps to insure that they are notified of cancellation or postponements of hearings in which they are interested.

MC 129032 (Sub-89F), Tom Inman Trucking, Inc., now being assigned for hearing on June 9, 1980 (1 day) at St. Louis, MO, location of hearing room will be designated later.

MC 2754 (Sub-30F), Neuendorf Transportation Co., now assigned for hearing on June 2, 1980, at Madison, WI (3 days) in Lieu of 2 weeks and continued to June 5, 1980 (2 days) at Minneapolis, MN; June 9, 1980 (5 days) at Appleton, WI and June 16, 1980 (5 days) at Chicago, IL, location of hearing room will be designated later.

MC 128273 (Sub-326F), Midwestern Distribution, Inc., now assigned for hearing on May 27, 1980 (3 days) at Orlando, FL in the Hilton Inn, 3200 West Colonial Drive.

MC 102616 (Sub-993F), Coastal Tank Lines, Inc., now assigned for hearing on May 28, 1980 (1 day) at New Orleans, LA, in Room 648, F. Edward Hebert Federal Bldg., 600 South Street.

MC 145526 (Sub-1F), CTC Transportation, Inc., now assigned for hearing on May 29, 1980 (2 days) at New Orleans, LA, in Room 648, F. Edward Hebert Federal Building, 600 South Street.

MC 113651 (Sub-303F), Indiana Refrigerator Lines, Inc., is transferred to Modified Procedure.

MC 143698 (Sub-2F), Cast North America LTD, is transferred to Modified Procedure.

MC 146352 (Sub-2F), Avery Trucking Co., Inc., is transferred to Modified Procedure.

MC 128273 (Sub-326F), Midwestern Distribution, Inc., now assigned for hearing on May 27, 1980, at Orlando, FL, is postponed indefintely.

MC 58549 (Sub-29F), General Motor Lines, Inc. and

MC 58549 (Sub-32F), General Motor Lines, Inc., now being assigned for Prehearing Conference on June 30, 1980, at the Offices of the Interstate Commerce Commission in Washington, DC.

MC 114211 (Sub-411F), Warren Transport, Inc., now being assigned for Prehearing Conference on June 18, 1980, at the Offices of the Interstate Commerce Commission, Washington, DC.

MC 123407 (Sub-581F), Sawyer Transport, Inc., now assigned for Prehearing Conference on June 19, 1980, at the Offices of the Interstate Commerce Commission, Washington, DC.

MC 107403 (Sub-1186F), Matlack, Inc., now assigned for hearing on May 28, 1980, will be held in Room No. 1052A, Federal Building, Federal Place, Louisville, KY.

MC 110525 (Sub-1296F), Chemical Leaman Tank Lines, Inc., now assigned for hearing on June 2, 1980, will be held at the Environmental Protection Agency, Room 130, 26 West St. Clair, Cincinnati, OH, and on June 3, 1980, will be held in Room No. 305, U.S. Post Office & Courthouse, 5th & Walnut, Cincinnati, OH.

MC 146677 (Sub-2F), Granny's Express, Inc., now assigned for hearing on June 4, 1980, will be held in Room No. 305, U.S. Post Office & Courthouse, 5th & Walnut, Cincinnati, OH.

MC 2202 (Sub-597F), Roadway Express, Inc., transferred to Modified Procedure.

MC 35807 (Sub-90F), Wells Fargo Armored Service Corporation, now assigned for hearing on June 5, 1980, at Washington, DC, is canceled and transferred to Modified Procedure.

MC 109533 (Sub-111F), Overnite Transportation Company, is transferred to Modified Procedure.

MC 145441 (Sub-35F), A.C.B. Trucking, Inc., is transferred to Modified Procedure.

MC 44445 (Sub-8F), Harold Klein Cartage, Inc., now assigned for hearing on June 9, 1980, at Milwaukee, WI, is canceled and Application Dismissed.

MC 52709 (Sub-352F), Ringsby Truck Lines, Inc., transferred to Modified Procedure.

MC 103926 (Sub-96F), W. T. Mayfield Sons Trucking Company, is transferred to Modified Procedure.

MC 107496 (Sub-1215F), Ruan Transport Corporation, now assigned for hearing on June 9, 1980, is canceled and Application Dismissed.

MC 58549 (Sub-29F), General Motor Lines, Inc., now assigned for hearing on May 12, 1980, at Roanoke, VA, is postponed indefinitely.

MC 65802 (Sub-66F), Lynden Transport, Inc., now assigned for hearing on June 2, 1980, will be held in Room No. 3086, New Federal Building, 915 2nd Avenue, Seattle, WA.

MC 145384 (Sub-32F), Rose-Way, Inc., now assigned for hearing on June 9, 1980, will be held in Room No. 103, Pioneer Courthouse, 555 S.W. Yamhill Street, Portland, OR.

MC 42487 (Sub-916F), Consolidated Freightways Corporation of Delaware, now assigned for hearing on May 19, 1980, at Omaha, NE, is canceled and transferred to Modified Procedure.

MC 140829 (Sub-253F), Cargo, Inc., now assigned for hearing on May 9, 1980, at Chicago, IL, is canceled and transferred to Modified Procedure.

MC 114552 (Sub-158), M1F, Senn Trucking Company, now assigned for continued

hearing on June 10, 1980, at the Offices of the Interstate Commerce Commission in Washington, DC.

MC 124251 (Sub-68F), Jack Jordan, Inc., now assigned for hearing on June 3, 1980, will be held at the I.C.C.—Room No. 401—4th Floor, 1776 Peachtree Street, N.W., Atlanta, GA.

MC 124251 (Sub-69F), Jack Jordan, Inc., now assigned for hearing on June 5, 1980, will be held at the I.C.C.—Room No. 401—4th Floor, 1776 Peachtree Street, N.W., Atlanta, GA.

MC 121254 (Sub-2F), O'Leary Transportation Co., Inc., now being assigned for hearing on July 28, 1980 (1 Week), at Boston, MA in a hearing room to be designated later.

MC 138438 (Sub-44F), D. M. Bowman, Inc., now being assigned for hearing on July 21, 1980 (1 Week), at Hagerstown, MD, in a hearing room to be designated later.

MC 37417, Shipments in Marine Containers on Railroad Flatcars, April 1980, and No. FSA 33656, Commodity Rates East of the Rocky Mountains, F.S.O. 18982, now being assigned for hearing on May 28, 1980, at the Office of the Interstate Commerce Commission in Washington, DC.

MC 146551 (Sub-2F), Taylor Transport, Inc., transferred to Modified Procedure.

MC 138432 (Sub-14F), Garland Gehrke, now assigned for hearing on May 5, 1980, at Chicago, IL, is canceled and transferred to Modified Procedure.

MC 146002 (Sub-2F), Brookridge Leasing, Inc., now assigned for hearing July 17, 1980, at Tampa, FL, is canceled and transferred to Modified Procedure.

MC 88161 (Sub-95F), Inland Transportation Company, Inc., now assigned for hearing on June 16, 1980, will be held in Room 3086, New Federal Building, 915 2nd Avenue, Seattle, WA.

MC 143698 (Sub-2F), Cast North American Ltd., now assigned for hearing on June 10, 1980, will be held in Room No. 649, Court House, 231 W. Lafayette, Detroit, MI.

MC 106647 (Sub-44F), Clark Transport Company, Inc., now assigned for hearing on June 4, 1980, will be held in Room 3883, 219 South Dearborn Street, Chicago, IL.

MC 119493 (Sub-297F), Monkem Company, Inc., now assigned for hearing on June 9, 1980, will be held in Room 1669, Everett McKinley Dirksen Building, 219 South Dearborn Street, Chicago, IL.

MC 108633 (Sub-17F), Barnes Freight Line, Inc., now assigned for continued hearing on June 3, 1980 (4 Days), at Birmingham, AL, examination of documents on May 29, and 30, 1980. Hearing room will be designated later.

MC 133689 (Sub-275F), Overland Express, Inc., now assigned for hearing on June 10, 1980, at New York, NY, is canceled and transferred to Modified Procedure.

MC 116763 (Sub-528F), Carl Subler Trucking, Inc., now being assigned for hearing on July 8, 1980 (1 Day), at Chicago, IL, in a hearing room to be designated later.

MC 113784 (Sub-84F), Laidlaw Transport Limited, now assigned for hearing on June 17, 1980, will be held in Room 1440, Federal Building, 111 West Huron Street, Buffalo, NY, and on June 26, 1980 will be held in Room 914, Federal Building, 111 West Huron Street, Buffalo, NY.

MC 96992 (Sub-17F), Highway Pipeline Trucking Company, now assigned for hearing on June 2, 1980, will be held in Court Room No. 4—9th Floor, Federal Building, 515 Rusk, Houston, TX.

MC 105457 (Sub-97F), Thurston Motor Lines, Inc., now being assigned for Prehearing Conference on June 29, 1980, at the Offices of Interstate Commerce Commission, Washington, D.C.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 80-15653 Filed 5-21-80; 8:45 am]

BILLING CODE 7035-01-M

Decision Notice

As indicated by the findings below, the Commission has approved the following applications filed under 49 U.S.C. 10924, 10926, 10931 and 10932.

We find:

Each transaction is exempt from section 11343 (formerly section 5) of the Interstate Commerce Act, and complies with the appropriate transfer rules.

This decision is neither a major Federal action significantly affecting the quality of the human environment nor a major regulatory action under the energy Policy and Conservation Act of 1975.

Petitions seeking reconsideration must be filed on or before June 11, 1980. Replies must be filed within 20 days after the final date for filing petitions for reconsiderations; any interested person may file and serve a reply upon the parties to the proceeding. Petitions which do not comply with the relevant transfer rules at 49 CFR 1132.4 may be rejected.

If petitions for reconsideration are not timely filed, and applicants satisfy the conditions, if any, which have been imposed, the application is granted and they will receive an effective notice. The notice will indicate that consummation of the transfer will be presumed to occur on the 20th day following service of the notice, unless either applicant has advised the Commission that the transfer will not be consummated or that an extension of time for consummation is needed. The notice will also recite the compliance requirements which must be met before the transferee may commence operations.

Applicants must comply with any conditions set forth in the following decision-notices within 30 days after publication, or within any approved extension period. Otherwise, the decision-notice shall have no further effect.

By the Commission, Motor Carrier Board, Members Holyfield, Hedetniemi, and Healy.

Agatha L. Mergenovich,

Secretary.

F.D. 29334. By decision of May 5, 1980, issued under 49 U.S.C. 10926 and the transfer rules at 49 C.F.R. 1151. The Motor Carrier Board approved the transfer to American World Forwarders, Inc., of Daytona Beach, FL, of Permit No. FF-450 issued February 18, 1976, to American World Forwarders Express, Inc., of Daytona Beach, FL, authorizing forwarder service as follows: (a) used household goods, (b) unaccompanied baggage, and (c) used automobiles, Between points in the United States (including HI but excluding AK), restricted in (C) to transportation of export-import traffic. Applicant's representative is: Alan F. Wohlstetter, 1700 K St., N.W., Washington, DC 20006. Transferee is not a carrier or a freight forwarder.

MC-FC-78275. By decision of May 5, 1980, issued under 49 U.S.C. 10926 and the transfer rules at 49 C.F.R. Part 1132 The Motor Carrier Board approved the transfer to Mobile Transporters, Inc. of Joppa, MD, of that portion of Certificate No. MC-142359 (Sub-No. 2) issued September 8, 1978 to Port East Transfer, Inc. authorizing the transportation of (a) trailers designed to be drawn by passenger automobiles (except recreational vehicles), in initial movements and buildings, in sections, mounted on wheeled undercarriages with hitchball connectors from Baltimore, MD, to points in the United States on and east of a line beginning at the mouth of the Mississippi River and extending along the Mississippi River to its junction with the western boundary of Itasca County, MN, and thence northward along the western boundaries of Itasca and Koochiching Counties, MN, to the international boundary line between the United States and Canada and (b) trailers designed to be drawn by passenger automobiles (except recreational vehicles), in secondary movement, between Baltimore, MD, on the one hand, and, on the other, points in the United States on and east of a line beginning at the mouth of the Mississippi River to its junction with the western boundary of Itasca County, MN and thence northward along the western boundaries of Itasca and Koochicking Counties, MN, to the international boundary line between the United States and Canada, restricted in (a) above to the transportation of traffic from origins which are points of manufacture. Applicant's representative is: Mel P. Booker, Jr., 110 South Columbus St., Alexandria, VA 22314. TA

application has been filed. Transferee holds no authority.

MC–FC–78485. By decision of February 27, 1980, issued under 49 U.S.C. 10926 and the transfer rules at 49 C.F.R. Part 1132. The Motor Carrier Board approved the transfer to Regency Motor Freight, Inc., of Southgate, MI, of Certificate No. MC–68980, issued September 24, 1946, and all subs thereunder, to Checker Express Co., at Milwaukee, WI, authorizing the transportation of *General commodities*, except those of unusual value, classes A and B explosives, household goods as defined by the Commission, commodities in bulk, commodities requiring special equipment, and those injurious or contaminating to other lading, over a series of regular routes including operations between Milwaukee, WI and Chicago, IL and intermediate and off-route points; serving the off-route points of Greendale, West Milwaukee, and Wauwatosa, WI; between Chicago, IL and the junction of Edens Expressway and U.S. Hwy 41; between Milwaukee, WI and Port Washington, WI and the off-route points of Knellsville and Saukville, WI; serving the plant site of Bethlehem Steel Corporation, Burns Harbor, Porter County, IN as an off-route point; serving the site of Cooper-Jarrett, Inc. terminal, County Line Road, DuPage County, IL as an off-route point; between Milwaukee and Fillmore, WI and intermediate points and off-route points of Fredonia, WI and alternate route; between North Lake, WI and Milwaukee, WI and intermediate points; between Allentown, WI and Milwaukee, WI serving intermediate points; between Racine, WI and Chicago, IL and intermediate points and off-route points of Kenosha, WI and those in the Chicago Commercial Zone and alternate routes; between points in Macon, Moultrie, Coles, Edgar, Piatt, Champaign, Vermilion, De Witt, McLean, Ford, and Douglas Counties, IL and that part of Livingston and Iroquois Counties, IL on and south of U.S. Hwy 24 and intermediate and off-route points, restricted to traffic moving between such points on the one hand, and, on the other, Cook, Lake, McHenry, DeKalb, Kane, DuPage, Kendall, Grundy, Will and Kankekee Counties, IL; serving Burns Harbor, IN as an off-route point; serving the plant site of Eastman Kodak Company at Oak Brook, IL as an off-route point between Chicago, IL and Milwaukee, WI serving intermediate and off-route points subject to certain restrictions; between Chicago, IL and St. Louis, MO serving the intermediate and off-route points in the Chicago, IL and St. Louis, MO Commercial Zones and serving the plant site of Hussmann Refrigerator Company at Bridgeton, MO; and *New Furniture and Household Goods* between points in Ozaukee County, WI and IL, IA and MN; *Iron and Steel Articles* from the plant site of Jones & Laughlin Steel Corporation in Putnam County, IL to points in WI and return of materials, equipment and supplies; *Food and Foodstuffs* (except in bulk) over irregular routes from Champaign, IL to points in WI. Transferee presently holds no authority from the Commission. Application has been filed for temporary authority under 49 U.S.C. 11349. Representatives: Edwin M. Snyder, Representative for Transferee, 22375 Haggerty Road, P. O. Box 400, Northville, Michigan 48167. Rodney H. Dow, Foley & Lardner, Representative for Transfer, First Wisconsin Center, 777 East Wisconsin Avenue, Milwaukee, Wisconsin 53202.

MC–FC–78530. By decision of May 5, 1980, issued under 49 U.S.C. 10926, 10931, and 10932, and the transfer rules at 49 C.F.R. 1132. The Motor Carrier Board approved the transfer to Edwin N. Bacorn and Jill Bacorn, d.b.a. Bisher Freight Service, Ramona, CA, of Certificate No. MC–4363, issued January 31, 1968, to John C. Degenfelder & Arvonne B. Degenfelder d.b.a. Bisher Freight Service, Romona, CA, authorizing the transportation of *General commodities*, (except those of unusual value, classes A and B explosives, household goods as defined by the Commission, commodities in bulk, and those requiring the use of special equipment), between San Diego and Ramona, CA, serving all intermediate points, from San Diego over U.S. Hwy 80 to El Cajon, CA, then over CA Hwy 67 to Ramona, and return over the same route; between junction unnumbered hwy (north of Lakeside, CA), and junction Mount Woodson Rd. and unnumbered hwy (north of Shady Dell, CA, serving all intermediate points, from junction unnumbered hwy and Mount Woodson Rd. over Mount Woodson Rd. to junction unnumbered hwy and return over the same route; and Certificate of Registration No. MC–4363 (Sub-No. 3) issued September 15, 1978, to John C. Degenfelder & Arvonne B. Degenfelder d.b.a. Bisher Freight Service, Ramona, CA, evidencing a right to engage in transportation in interstate commerce corresponding in scope to state Certificate No. 62128, dated June 13, 1961, and transferred by Decision Nos. 72231 and 87790 dated April 4, 1967, and August 30, 1977, respectively, issued by the Public Utilities Commission of the State of California, subject to the condition that prior to or concurrently with consummation of the transaction, transferee shall submit (1) a certified copy of the State certificate as reissued to transferee, or—if the State Commission does not reissue the certificate—a certified copy of the State order approving the transfeer of the underlying intrastate rights of the Certificate of Registration, and (2) a written notice confirming the date of consummation of that intrastate transaction. Applicants' representative: Edwin N. Bacorn, 357 Main St., Ramona, CA.

MC–FC–78553. By decision of May 2, 1980, issued under 49 U.S.C. 10926 and the transfer rules at 49 C.F.R. Part 1132. The Motor Carrier Board approved the transfer to Florida-Eastern U.S. Van Lines, Inc. of Conshohocken, PA of Certificate No. MC–11988, issued October 14, 1964, to Manning's Moving & Storage, Inc. of Trenton, NJ, authorizing the transportation of *Household Goods*, between Trenton, NJ, and points in NJ and PA, within 25 miles of Trenton, NJ, on the one hand, and, on the other, points in DE, MD, CT, MA, NY, PA, NJ, and DC; and *Household Goods*, as defined by the Commission, Between Trenton, NJ, and points in NJ and PA within 25 miles of Trenton, NJ, on the one hand, and, on the other, points in RI, VA, NC, SC, OH, and GA. Applicant's representative is: Robert J. Gallagher, Esq., 1000 Connecticut Ave., NW., Suite 1200, Washington, D.C. 20036. TA application have been filed.

MC–FC–78568. By decision of May 2, 1980, issued under 49 U.S.C. 10926 and the transfer rules at 49 C.F.R. Part 1132. The Motor Carrier Board approved the transfer to Consolidated Carriers International Transport Corporation of Charlotte, NC of Permit No. MC–143926 issued August 25, 1980 to Consolidated Carriers Corporation authorizing the transportation of ornaments and decorations, and materials and supplies used in the manufacture and sale of these commodities (except commodities in bulk), between the facilities of Rauch Industries, Inc., located at or near Gastonia, NC, on the one hand, and, on the other, points in the United States (except North Carolina, Alaska, and Hawaii), subject to the following condition: prior to or concurrently with consummation of the transfer, transferor shall settle its debts with owner-operators and confirm this in writing to the Commission's Office of Proceedings. Applicant's representative is: Robert B. Walker, 915 Pennsylvania Bldg., 425 13th St., NW., Washington, DC 20004. TA application has been filed. Transferee hold no authority.

MC–FC–78569. By decison of May 1, 1980, issued under 49 U.S.C. 10926 and the transfer rules at 49 C.F.R. Part 1132. The Motor Carrier Board approved the transfer to Night hawk Motor Transport, Inc. of Cincinnati, OH of Certificate No. MC–114273 Sub-No. 613 (in part) issued August 30, 1979 to CRST, Inc. of Cedar Rapids, IA, authorizing the transportation of *general commodities,* (except those of unusual value, Class A and B explosives, livestock, household goods as defined by the Commission, commodities in bulk, and those requiring special equipment), between points in the Chicago, IL Commercial Zone as defined by the Commission, on the one hand, and, on the other, Cincinnati, Dayton and Hamilton, OH, and points in that part of OH on and north of U.S. Hwy 20 extending from the Ohio-Indiana state line to and including Toledo, OH. Applicant's representative is: James W. Muldoon, 50 West Broad Street, Columbus, OH 43215. Kenneth L. Core, P.O. Box 68, Cedar Rapids, IA 52406. TA application has not been filed. Transferee holds no authority.

MC–FC–78579. By decison of May 5, 1980, issued under 49 U.S.C. 10926 and the transfer rules at 49 C.F.R. Part 1132. The Motor Carrier Board approved the transfer to Bernie Berger, d.b.a. Berger Bros. Trucking of Mandan, ND a portion of Certificate No. MC–139420 Sub-3 issued June 15, 1979 to Glacier Transport, Inc. of Grand Forks, ND authorizing the transportation of *hydraulic cylinders,* from Rugby, ND, to points in the United States (except AK and HI); *materials and supplies* used in the manufacture of hydraulic cylinders, hydraulic hoist and truck bodies, from Minneapolis, MN, and Chicago, IL to Rugby, ND. Applicant's representative is: James B. Hovland, Suite M–20, 400 Marquette Avenue, Minneapolis, MN 55402. TA application has been filed.

MC–FC–78587. By decision of May 15, 1980, issued under 49 U.S.C. 10926 and the transfer rules at 49 C.F.R. 1132. The Motor Carrier Board approved the transfer to Sans Transport Co., Inc., of Chicago, IL, of Certificate No. MC–142685 issued December 7, 1979, to John R. Verdino, d.b.a. J&S Motor Service, of Chicago, IL, authorizing the transportation of packaging materials and supplies, used in butcher shops, from the facilities of Kraft Paper Sales Co., located at Harvey, IL, to Goshen, Portage, and Valparraiso, IN. Applicant's representative is: Stephen H. Loeb, Suite 2027, 33 N. LaSalle St., Chicago, IL 60602. Transferee is not a carrier. An application seeking temporary lease authority has not been filed.

[FR Doc. 80–15652 Filed 5–21–80; 8:45 am]

BILLING CODE 7035–01–M

[No. MC–C–10251]

Interpretation of Commodity Descriptions; Motor Vehicle Descriptions

AGENCY: Interstate Commerce Commission.

ACTION: The introduction of a time-limit for the filing of petitions for commodity description changes as described in the decision of May 11, 1979.

SUMMARY: Morgan Drive-Away Inc., a party to this proceeding, has filed a petition seeking, among other things, a time-limit for the changing of narrow commodity descriptions to the broader automobile authority as adopted in this proceeding. This request is granted for the reasons indicated below.

EFFECTIVE DATE: Petitions for commodity changes as described in this proceeding should be filed with the Commission on or before August 20, 1980.

FOR FURTHER INFORMATION CONTACT: Donald J. Shaw, Jr., Phone: 202–275–7292.

SUPPLEMENTARY INFORMATION:

In the decision served May 21, 1979, the Commission issued a "Commodity Interpretation" dealing with a wide range of commodity descriptions in the motor vehicle industry. The Commission decided that the "recreational vehicles" in question were actually automobiles and that the broad commodity descriptions of "automobile", "trucks", "buses", and "motor homes" should be used in lieu of narrower descriptions.

The Commission, after making that determination, allowed carriers authorized to transport more specific types of recreational vehicles to petition to modify their certificates and permits to reflect the broader automobile description. Morgan Drive-Away, now seeks a time limit for the filing of these petitions. A time limit for filing would speed up the changeover process and alleviate the confusion existing in the motor vehicle industry. Therefore, any carriers presently holding authority to transport the more specific commodity descriptions outlined in our previous decision will be allowed 90 days from the date of publication of this notice in the **Federal Register.**

The decision does not affect significantly the quality of the human environment or energy consumption.

It is ordered:

The petitions for commodity description changes as described in the decision of May 11, 1979, and served May 21, 1979, must be filed on or before August 20, 1980, or the parties are precluded from changing their authorities in this manner.

Decided: May 14, 1980.

By the Commission, Chairman Gaskins, Vice-Chairman Gresham, Commissioners Stafford, Clapp, Trantum, Alexis, and Gilliam. Chairman Gaskins voted not to approve the decision. His position remains as it was in January, that the 90-day limit is unnecessary. Commissioner Gilliam did not participate in the disposition of this proceeding.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 80–15650 Filed 5–21–80; 8:45 am]

BILLING CODE 7035–01–M

Long-and-Short-Haul Application for Relief; (Formerly Fourth Section Application)

May 19, 1980.

These applications for long-and-short-haul relief have been filed with the I.C.C.

Protests are due at the I.C.C. on or before June 6, 1980.

No. 43820, Southwestern Freight Bureau, Agent No. B–58, on cottonseed, peanut and soybean hulls, in carloads, from, to and between stations in Southwestern Territory published in Supplements 114 and 14 to Tariffs ICC SWFB 4450 and ICC SWFB 4454, respectively, effective June 13, 1980. Grounds for relief—need for additional revenue to offset increased costs.

No. 43821, Southwestern Freight Bureau, Agent No. B–66, on cement, in carloads, from and to stations in Official Territory published in Supplements 11 and 163 to Tariffs ICC SWFB 4739–A and ICC SWFB 4740, respectively, effective June 15, 1980. Grounds for relief—need for additional revenue to offset increased costs.

No. 43822, Southwestern Freight Bureau, Agent No. B–62, on beet or cane sugar, in carloads, from stations in Minnesota and North Dakota to Braum, Moore, Oklahoma City and Tulsa, OK.; published in Supplement 28 to Tariff ICC SWFB 3003–H, effective June 13, 1980.

Grounds for relief—destination rate relationships.

No. 43823, Southwestern Freight Bureau, Agent No. B–71, on brewer's grain, corn cob chaff, malt cleanings, etc., in carloads, from, to and between stations in Colorado-Utah-Wyoming Committee, Illinois Rate Committee, Southwestern and Western Trunk Line territories to be published in Item 345 series of Tariff ICC SWFB 4023–A of Southwestern Freight Bureau, Agent and similar items in other agency and individual lines' tariffs as listed in the application. Grounds for relief—rate relationships.

By the Commission.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 80–15651 Filed 5–21–80; 8:45 am]

BILLING CODE 7035–01–M

[Application No. 1939]

Detroit, Toledo & Ironton Railroad Co.

AGENCY: Interstate Commerce Commission.

ACTION: Notice, Released Rate Application No. 1939.

SUMMARY: The Detroit, Toledo & Ironton Railroad Co., seeks authority to establish and maintain, in its Tariff ICC DTI 7444–C, rates on "Freight, All Kinds" between its ramp at Cincinnati, OH and its ramp at Brownstown Township, MI, subject to a released value not exceeding $150,000 per trailer. The applicant proposes to maintain two scales of rates. One scale will apply if the trailer is *not* released as to value and the second will apply if the trailer *is* released. The rate scale for trailers such *are* released will be uniformly 10 percent less than the scale for trailer which are *not*.

ADDRESSES: Anyone seeking copies of this application should contact: Mr. C. Barret, Transportation Consultant, 11764 Indian Ridge Road, Reston, VA 22091. Tel. (703) 860–8521.

FOR FURTHER INFORMATION CONTACT: Mr. Max Pieper, Bureau of Traffic, Interstate Commerce Commission, Washington, D.C. 20423. Tel. (202) 275–7553.

SUPPLEMENTARY INFORMATION: Relief is sought from 49 USC 10730.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 80–15654 Filed 5–21–80; 8:45 am]

BILLING CODE 7035–01–M

INTERNATIONAL TRADE COMMISSION

[701–TA–40 (Final)]

Fish, Fresh, Chilled, or Frozen, Whether or not Whole, but Not Otherwise Prepared or Preserved, From Canada

Determination. On the basis of the record [1] developed in investigation No. 701–TA–40 (Final), the Commission determines,[2] pursuant to section 104(a)(2) of the Trade Agreements Act of 1979, that an industry in the United States is not materially injured, is not threatened with material injury, and that the establishment of an industry is not materially retarded by reason of imports of fish, fresh, chilled, or frozen, whether or not whole, but not otherwise prepared or preserved, provided for in TSUS items 110.35, 110.50, and 110.55, from Canada, with respect to which the Department of Commerce has reported that a subsidy is being provided in the amount of 1.08 percent of the f.o.b. import prices of such fish harvested in the Atlantic region of Canada, and which are subject to outstanding countervailing duty orders, but for which the imposition and collection of such duties have been waived.

Background. Section 104(a) of the Trade Agreements Act of 1979 (P.L. 96–39, July 26, 1979) requires that the United States International Trade Commission make an injury determination in those cases in which the Commission has received the most current net subsidy information pertaining to any countervailing duty order in effect on January 1, 1980, which had been waived pursuant to section 303(d) of the Tariff Act of 1930 or which had been published on or after the date of enactment of the Trade Agreements Act of 1979.

On January 2, 1980, the Commission received advice from the U.S. Department of Commerce, the administering authority under the provisions of the Trade Agreements Act of 1979, that a countervailing duty order that had been waived pursuant to section 303(d) of the Tariff Act of 1930 (19 U.S.C. 1303(d)), was in effect on January 1, 1980, with respect to fish from Canada. On February 5, 1980, the Commission received from the Department of Commerce, the most current net subsidy information available with respect to the countervailing duty order(s) on fish from Canada. Accordingly, the Commission instituted investigation No. 701–TA–40 (Final) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded by reason of imports of fish, fresh, chilled, or frozen, whether or not whole, but not otherwise prepared or preserved, provided for in TSUS items 110.35, 110.50, and 110.55, from Canada, which are subject to the outstanding waived countervailing duty order(s).

Notice of the Commission's investigation and of the public hearing to be held in connection therewith was duly given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C. and at the Commission's New York City Office, and by publishing the notice in the **Federal Register** of February 22, 1980 (45 FR 11938). The public hearing for this investigation was held in Washington, D.C. on April 21, 1980, and all persons who had requested the opportunity were permitted to appear in person or through counsel.

Views of Vice Chairman Bill Alberger and Commissioner Michael J. Calhoun

On the basis of the record developed in investigation 701–TA–40 (Final), we determine pursuant to section 104(a)(2) of the Trade Agreements Act of 1979 that an industry in the United States is not materially injured, and is not threatened with material injury, and the establishment of an industry is not materially retarded,[3], by reason of imports of fish, fresh, chilled, or frozen, whether or not whole, but not otherwise prepared or preserved, provided for in TSUS items 110.35, 110.50, and 110.55, from Canada with respect to which the Department of Commerce has reported that a subsidy is being provided in the amount of 1.08 percent of f.o.b. import price of the fish harvested in the Atlantic region of Canada,[4] and which

[1] The "record" is defined in sec. 207.2(j) of the Commission's *Rules of Practice and Procedure* (19 CFR 207.2(j)).

[2] Concurring in the unanimous negative determination where Vice Chairman Bill Alberger and Commissioners George M. Moore, Paula Stern and Michael J. Calhoun. Chairman Bedell did not participate in the determination.

[3] Since fish of the species and types that are subject to countervailing duty waivers and that are the subject of this investigation are produced by numerous fishermen and processors, the establishment of an industry is not at issue in this investigation and will not be discussed further.

[4] The Department of Commerce also found that fish harvested on the Pacific Coast of Canada were benefiting from Canadian subsidies of 0.38 percent, which the Dept. of Commerce has declared as legally *de minimis*. The Commission has no power in this investigation to consider any injurious impact of such imports of fish harvested off the Pacific Coast of Canada. Objections on this issue (Counsel for the Fisherman's Marketing Association of Seattle, Washington has raised such concerns in

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are subject to outstanding countervailing duty orders, but for which the imposition and collection of countervailing duties have been waived.

The domestic industry and the product in question. Section 771(4) of the Tariff Act of 1930 (19 U.S.C. 1677(4)) provides in part as follows:

(A) In General.—The term "industry" means the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product.

(D) Product Lines.—The effect of subsidized or dumped imports shall be assessed in relation to the United States production of a like product if available that permit the separate identification of production in terms of such criteria as the production process or the producers profits. If the domestic production of the like product has no separate indentity in terms of such criteria, then the effect of the subsidized or dumped imports shall be assessed by the examination of the production of the narrowest group or range of products, which includes a like product, for which the necessary information can be provided.

Section 771(10) (19 U.S.C. 1677(10)) provides that:

The term "like product" means a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this title.

In this investigation we have concluded that the appropriate domestic industry against which the impact of subsidized imports of fish from Canada should be measured consists of those facilities in the United States producing the following two categories of like merchandise:

(1) Fish that are whole, fresh, chilled or frozen or, if not whole, fish that are processed only by the removal of heads, viscera, fins or any combination thereof, but which are not otherwise processed,[5] and

(2) certain fish that are "otherwise processed" (but not merely by scaling and not including fish that are skinned and boned and frozen into blocks each weighing over 10 pounds), whether or not heads, viscera, fins, scales, or any combination thereof, have been removed.[6]

The fish covered by the two categories under consideration are virtually all groundfish, deriving that name from the fact that they live at or near the sea bottom (or the ground). All of the fish species discussed here are collectively referred to as "groundfish." The principal species of whole groundfish covered are Atlantic Ocean perch (including rosefish), flatfish (except halibut), wolf fish and whiting. The principal species of groundfish fillets covered are Atlantic Ocean perch (including rosefish), cod, cusk, haddock, hake, and pollock.

Some 700 New England and 300 west coast fishing vessels land such groundfish in the United States. Since almost all of the catch of these vessels is converted into fillets, they are part of the industry that produces the subject fillets. They are also harvesters of the whole fish under investigation. There are approximately 100 firms in the United States producing fillets like those imported Canadian fillets subject to countervailing duty waivers. Many of these firms also produce fillets from both domestic and imported fish. Of the 100 processing firms, 71 are on the Atlantic coast.

Section 771(4)(C) of the Tarriff Act of 1930 provides that, in appropriate circumstances, the United States, for a particular product market, may be divided into 2 or more markets and the producers within each market may be treated as if they were a separate industry if—

(i) the producers within such market sold all or alsmost all of their production of the like product in question in that market, and

(ii) the demand in that market is not supplied to any substanital degree, by producers of the product in question located elsewhere in the United States.

In such appropriate circumstances, section 771(4)(c) continues, material injury, the threat of material injury, or material retardation of the establishment of an industry may be found to exist with respect to an industry, even if the domestic industry as a whole, or those producers whose collective output of a like product constitutes a major proportion of the total domestic production of that product, is not injured, if there is a concentration of subsidized or dumped imports into such an isolated market and if the producers of all, or almost all, of the production within that market are being materially injured or threatened with material injury, or if the establishment of an industry is being materially retarded, by reason of the subsidized or dumped imports.

Fishermen and fish processors in the Northeastern States sell all or almost all of their product in the Northeastern States and the demand for subject fish is the Northeastern States is not supplied, to any substantial degree, by producers outside that region. The movement of imports is generally from the Atlantic region of Canada to the Northeastern United States, and from the Pacific region of Canada to the west coast. We find in this case, that the criteria for a regional industry are met. Although the criteria required for consideration of a regional industry have been met, such identification is not necessary in this case since we would not find injury to the domestic industry whether the industry is defined in terms of the entire United States or in terms of the Eastern region.

Discussion. During the period 1976–79, U.S. output of the whole and filleted groundfish subject to this investigation, converted to fillet weight, rose annually from 100 million pounds in 1974 to 138 million pounds in 1979, and east coast output rose from 86 million pounds in 1975 to 114 million pounds in 1978.

Imports from Canada of whole and filleted groundfish subject to countervailing duty waivers rose irregularly from 82 million pounds in 1974 to 115 million pounds in 1979. The market share held by such imports amounted to 23.3 percent in 1974 and 23.5 percent in 1979. Imports of such fish from Canada not subject to countervailing duty waivers and imports of like fish products from countries other than Canada were far larger than the subject imports, bringing the total ratio of imports to U.S. consumption to more than 70 percent for each of the years during the 1974–79 period.

Imports from eastern Canada subject to countervailing duty waivers rose from 93 million pounds in 1975 to 101 million pounds in 1978; they accounted for 23.6 percent of east coast consumption in 1975 and 22.5 percent of east coast consumption in 1978.

Imports of like products from all sources not subject to countervailing duty waivers push the ratio of imports to east coast consumption up to 78.2 percent in 1975 and 74.5 percent in 1978.

The domestic industry's output has been affected by numerous factors including (1) conservation quotas established in the last several years for numerous species of fish that had suffered depleted stocks owing to overfishing prior to the expansion of the U.S. territorial limit for domestic fisheries to 200 miles from shore, (2) licensing of foreign vessels to fish within the expanded 200-mile limit, and (3) possible overexpansion of the U.S. fishing fleet in response to the expansion of the territorial limit, leaving the potential fishing resources per vessel lower than it had been previously.

In a recent investigation under section 201 of the Trade Act of 1974 (Inv. No.

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a submission for the Record) must be raised with the Department of Commerce, not with the Commission.

[5] The fish in this category are referred to as "whole fish."

[6] The fish in this category are referred to as "fillets", since virtually all the fish in this category are fillets, even though minor portions of other cuts of fish, such as fish steaks, are also included.

TA-201-41), concluded in January 1980, the Commission sent more than 700 questionnaires concerning profitability to fisherman and processors throughout the United States and received only 6 complete responses, none of which were from east coast fishermen. In investigations conducted by this Commission, the injury to a domestic industry must be demonstrated by the data which are accumulated by the Commission's investigation and the data which are submitted by the petitioner and those in support of the petition. Where the petitioner fails to bring forth any data—either directly or through responses to Commission questionnaires—that silence may not be construed as evidence of injury. That silence may, in the right case, lead to the inference that there is no injury to a domestic industry, since we assume that injured parties would desire that evidence of injury be brought to the Commission's attention. There is no need to draw such an inference here, however, since the evidence adduced by the investigation—without the questionnaire responses from the domestic industry—clearly demonstrates that there is no injury to a domestic industry.

On the average, the ex-vessel prices for east coast groundfish, except flounder, were at record levels in December 1979 and, on the average, were substantially higher throughout 1979, than in previous years, indicating the absence of price suppression or depression in the market most affected by imports of the fish subject to countervailing duty waivers.

Sections 771(7)(B) and (C) of the Act require the consideration of the volume of imports, their effect on domestic prices, and their impact on domestic producers of a like product using guidelines of certain specific economic factors. The following are our findings based on the record in this investigation.

Findings of Fact

A. Volume of Imports

1. Total U.S. imports from Canada of whole groundfish subject to countervailing duty waivers increased from 2.9 million pounds, round weight in 1974 to 4.4 million pounds in 1978, and 9.5 million pounds in 1979 (Report, table 14, p. A-48). U.S. imports from the Atlantic region of Canada of whole groundfish subject to countervailing duty waivers into the eastern United States increased from 2.1 million pounds in 1975 to 2.7 million pounds in 1976, fell to 2 million pounds in 1977 and rose to 3.7 million pounds in 1979 (Report, table J-15, p. A-112).

2. Total U.S. imports from Canada of filleted groundfish subject to countervailing duty waivers rose from 81 million pounds in 1974 to 97 million pounds in 1975, fell to 79 million pounds in 1977, and rose to 112 million pounds in 1979 (Report, table 15, p. A-48). Imports into the eastern United States from the Atlantic region of Canada of filleted groundfish subject to countervailing duty waivers fell from 93 million pounds in 1975 to 78 million pounds in 1977 and rose to 111 million pounds in 1979 (Report, table J-16, p. A-112).

3. The ratio of all subsidized imports of whole groundfish from Canada subject to countervailing duty waivers to U.S. consumption was 1.2 percent in 1974, remained in the range of 1.5-1.6 percent each year during the period 1975-78, and rose to 3.5 percent in 1979 (Report, table 14, p. A-48). The ratio of imports of whole groundfish subject to countervailing duty waivers from the Atlantic region of Canada into the eastern United States rose from 0.9 percent in 1975 to 1.3 percent in 1976, fell to 0.9 percent in 1977 and 1978, and rose to 1.5 percent in 1979 (Report, table J-15, p. A-112). The ratio of such imports from eastern Canada to total U.S. consumption of whole groundfish amounted to 0.9 percent in 1975, 1.1 percent in 1976, 0.8 percent in 1977 and 1978, and 1.4 percent in 1979 (Report, tables 14 and J-15, at pp. A-48 and A-112).

4. The ratio of all subsidized imports of filleted groundfish from Canada subject to countervailing duty waivers to total U.S. consumption of filleted groundfish rose from 38.5 percent in 1974 to 39.4 percent in 1975, fell to 28.6 percent in 1977, and rose again to 34.4 percent in 1979 (Report, table 15, p. A-48). The ratio of imports of filleted groundfish from the Atlantic regions of Canada subject to countervailing duty waivers to eastern U.S. consumption fell from 40.3 percent in 1975 to 30.3 percent in 1977 and rose to 36.3 percent in 1979 (Report, table J-16, p. A-112). The ratio of such imports from the Atlantic region of Canada to total U.S. consumption amounted to 37.7 percent in 1975, 32.7 percent in 1976, 28.3 percent in 1977, 33.1 percent in 1978 and 34.0 percent in 1979 (Report, tables 15 and J-16, at pp. A-48 and A-112).

5. Imports of the fish products from Canada covered by countervailing duty waivers are smaller in volume and account for lower import penetration in the U.S. market or the east coast U.S. market than do other imports of like products from Canada and imports of like products from other countries (Report, tables 14-16 and J-15-J-17, pp. A-48, A-49 and A-112 and A-113).

6. The most rapid growth in imports from Canada has occurred during the period in which Canada was in the process of eliminating its subsidy payments to fishermen and processors. Prior to March 31, 1978, the Canadian subsidies amounted to 17.22 percent of the f.o.b. value of Canadian exports; from April 1, 1978 through September 30, 1978, the subsidies amounted to 5.22 percent, and since October 9, 1978, the subsidy has amounted to 1.22 percent or less (Report, p. A-7).

B. Effect of Imports on U.S. Prices

7. Between January 1976 and January 1979, the east coast prices of ocean perch rose by 70 percent, and the price of yellowtail flounder rose by 33 percent. In comparison, the Bureau of Labor Statistics index of meat, fish, and poultry prices rose by only 26 percent during the period. December 1979 prices for most of the fish considered herein were at record levels and, in general, 1979 prices for whole fish were at higher levels than in previous years, and prices of domestic fillets have risen sharply in recent years despite increased imports from Canada (Report, pp. A-52-A-61, tables 17-22).

8. Despite the presence of underselling of the domestic product in the U.S. market the bulk of the importers' product is sold in the frozen form and the bulk of the domestic product is sold in the fresh form. Frozen fish products are ordinarily sold at a lower price than fresh fish products because of quality, taste, and texture considerations (Report, A-12 and A-50).

C. Impacts on Domestic Producers of the Like Product

9. U.S. landings of whole groundfish of species subject to countervailing duty waivers rose irregularly from 223 million pounds, round weight, in 1974 to 255 million pounds in 1978 but fell slightly to 249 million pounds in 1979 (Report, table 14, p. A-48). East coast landings of whole goundfish of the species subject to countervailing duty waivers, rose annually from 180 million pounds, round weight, in 1975 to 211 million pounds, round weight, in 1979 (Report, table J-15, p. A-112).

10. U.S. production of filleted groundfish of the species subject to countervailing duty waivers rose from 46 million pounds, fillet weight, in 1974 and 1975, to 73 million pounds, fillet weight, in 1979 (Report, table 15, p. A-48). East coast production also increased annually, from 32 million pounds in 1975 to 58 million pounds in 1979 (Report, table J-16, p. A-112).

11. U.S. capacity to catch groundfish of the types under investigation, in numbers of fishing vessels, has expanded in recent years, but conservation quotas on the east coast, the licensing of foreign vessels to fish within the 200 mile limits (Report, pp. A–18–A–21), and the sharing of the limited resources among an expanded number of vessels may have prevented the U.S. fishing fleet from operating at full capacity. On the west coast, trip limits by processors, because supply was outstripping demand, has resulted in declining capacity utilization (Report, pp. A–120—A–122).

12. U.S. inventories of frozen ocean perch fillets in December 1979 were higher than in any year since 1973, except 1974. U.S. inventories of frozen cod fillets were higher in December 1979 than in December of 1978 or 1976, but were lower than the December 1978 levels. Inventories of frozen haddock fillets wre lower in December 1979 than in any preceding year of the 1973–79 period (Report, p. A–34).

13. U.S. employment in the domestic groundfish industry has probably expanded in recent years in line with the expansion of production and the expansion of the fishing fleet. In Massachuetts, employment increased by 11 percent between 1974 and 1977, and the number of Gloucester fishermen grew from 650 in 1976 to 1,000 in 1978 (Report, pp. A–34 and A–35).

14. No response on their financial statistics was received from any east coast groundfishermen during the Commission's recent investigation of fish under section 201 of the Trade Act of 1974, but six responses received from west coast fishermen indicated increasing profits from 1975 through 1978 and a reduction in profits in 1979 (Report, pp. A–35–A–37). The reduced profits for the west coast fishermen may be attributable to trip limits established by processors and may not be reflective of profits of east coast fishermen.

15. U.S. fishermen and fish processors have alleged sales lost to imports of fish from Canada, however, the largest volume of fish from Canada is of fish not covered by the current investigation, these have previously been investigated by the Commission and have been found not to be injurious to the domestic industry (Report, A–46, A–47, and A–63).

16. Since many of the fish products are interchangeable with one another in the market place, total demand for the subject fish is also directly affected by imports of similar species of fish at the same and at different stages of processing. Any injury to the domestic industry resulting from any imports of fish products is more likely to be caused by those not covered by this investigation, than by imports of fish subject to countervailing duty waivers, which account for less than 3 percent of total fish imports (Report, p. A–47).

17. No information has been received by the Commission regarding return on investment, wages, cash flows, or the ability to raise capital.

Conclusions of Law

A. The appropriate domestic industry against which the impact of subsidized imports of fish from Canada should be measured consists of those facilities in the United States producing:

(1) Fish that are whole, fresh, chilled or frozen or, if not whole, fish that are processed only by the removal of heads, viscera, fins or any combination thereof, but which are not otherwise processed, and

(2) certain fish that are "otherwise processed" (but not merely by scaling and not including fish that are skinned and boned and frozen into blocks each weighing over 10 pounds), whether or not heads, viscera, fins, scales, or any combination thereof, have been removed.

B. The domestic industry is not materially injured or threatened with material injury by reason of subsidized imports of fish from Canada which are subject to countervailing duty waivers.

Views of Commissioner George M. Moore

For the Commission to make an affirmative determination in this investigation, the Commission must find that an industry in the United States is materially injured, or is threatened with material injury, or that the establishment of an industry in the United States is materially retarded,[7] by reason of imports of fish, fresh, chilled, or frozen, whether or not whole, but not otherwise prepared or preserved, provided for in TSUS items 110.35, 110.50, and 110.55, from Canada, which are the subject of outstanding waived countervailing duty orders.

The nature and extent of the subsidy. The Department of Commerce reported to the Commission that a subsidy is being provided in the amount of 1.08 percent of the f.o.b. import price of specified fish products harvested in the Atlantic region of Canada and that a subsidy is being provided in the amount of 0.38 percent of the f.o.b. import price of specified fish products harvested in other regions of Canada, but that only the subsidies applicable to fish harvested in the Atlantic region of Canada are more than *de minimis*. The earlier history of this case is outlined fully in the Commission's report.

The domestic industry and the product in question. In this investigation I find that the appropriate domestic industry against which the impact of subsidized imports from Canada (subject to countervailing duty waivers) should be measured consists of those facilities in the United States producing the following two categories of like merchandise:

(1) Fish that are whole, fresh, chilled or frozen or, if not whole, fish that are processed only by the removal of heads, viscera, fins or any combination thereof, but which are not otherwise processed,[8] and

(2) certain fish that are "otherwise processed" (but not merely by scaling and not including fish that are skinned and boned and frozen into blocks each weighing over 10 pounds), whether or not heads, viscera, fins, scales, or any combination thereof, have been removed.[9]

The principal species of whole groundfish [10] covered by this investigation are Atlantic ocean perch (including rosefish), flatfish (except halibut), wolf fish and whiting. The principal species of groundfish fillets covered by the investigation are Atlantic ocean perch (including rosefish), cod, cusk, haddock, hake, and pollock.

The movement of groundfish imports is generally from the Atlantic region of Canada to the Northeastern United States, and from the Pacific region of Canada to the west coast, but since the subsidies found by Commerce were more than *de minimis* only for fish harvested in the Atlantic region of Canada, the relevant industry in this investigation consists of the fishermen and processors located on the east coast of the United States.

However, regardless of whether the relevant U.S. industry is composed of all vessels that land groundfish of the subject species in the United States and all processing plants that produce groundfish fillets, or only those vessels that land their catch on the east coast of

[7] Since fish of the species and types that are subject to countervailing duty waivers and that are the subject of this investigation are produced by numerous fishermen and processors, the establishment of an industry is not at issue in this investigation and will not be discussed further.

[8] The fish in this category are referred to as "whole fish."

[9] The fish in this category are referred to as "fillets", since virtually all of the fish in this category are fillets, even though minor portions of other cuts of fish, such as fish steaks, are also included.

[10] Since virtually all of the fish species covered by countervailing duty waivers live at or near the sea bottom (or ground), they are referred to in these views collectively as "groundfish".

the United States and the filleting plants on the east coast of the United States, my determination in this investigation is the same; namely, that the domestic industry is not materially injured or threatened with material injury by reason of imports of such fish from Canada that are subject to countervailing duty waivers.

The question of material injury. (a) *The volume of subsidized imports subject to countervailing duty waivers.*—Total U.S. imports from Canada of whole groundfish subject to countervailing duty waivers increased from 2.9 million pounds, round weight, in 1974 to 4.4 million pounds in 1978, and 9.5 million pounds in 1979.[11] U.S. imports from the Atlantic region of Canada of whole groundfish subject to countervailing duty waivers into the eastern United States increased from 2.1 million pounds in 1975 to 2.7 million pounds in 1976, fell to 2 million pounds in 1977 and rose to 3.7 million pounds in 1979.[12]

Total U.S. imports from Canada of filleted groundfish subject to countervailing duty waivers rose from 81 million pounds in 1974 to 97 million pounds in 1975, fell to 79 million pounds in 1977, and rose to 112 million pounds in 1979.[13] Imports into the eastern United States from the Atlantic region of Canada of filleted groundfish subject to countervailing duty waivers fell from 93 million pounds in 1975 to 78 million pounds in 1977 and rose to 111 million pounds in 1979.[14]

The ratio of all subsidized imports of whole groundfish from Canada subject to countervailing duty waivers to U.S. consumption was 1.2 percent in 1974, remained in the range of 1.5–1.6 percent each year during the period 1975–78, and rose sharply to 3.5 percent in 1979.[15] The ratio of imports of whole groundfish subject to countervailing duty waivers from the Atlantic region of Canada into the eastern United States rose from 0.9 percent in 1975 to 1.3 percent in 1976, fell to 0.9 percent in 1977 and 1978, and rose to 1.5 percent in 1979.[16] The ratio of such imports from eastern Canada to total U.S. consumption of whole groundfish amounted to 0.9 percent in 1975, 1.1 percent in 1976, 0.8 percent in 1977 and 1978, and 1.4 percent in 1979.[17]

The ratio of all subsidized imports of filleted groundfish from Canada subject to countervailing duty waivers to total U.S. consumption of filleted groundfish rose from 38.5 percent in 1974 to 39.4 percent in 1975, fell to 28.6 percent in 1977, and rose again to 34.4 percent in 1979.[18] The ratio of imports of filleted groundfish from the Atlantic region of Canada subject to countervailing duty waivers to eastern U.S. consumption fell from 40.3 percent in 1975 to 30.3 percent in 1977 and rose to 36.3 percent in 1979.[19] The ratio of such imports from the Atlantic region of Canada to total U.S. consumption amounted to 37.7 percent in 1975, 32.7 percent in 1976, 28.3 percent in 1977, 33.1 percent in 1978 and 34.0 percent in 1979.[20]

The ratio of combined imports from Canada of whole and filleted groundfish subject to countervailing duty waivers accounted for 23.3 percent of U.S. consumption in 1974 and 23.5 percent of U.S. consumption in 1979. The ratio of combined imports from the Atlantic region of Canada of whole and filleted groundfish subject to countervailing duty waivers to eastern U.S. consumption amounted to 23.6 percent in 1975 and 22.5 percent in 1978.[21]

The most rapid growth in imports from Canada has occurred during the period in which Canada was in the process of eliminating its subsidy payments to fishermen and processors. Prior to March 31, 1978, the Canadian subsidies amounted to 17.22 percent of the f.o.b. value of Canadian exports; from April 1, 1978 through September 30, 1978, the subsidies amounted to 5.22 percent, and since October 9, 1978, the subsidy has amounted to 1.22 percent or less.[22]

(b) *Price effects of subsidized imports.*—Between January 1976 and January 1979, the east coast prices of ocean perch rose by 70 percent, and the price of yellowtail flounder rose by 33 percent. In comparison, the Bureau of Labor Statistics index of meat, fish, and poultry prices rose by only 26 percent during the period. December 1979 prices for most of the fish considered herein were at record levels and, in general, 1979 prices for whole fish were at higher levels than in previous years, and prices of domestic fillets have risen sharply in recent years despite increased imports from Canada.[23] These factors indicate the absence of price suppression or price depression in the domestic industry.

Despite the presence of underselling of the domestic product in the U.S. market the bulk of the importers' product is sold in the frozen form and the bulk of the domestic product is sold in the fresh form. Frozen fish products are ordinarily sold at a lower price than fresh fish products because of quality, taste, and texture considerations.

(c) *Impact of subsidized imports on the domestic industry.*—U.S. landings of whole groundfish of species subject to countervailing duty waivers rose irregularly from 223 million pounds, round weight, in 1974 to 255 million pounds in 1978 but fell slightly to 204 million pounds in 1979.[24] East coast landings of the subject whole groundfish rose annually from 180 million pounds, round weigh, in 1975 to 211 million pounds, round weight, in 1979.[25]

U.S. production of the subject filleted groundfish rose from 46 million pounds, fillet weight, in 1974 and 1975, to 73 millions pounds, fillet weight in 1979.[26] East coast production also increased annually from 32 million pounds in 1975 to 58 million pounds in 1979.[27]

U.S. inventories of frozen ocean perch fillets in December 1979 were higher than in any year since 1973, except 1979. U.S. inventories of frozen cod fillets were higher in December 1979 than in December of 1978 or 1976, but were lower than the December 1977 levels. Inventories of frozen haddock fillets were lower in December 1979 than in any preceding year of the 1973–79 period.[28]

U.S. employment in the domestic groundfish industry has probably expanded in recent years in line with the expansion of production and the expansion of the fishing fleet. In Massachusetts, employment increased by 11 percent between 1974 and 1977, and the number of Gloucester fishermen grew from 650 in 1976 to 1,000 in 1978.[29]

No response on their financial statistics was received from any east coast groundfishermen during the Commission's recent investigation of fish under section 201 of the Trade Act of 1974 (Investigation No. TA–201–41), but six responses received from west coast fishermen indicated increasing profits from 1975 through 1978 and a reduction in profits in 1979.[30]

U.S. fishermen and fish processors have alleged sales lost to imports of fish from Canada, however, the largest

[11] Staff report at p. A–48, table 14.
[12] Staff report at p. A–112, table J–15.
[13] Staff report at p. A–48, table 15.
[14] Staff report at p. A–112, table J–16.
[15] Staff report at p. A–48, table 14.
[16] Staff report at p. A–112, table J–15.
[17] Staff report at pp. A–48, and A–112, tables 14 and J–15.
[18] Staff report at p. A–48, table 15.
[19] Staff report at p. A–112, table J–116.
[20] Staff report at pp. A–48 and A–112, tables 15 and J–16.
[21] Staff report at pp. A–49 and A–113; tables 16 and J–17.
[22] Staff report at p. A–7.
[23] Staff report at pp. A–51—A–61, tables 17–22.
[24] Staff report at p. A–48, tables 14.
[25] Staff report at p. A–112, table J–15.
[26] Staff report at p. A–48, table 15.
[27] Staff report at p. A–112, table J–16.
[28] Staff report at pp. A–33 and A–34.
[29] Staff report at pp. A–34 and A–35.
[30] Staff report at pp. A–36 and 39.

volume of such fish from Canada is not covered by this investigation.[31]

Conclusion. I determine that an industry in the United States is neither materially injured nor threatened with material injury by reason of imports of fish, chilled, or frozen, whether or not whole, but not otherwise prepared or preserved, provided for in TSUS items 110.35, 110.50, and 110.55, from Canada, which are the subject of waived countervailing duty orders.

Views of Commissioner Paula Stern

Introduction. For the Commission to make a determination in this investigation, pursuant to section 104(a)(2) of the Trade Agreements Act of 1979, it must find that an industry in the United States is materially injured, or is threatened with material injury, or that the establishment of an industry in the United States is materially retarded,[32] by reason of imports of fish, fresh, chilled, or frozen, whether or not whole, but not otherwise prepared or preserved, provided for in TSUS items 110.35, 110.50, and 110.55, from Canada, which are the subject of outstanding waived countervailing duty orders.

The relevant domestic industry in this investigation consists of fishermen in the Northeastern States who harvest fish of the species imported from Canada in whole or fillet form that are subject to countervailing duty waivers and processors in the Northeastern States that produce fillets like those imported from Canada that are subject to countervailing duty waivers. There are almost no indications of material injury to this industry. Further, no causal linkage has been established between the imports and any alleged problems of the domestic producers.

The nature and extent of the subsidy. The Department of Commerce has reported to the Commission that a subsidy is being provided in the amount of 1.08 percent of the f.o.b. import price of specified fish products harvested in the Atlantic region of Canada and that a subsidy is being provided in the amount of 0.38 percent of the f.o.b. import price of specified fish products harvested in other regions of Canada, but that only the subsidies applicable to fish harvested in the Atlantic region of Canada are more than *de minimis.*

Domestic groundfish harvesters and processors. Two categories of like merchandise are harvested and processed in the United States:

(1) Fish that are whole, fresh, chilled or frozen or, if not whole, fish that are processed only by the removal of heads, viscera, fins or any combination thereof, but which are not otherwise processed,[33] and

(2) certain fish that are "otherwise processed" (but not merely by scaling and not including fish that are skinned and boned and frozen into blocks each weighing over 10 pounds), whether or not heads, viscera, fins, scales, or any combination thereof, have been removed.[34]

The species of fish covered by the two categories under consideration are virtually all groundfish which derive their name from the fat that they live at or near the sea bottom (or the ground) and will be collectively referred to as groundfish. The principal species of whole groundfish covered by this investigation are Atlantic ocean perch (including rosefish), flatfish (except halibut), wolf fish and whiting. The principal species of groundfish fillets covered by the investigation are Atlantic ocean perch (including rosefish), cod, cusk, haddock, hake, and pollock.

About 700 New England and 300 west coast fishing vessels land such groundfish in the United States. Since virtually all of the catch of these vessels is converted into fillets, the processors are part of the industry that produces the subject fillets as well as harvesters of the subject whole fish under investigation. There are approximately 100 groundfish filleting firms in the United States producing fillets like the fillets imported from Canada that are subject to countervailing duty waivers. In addition to whole fish obtained from U.S. fishing vessels, many of these firms also produce fillets from whole fish imported from Canada. Of the 100 processing firms, 71 are on the Atlantic coast.

Regional considerations. In the present case, the criteria for treating a regional U.S. industry as the relevant domestic industry for purposes of the law are met. Section 771(4)(C) of the Tariff Act of 1930 provides that in appropriate circumstances the United States may be divided into 2 or more markets and the producers within each market may be treated as if they were a separate industry if—

(i) the producers within such market sold all or almost all of their production of the like product in question in that market, and

(ii) the demand in that market is not supplied to any substantial degree, by producers of the product in question located elsewhere in the United States.[35]

In such appropriate circumstances, material injury, the threat of material injury, or material retardation of the establishment of an industry may be found to exist with respect to an industry, even if the domestic industry as a whole, or those producers whose collective output of a like product constitutes a major proportion of the total domestic production of that product, is not injured, if there is a concentration of subsidized or dumped imports into such an isolated market and if the producers of all, or almost all, of the production within that market are being materially injured or threatened with material injury, or if the establishment of an industry is being materially retarded, by reason of the subsidized or dumped imports.

The fishermen and fish processors in the Northeastern States sell all or almost all of their product in the Northeastern States. The demand for the subject fish in the Northeastern States is not supplied to any substantial degree by producers outside the Northeastern States. Because the movement of imports is generally from the Atlantic region of Canada to the Northeastern United States and from the Pacific region of Canada to the west coast, and because the subsidies found by Commerce were *de minimis* for fish harvested in the Pacific region of Canada, the subject imports—those receiving a more than *de minimis* subsidy—are concentrated in the Northeast market of the United States.

In my view, to justify singling out a geographic segment of the country, the region should be significant enough to constitute an industry potentially meriting a remedy which, for constitutional reasons, may only be imposed on a national, rather than a regional, scale under the countervailing duty statutes.[36] The Northeastern States

[31] Staff report at pp. A-46 and A-63.

[32] Since fish of the species and types that are subject to countervailing duty waivers and that are the subject of this investigation are produced by numerous fishermen and processors, the establishment of an industry is not at issue in this investigation and will not be discussed further.

[33] The fish in this category are referred to as "whole fish."

[34] The fish in this category are referred to as "fillets", since virtually all of the fish in this category are fillets, even though minor portions of other cuts of fish, such as fish steaks, are also included.

[35] 19 U.S.C. 1677(4)(C).

[36] See "Additional Views of Commissioners Bill Alberger and Paula Stern with Respect to Regional Injury," *Carbon Steel Plate From Taiwan . . .*, Investigation No. AA1921-197, USITC Publication 970 (May 1979) at 23. That case was decided under the Antidumping Act of 1921, the predecessor to the current antidumping statute. However, the discussion of the criteria for regionality found in those views is a helpful background for considering whether a regional analysis is appropriate under the current law. Sec. 771(4)(C), which defines regional industries, applies to both countervailing duty and antidumping investigations and provides the

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obviously meet the criterion of significance as a region since that area accounted for 83 percent of total U.S. production.

Thus because the Northeastern States satisfy the appropriate criteria of market isolation, import concentration, and significance, the relevant industry in this investigation consists of the fishermen and processors located in that region.

The question of material injury. Whether the affected U.S. industry is composed of all vessels that land groundfish of the subject species in the United States and all U.S. processing plants that produce the subject groundfish fillets, or only those vessels that land their catch on the Northeast coast and the filleting plants in the Northeast region, my determination in this investigation would be the same—that the domestic industry is not materially injured or threatened with material injury be reason of the imports of the fish from Canada that are subject to countervailing duty waivers.

With respect to the question of material injury, the Commission is directed by section 771 of the Tariff Act of 1930 to consider, among other factors, the volume of imports of the merchandise subject to the investigation, the price effects of such imports, and the impact of such imports on the affected U.S. industry.

The volume of subsidized imports subject to countervailing duty waivers.—Although both import categories subject to countervailing duty waivers are of like merchandise, I have considered absolute and relative import penetration levels separately and together on both a regional and on a national basis. Combined subject imports moderately increased by 9 percent in absolute volume during the four-year period 1975-1978. However, their combined shares of both national and regional markets was lower in 1978 than it had been in 1975. The far smaller category of subject imported whole groundfish did increase its market share; however, this was outweighed by developments in the much more important category of subject imported groundfish fillets.[37] [38]

The most rapid growth in imports from Canada occurred during the period in which Canada was in the process of eliminating its subsidy payments to fishermen and processors. Prior to March 31, 1978, the Canadian subsidies amounted to 17.22 percent of the f.o.b. value of Canadian exports; from April 1, 1978 through September 30, 1978, the subsidies amounted to 5.22 percent, and since October 9, 1978, the subsidy has amounted to 1.22 percent or less.[39] U.S. imports from the Atlantic region of Canada [40] of whole groundfish subject to countervailing duty waivers into the Northeastern States increased from 2.1 million pounds in 1975 to 2.7 million pounds in 1976, fell to 2 million pounds in 1977 and rose to 3.7 million pounds in 1979.[41] Imports into the Northeastern States from the Atlantic region of Canada of filleted groundfish subject to countervailing duty waivers fell from 93 million pounds in 1975 to 78 million pounds in 1977 and rose to 111 million pounds in 1979.[42] Combined imports from eastern Canada of the whole and filleted groundfish subject to countervailing duty waivers rose from 93 million pounds, fillet weight, in 1975 to 101 million pounds in 1978.

The ratio to U.S. consumption of imports of whole groundfish subject to countervailing duty waivers from the Atlantic region of Canada into the Northeastern States rose from 0.9 percent in 1975 to 1.3 percent in 1976, fell to 0.9 percent in 1977 and 1978, and rose to 1.5 percent in 1979.[43] The ratio of such imports to total U.S. consumption of whole groundfish amounted to 0.9 percent in 1975, 1.1 percent in 1976, 0.8 percent in 1977 and 1978, and 1.4 percent in 1979.[44]

The ratio of imports of filleted groundfish from the Atlantic region of Canada subject to countervailing duty waivers to consumption in the Northeastern States fell from 40.3 percent in 1975 to 30.3 percent in 1977 and rose to 36.3 percent in 1979.[45] The ratio of such imports to total U.S. consumption amounted to 37.7 percent in 1975, 32.7 percent in 1976, 28.3 percent in 1977, 33.1 percent in 1978 and 34.0 percent in 1979.[46]

The ratio of combined imports from the Atlantic region of Canada of whole and filleted groundfish subject to countervailing duty waivers to consumption in the Northeastern States amounted to 23.6 percent in 1975 and 22.5 percent in 1978.[47] The ratio of such imports to total U.S. consumption fell from 22.7 percent in 1975 to 17.7 percent in 1976, before rising to 21.3 percent in 1978.[48]

Price effects of subsidized imports.—There are no meaningful indications of price suppression or price depression for domestic producers of the products under investigation. The bulk of the importers' product is sold in the frozen form, and the bulk of the domestic product is sold in the fresh form. Frozen fish products are ordinarily sold at a lower price than fresh fish products because of quality, taste, and texture considerations.[49] For example, frozen fillets of ocean perch and frozen flatfish fillets are sold for substantially lower prices than are fresh fillets of the same species of fish, even when both are from the same sources.[50]

Between January 1976 and January 1979, the east coast prices of ocean perch rose by 70 percent, and the price of yellowtail flounder rose by 33 percent. In comparison, the Bureau of Labor Statistics index of meat, fish, and poultry prices rose by only 26 percent during the period. December 1979 prices for most of the subject fish were at record levels. In general, 1979 prices for whole fish were at higher levels than in previous years, and prices of domestic fillets have risen sharply in recent years despite increased imports from Canada.[51] These factors indicate the absence of price suppression or price depression in the domestic industry.

Impact of subsidized imports on the affected industry.—Section 771 of the act instructs the Commission to examine, with respect to the impact of the subsidized imports on the domestic industry, all relevant economic factors including, but not limited to, actual and potential decline in output, sales, market share, profits, productivity, return on investments, utilization of capacity, factors affecting domestic prices, and

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Commission with considerable discretion in determining on a case-by-case bases whether or not to make its finding based on a regional industry.

[37] The most recent year for which data are available for the subject imports, production, consumption, and the market penetration by imports for the Northeastern market, on a combined basis, is 1978.

[38] Imports of the fish products from Canada covered by countervailing duty waivers are substantially smaller in volume and account for lower import penetration in the national U.S. market on the east coast U.S. market than do other imports of similar products from Canada and from other countries. These other imports have not been found injurious in *Certain Fish from Canada . . .*, Inv. No. 303–TA–3 (1978) and *Certain Fish and Certain Shellfish from Canada . . .*, Inv. No. 303–TA–9 (1979).

[39] Staff report at A–7.

[40] Virtually all imports from the Atlantic region of Canada are destined for consumption in the Northeastern States.

[41] Staff report at A–112, table J–15.

[42] Staff report at A–112, table J–16.

[43] Staff report at A–112, table J–15.

[44] Staff report at A–48 and A–112, tables 14 and J–15.

[45] Staff report at A–112, table J–16.

[46] Staff report at A–48 and A–112, tables 15 and J–16.

[47] Staff report at A–113; table J–17.

[48] Staff report at A–49 and A–113; tables 16 and J–17.

[49] Staff report at A–11, A–58, and A–60.

[50] Staff report at A–59 and A–61. Specific price comparisons between the domestic and imported products are not possible to make in these views because of the confidentiality of the information available to the Commission.

[51] Staff report at A–51–61, tables 17–22.

actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment. With the sole exception of inventories, none of the indicators for which adequate data are available show any injury to the domestic industry.

U.S. landings of whole groundfish of species subject to countervailing duty waivers rose irregularly from 223 million pounds, round weight, in 1974 to 255 million pounds in 1978 but fell slightly to 249 million pounds in 1979.[52] East coast landings of whole groundfish of the species subject to countervailing duty waivers, rose annually from 180 million pounds, round weight, in 1975 to 211 million pounds, round weight, in 1979.[53]

U.S. production of filleted groundfish of the species subject to countervailing duty waivers rose from 46 million pounds, fillet weight, in 1974 and 1975, to 73 million pounds, fillet weight, in 1979.[54] East coast production also increased annually, from 32 million pounds in 1975 to 58 million pounds in 1979.[55]

U.S. capacity to catch groundfish of the types under investigation, in numbers of fishing vessels, has expanded in recent years, but conservation quotas on the east coast, the licensing of foreign vessels to fish within the 200 mile limits,[56] and the sharing of the limited resources among an expanded number of vessels may have prevented the U.S. fishing fleet from operating at full capacity. On the west coast, trip limits by processors, because supply was outstripping demand, have resulted in declining capacity utilization.[57]

U.S. inventories of frozen ocean perch fillets in December 1979 were higher than in any year since 1973, except 1974. U.S. inventories of frozen cod fillets were higher in December 1979 than in December of 1978 or 1976, but were lower than the December 1977 levels. Inventories of frozen haddock fillets were lower in December 1979 than in any preceding year of the 1973–79 period.[58] Increases in frozen inventories may be due to the expanded capacity of the domestic fleet which, on the west coast, has supplied fresh fish in excess of demand.[59]

U.S. employment in the domestic groundfish industry has probably expanded in recent years in line with the expansion of production and the expansion of the fishing fleet. In Massachusetts, employment increased by 11 percent between 1974 and 1977, and the number of Gloucester fishermen grew from 650 in 1976 to 1,000 in 1978.[60]

No financial data were submitted in this investigation, nor were any financial statistics received from east coast groundfishermen during the Commission's recent investigation of fish under section 201 of the Trade Act of 1974. Therefore no judgment can be made as to their profits. Six responses received from west coast fishermen indicated increasing profits from 1975 through 1978 and a reduction in profits in 1979.[61] The reduced profits for the west coast fishermen may be attributable to trip limits established by processors and may not be reflective of profits of east coast fishermen.[62]

The fishermen in the northeastern region have been repeatedly requested to supply financial data to the Commission and they have repeatedly failed to comply with the Commission's requests. Section 771(7)(E)(ii) of the Tariff Act of 1930 states that the presence or absence of any factors which the Commission is required to evaluate under subparagraph (C) or (D) shall not necessarily give decisive guidance with respect to the determination by the Commission of material injury. Although the Commission undertakes its own investigations and cannot shirk this obligation by concluding that a party has failed to presuade it of the correctness of its position, a certain burden is placed upon the petitioner. That burden is the obligation of coming forward with necessary information, an obligation which the petitioners in this investigation have obviously failed to meet.[63]

U.S. fishermen and fish processors have alleged sales lost to imports of fish from Canada. However, confirmation of the lost sales was not possible because no customer names were provided.

Conclusion. I have not been able to find any persuasive indications of material injury in this investigation. Moreover, no casual linkage has been shown between any alleged injury and the subject imports which are benefitting from a rather small subsidy. Therefore, I conclude that an industry in the United States is neither materially injured nor threatened with material injury by reason of imports of fish, fresh, chilled, or frozen, whether or not whole, but not otherwise prepared or preserved, provided for in TSUS items 110.35, 110.50, and 110.55, from Canada, which are the subject of waived countervailing duty orders.

By Order of the Commission.

Issued: May 19, 1980.

Kenneth R. Mason,

Secretary.

[FR Doc. 80-15682 Filed 5-21-80; 8:45 am]

BILLING CODE 7020-02-M

[52] Staff report at A-48, table 14.

[53] Staff report at A-112, table J-15.

[54] Staff report at A-48, table 15.

[55] Staff report at A-112, table J-16.

[56] Staff report at A-18–A-21.

[57] Staff report at A-120 and A-121.

[58] Staff report at A-33 and A-34.

[59] See "Views of the Commission," *Certain Fish . . .*, Investigation No. TA-201-41, USITC Publication 1028, (January 1980) at 6 and 8.

[60] Staff report at A-34.

[61] Staff report at A-39.

[62] The Commission is lacking information regarding return on investment wages, cash flows, or the ability to raise capital, as well as the above cited financial data on east coast fishermen.

[63] See "Additional views of Commissioners Stern and Calhoun," *Countertop Microwave Ovens From Japan . . .*, Investigation No. 731-TA-4 (Preliminary), USITC Publication 1033 (February 1980), at 5 and 6; see also S. Rept. No. 96-249 (96th Cong., 1st sess.) 1979, at 88.

DEPARTMENT OF JUSTICE

Antitrust Division

United States v. CBS Inc.; Proposed Final Judgment and Competitive Impact Statement

Notice is hereby given pursuant to the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16(b) through (h) that a proposed Final Judgment, Stipulation And Order, and Competitive Impact Statement have been filed with the United States District Court for the Central District of California in *United States* v. *CBS Inc.*, Civil No. 74-3599-RJK. CBS has consented to the Proposed Judgment. The complaint in this action alleged that in violation of the Sherman Act, defendant had entered into restrictive contracts and had combined with its affiliated CBS Television Network to restrain and monopolize prime time entertainment programming exhibited on that network. The Judgment would: limit for a period of 10 years, the amount of television entertainment programming that CBS may produce for use on its Network; prohibit CBS from conditioning access to its television network upon an independent program supplier's grant of any other right or interest to CBS; limit for periods of 10 or 15 years the contractual rights which CBS may obtain in connection with network exhibition of a program including limitations on CBS's right to exclusive use of a program; enjoin CBS from obtaining any right or interest in television entertainment programs produced by others, except for the right to network exhibition; enjoin CBS from engaging in domestic syndication of any television entertainment programs, from engaging in foreign distibution of programs other than those produced abroad or by CBS, limit CBS's ability to

enforce rights in any agreements with talent so as to prevent such talent from being able to provide services in connection with program series switching to other networks or television stations; and prohibit for a period of 10 years reciprocal program arrangements between CBS and either American Broadcasting Companies, Inc., or National Broadcasting Company, Inc. Certain of these provisions will not go into effect until similar relief is obtained in the companion action against ABC. A Final Judgment was entered in the NBC case on November 28, 1977, and it in large part forms the basis for the proposed CBS Judgment. The competitive Impact Statement describes the antitipated effects of the proposed Judgment on competition, and evaluates the alternative relief proposals actually considered by the Untied States. Public comment is invited within the statutory 60 day time period. Such comments and responses thereto will be published in the **Federal Register** and filed with the Court. Comments should be directed to Bernard M. Hollander, Chief, Judgment Enforcement Section, Antiturst Division, Department of Justice Room 3706, Washington, D.C. 20530.

Joseph H. Widmar,

Director of Operations.

U.S. District Court, Central District of California

United States of America, Plaintiff v. *CBS Inc.*, Defendant.

Civil No. 74–3599–RJK.

Stipulation and Order.

Filed: May 8, 1980.

It is stipulated by and between the undersigned parties, by their respective attorneys and subject to the approval of the Court, that:

1. A Final Judgment in the form hereto attached may be filed and entered by the Court, upon the motion of either party or upon the Court's own motion, at any time after compliance with the requirements of the Antitrust Procedures and Penalties Act (15 U.S.C. # 16) and without further notice to any party or other proceedings, provided that plaintiff has not withdrawn its consent which it may do at any time before the entry of the proposed Final Judgment by serving notice thereof on defendant and by filing that notice with the Court.

2. In the event plaintiff withdraws its consent or if the proposed Final Judgment is not entered pursuant to this Stipulation and Order, this Stipulation and Order and the proposed Final Judgment shall be of no effect whatever, and the making of this Stipulation and Order, and the proposed Final Judgment shall be without prejudice to the plaintiff or defendant in this or any other proceeding.

3. This Stipulation and Order shall not stop plaintiff or defendant, or any person, in this or any other action or proceeding, from asserting any issue of fact or law as to the subject matter of Section VI(E)(iii)(e), originally included in the proposed Final Judgment in *United States* v. *National Broadcasting Company, Inc.*, Civil Action No. 74–36010–RJK (C.D. Cal.), lodged November 17, 1976, nor shall it constitute any evidence or admission as to any such issue.

Dated: ————.

For the Plaintiff: Sanford M. Litvack, *Assistant Attorney General:* Joseph H. Widmar, *Director of Operations.*

For the Defendants: Robert S. Rifkind, David Boies, *Attorneys for Defendant CBS, Inc.;* Bernard M. Hollander, Barry J. Kaplan, Bernard J. O'Reilly, Ruth Dicker, James R. Kahn, John A. Kolar, Sandra L. Willis, *Attorneys for the United States.*

Order

IT IS SO ORDERED this 8th day of May, 1980.

———————

United States District Judge.

U.S. District Court, Central District of California

United States of America, Plaintiff, v. *CBS Inc.*, Defendant.

Civil Action No. 74–3599–RJK.

Filed: May 8, 1980.

Final Judgment

Plaintiff, United States of America, having filed its complaint herein on December 10, 1974, and defendant, CBS Inc., having filed its answer herein on December 30, 1974, by their respective attorneys, each having consented to the entry of this Final Judgment, without trial or adjudication of any issue of fact or law herein, and without this Final Judgment constituting any evidence against or admission by any party with respect to any issue of fact or law in any action or proceeding;

Now, therefore, before any testimony has been taken, the Court being advised and having considered the matter, it is hereby:

Ordered, adjudged and decreed as follows:

I.

This Court has jurisdiction of the subject matter of this action and of the parties hereto. The complaint states a claim upon which relief may be granted against defendant under the provisions of Sections 1 and 2 of the Act of Congress of July 2, 1890, 15 U.S.C. §§ 1, 2 entitled "An act to protect trade and commerce against unlawful restraints and monopolies," as amended, commonly known as the Sherman Act.

II.

As used in this Final Judgment:

(A) "Person" means an individual, partnership, corporation or any other form of legal or business entity.

(B) "CBS" means CBS Inc. and its subsidiaries.

(C) A "person controlling CBS" means any person owning at least ten percent (10%) of, or a controlling share of, the outstanding voting stock of CBS.

(D) "CBS Television Network" means a CBS owned or operated business which provides television programs and related advertising messages to affiliated television broadcast stations.

(E) "Entertainment Program" means any program, including a feature film, exhibited or intended to be exhibited on television other than the following programs: news, public affairs, agricultural, religious, instructional, and sports (as those terms are defined in Appendix A to this Final Judgment). The inclusion of incidental or occasional entertainment or non-entertainment elements in a program or program series shall not be deemed to change the classification of the program or program series.

(F) "Independent Program Supplier" means a person who produces or offers one or more entertainment programs for network exhibition, other than CBS, a person controlling CBS, or a person in which CBS or a person controlling CBS has an ownership interest.

(G) "Network Exhibition" means the initial and repeat exhibitions of a television program on the CBS television network during the term of any agreement between CBS and an independent program supplier for such exhibition of such program.

(H) "Prime Time Hours" means the hours from 6:00 p.m. to 11:00 p.m. in the Eastern and Pacific Time Zones of the United States, and the hours from 5:00 p.m. to 10:00 p.m. in the Central and Mountain Time Zones of the United States.

(I) "Daytime Hours" means the hours from 9:00 a.m. to 6:00 p.m. in the Eastern and Pacific Time Zones of the United States, and the hours from 9:00 a.m. to 5:00 p.m. in the Central and Mountain Time Zones of the United States.

(J) "Fringe Hours" means the hours from 11:00 p.m. to 2:00 a.m. and 6:00 a.m. to 9:00 a.m. in the Eastern and Pacific Time Zones of the United States, and the hours from 10:00 p.m. to 1.00 a.m. and 6:00 a.m. to 9:00 a.m. in the Central amd Mountain Time Zones of the United States.

(K) "Television Broadcast Station" means a station licensed as a television broadcast station by the Federal Communications Commission.

(L) "CBS Production Facilities" means studio facilities, including but not limited to, scenery, props and other production equipment, which are used for the production of entertainment programs exhibited or intended to be exhibited on television, and which are owned or leased by CBS, by any person controlling CBS, or by any person in which CBS or any person controlling CBS has any ownership interest.

(M) "Stripping" means the broadcasting of more than one (1) episode per week of a television program series.

(N) "Broadcast Year" means the television broadcast year customarily commencing in September of one year and continuing until September of the following year.

III.

The provisions of this Final Judgment are applicable to CBS, to any person controlling CBS and to each of CBS's directors, officers, agents, employees, subsidiaries, successors, and assigns, and to all persons in active concert or participation with any of them, who receive actual notice of this Final Judgment by personal service or otherwise.

IV.

CBS is enjoined and restrained from:

(A) Acquiring any financial or proprietary right or interest in the exhibition, distribution, or other commercial use of any television program produced wholly or in part by an independent program supplier, other than the right to the Network Exhibition of the program, except as provided in Sections VIII(A)–(D) of this Final Judgment, *provided that* an agreement granting CBS the right to Network Exhibition may include provisions concerning subject matters incident to the licensing and use of network programs, of which the following are examples: geographic scope and manner of transmission and delivery of network broadcasts; approval of creative elements and program content; technical quality and delivery requirements; union and Equal Employment Opportunity Act compliance; act of God; force majeure; preemptions; obligation to pay for, rather than play, programs; number of episodes or programs ordered; assignability; warranties; indemnification; completion bonds; security agreements and financing statements; insurance; public morals; advertising conflicts; advertising, promotion and publicity of programs; audience testing and screening; cancellation; exclusivity for talent and creative personnel (except as limited by Section VI(I) herein; see also Section VIII(E) herein); exclusive exhibition rights (except as limited by Sections VI(E)(ii)–(iii) herein); plates (except as limited by Section VI(F) herein); options (except as limited by Sections VI(E)(i), VI(F) and VI(G) herein); first negotiation and first refusal rights (except as limited by Sections VI(E)(i) and VI(G) herein); spinoffs (except as limited by Section VI(G) herein); repeats (except as limited by Section VI(H) herein); same day protection against once weekly syndication programs and theatrical feature films; title protection for the length of the applicable contract or contracts; format and continuing character protection; breach; and remedies, so long as any such provision does not violate the antitrust laws.

(B) Selling, licensing, or distributing entertainment programs to television broadcast stations for non-network television exhibition (or otherwise engaging in the business commonly known as "syndication"), or to foreign television stations or networks, except as provided in Section VIII(D) of this Final Judgment.

V.

(A) CBS is enjoined and restrained for a period of ten (10) years from the effective date of this Section from offering for CBS network broadcast during Prime Time Hours, Daytime Hours or Fringe Hours, more than two and one-half (2½) hours per week in Prime Time Hours, more than eight (8) hours per week in Daytime Hours, and more than eleven (11) hours per week in Fringe Hours, determined on the average per compliance period, of entertainment programs obtained from sources other than independent program suppliers, *provided that* during each compliance period CBS may add to the total number of allowable hours of entertainment programming from sources other than independent program suppliers, two (2) non-regularly scheduled special programs, and *provided further that* in any compliance period, CBS may, during Fringe Hours, increase the number of allowable hours of entertainment programming from sources other than independent program suppliers by reducing to the same extent the number of allowable hours of such programming in Prime Time Hours and/or Daytime Hours.

(B) For purposes of this Section V, compliance periods shall be consecutive semi-annual periods commencing at the start of each broadcast year. Compliance reports in the form set forth in Appendix B to this Final Judgment shall be submitted by CBS to plaintiff within thirty (30) days following the conclusion of each compliance period.

VI.

CBS is enjoined and restrained:

(A) From purchasing or offering to purchase from an independent program supplier the right to Network Exhibition of one or more entertainment programs upon the condition, express or implied, that CBS, or any person controlling CBS, will obtain any other right or interest from said supplier, except as to contractual provisions concerning subject matters incident to the licensing and use of network programs as provided in Section IV(A) of this Final Judgment.

(B) For a period of fifteen (15) years from the effective date of this Section, from purchasing or offering to purchase from an independent program supplier any right to the exhibition of a program, other than a live program, as a CBS television network entertainment program upon the condition, express or implied, that said supplier produce the program, in whole or in part, utilizing CBS production facilities.

(C) For a period of fifteen (15) years from the effective date of this Section from agreeing with an independent program supplier that said supplier use CBS production facilities to produce a program, other than a live program, as a CBS television network entertainment program for a period in excess of the time required to produce episodes for one (1) broadcast year, *provided that* CBS and said supplier are not precluded each year from negotiating and contracting for additional periods not to exceed one (1) year each.

(D) For a period of ten (10) years from the effective date of this Section from purchasing or offering to purchase from National Broadcasting Company, Inc. ("NBC") or American Broadcasting Companies, Inc. ("ABC") any right to Network Exhibition of any entertainment program upon the condition, express or implied, that NBC or ABC agrees to purchase or offers to purchase a right to network exhibition of any entertainment program produced or controlled by CBS.

(E) For period of fifteen (15) years from the effective date of this Section from:

(i) Acquiring from an independent program supplier options for Network Exhibition of a prime time network entertainment program series exercisable for a period in excess of four (4) years from the date of first broadcast of an episode of such program as part of a CBS prime time television network entertainment program series, and the balance of any broadcast year in which such four (4) year period ends, *provided that:* (a) with respect to any such program series which commences at the start of a broadcast year, nothing herein shall prevent CBS, at any time[s] in or after the Spring of the first broadcast year, from negotiating new provisions which may include the purchase of an extension of the option period, so long as the maximum term at no time exceeds four (4) years from the date such new provisions are entered into, except that where such new provisions are entered into at or after the time when CBS exercises its option for the following broadcast year the maximum term shall be four (4) years from the start of such following broadcast year; and (b) with respect to any such program series which commences at a time other than the beginning of a broadcast year, nothing herein shall prevent CBS, at any time[s] after twelve months subsequent to the date of first broadcast, from negotiating new provisions which may include the purchase of an extension of the option period, so long as the maximum term at no time exceeds four (4) years, and the balance of any broadcast year in which such four (4) years period ends, and *provided further that* nothing herein shall prevent CBS from acquiring first negotiation and first refusal rights for new agreements with said supplier so long as any such first refusal rights shall not be more favorable to CBS than a contractual obligation which prevents said supplier from entering into an agreement with a person other than CBS on terms less favorable to said supplier than said supplier's last offer to CBS without giving CBS the first opportunity to meet such terms, and *provided further that* nothing herein shall prevent CBS from entering into contractual provisions incident to the licensing and use of network programs as provided in Section IV(A) of this Final Judgment.

(ii) Acquiring from an independent program supplier, after thirty (30) days from the entry of this Final Judgment, exclusive exhibition rights for prime time network entertainment program series episodes for which CBS has a contractual right to Network Exhibition, in excess of the following:

(a) For prime time use, the duration of any contract term or terms by which CBS acquires the right to Network Exhibition;

(b) For non-prime time stripping on television broadcast stations, four (4) years from the first prime time episode broadcast; and

(c) For all other broadcast uses, three (3) years from the first prime time episode broadcast,

Provided that nothing herein shall prevent CBS from negotiating for and acquiring rights, including exclusive rights, for stripping and once weeking exhibition to be utilized after the periods of exclusivity set forth above, so long as negotiation for and acquisition of such rights takes place after CBS has agreed to order episodes of such program for the first year of broadcast as a CBS prime time television network entertainment program series, and *provided further that* nothing herein shall prevent CBS from acquiring exclusive exhibition rights to series episodes

for the broadcast year for which such episodes are ordered.

(iii) Acquiring from an independent program supplier, after thirty (30) days from the entry of this Final Judgment, exclusive exhibition rights for theatrical feature films for which CBS has a contractual right to Network Exhibition, against:

(a) Theatrical and non-theatrical direct projection;

(b) Closed circuit TV in non-residential hotels, motels, bars, restaurants, hospitals and similar non-residential institutions;

(c) Passenger-carrying vehicles;

(d) Video discs, cartridges or cassettes or other such equipment.

(F) For a period of ten (10) years from the effective date of this Section, from acquiring from an independent program supplier a first year pick-up option for exhibition of a prime time network entertainment program series based on a program designated by CBS and said supplier as a "pilot program" ("pilot") which is exercisable after the following times:

(i) Where CBS has not advanced said supplier any part of the costs of pilot development, subsequent to the earliest date that the agreement contemplates that broadcast of the series may commence; and

(ii) Where CBS has advanced said supplier any part of the costs of pilot development, more than one (1) year after delivery to CBS of the completed pilot, *provided that* as to those series which CBS does not include in the network schedule at the earliest date that the agreement contemplates that broadcast of the series may commence:

(a) For those pilot which have been delivered to CBS between October 2 on one year and April 1 of the following year, CBS must designate by June 1 of the latter year sixty-five percent (65%) of such pilots as to which CBS will release its option for series exhibition upon payment to CBS of all of CBS' unrecouped costs for the development of such pilots; and

(b) For those pilots which have been delivered to CBS between April 2 and October 1 of the same year, CBS must designate by January 1 of the following year sixty-five percent (65%) of such pilots as to which CBS will release its option for series exhibition upon payment to CBS of all of CBS' unrecouped costs for the development of such pilots;

And *provided further that* CBS may purchase additional first year pick-up options for series which CBS has not designated for release and for series which CBS has designated for option release but which CBS wishes to retain, so long as such additional options are acquired, for pilots described in Section VI(F)(ii)(a), after June 1, or after the announcement of the CBS television network schedule for the next broadcast year, whichever is later, and, for pilots described in Section VI(F)(ii)(b), after December 1, and so long as such additional options do not exceed increments of six (6) months.

For purposes of this Section VI(F):

A pilot shall be deemed to have been delivered to CBS when CBS has received, in the case of a film pilot, an answer print, and, in the case of a tape pilot, a program complying with customary tape requirements.

In computing the number of pilots to be released under Sections VI(F)(ii)(a) and (b), any fraction of a pilot shall be rounded off to the next lower whole number.

Unrecouped costs shall be deemed to be the amount of money advanced by CBS to an independent program supplier for the development of a pilot, except that if the CBS television network broadcasts a pilot once, two-thirds (⅔) of CBS's costs shall be deemed to have been recouped, and if CBS broadcasts a pilot more than once, all of CBS's costs shall be deemed to have been recouped.

(G) For a period of ten (10) years from the effective date of this Section, from acquiring from an independent program supplier rights in excess of first negotiation and first refusal rights for a spinoff involving a non-continuing character.

For purposes of this Section VI(G):

First refusal rights shall not be more favorable to CBS than a contractual obligation which prevents said supplier from entering into an agreement with a person other than CBS on terms less favorable to said supplier than said supplier's last offer to CBS without giving CBS the first opportunity to meet such terms.

A non-continuing character shall be deemed to mean one who appeared in no more than twenty-five percent (25%) of the original episodes of the program upon which such spinoff is based during the twelve (12) months prior to the time exhibition rights to such spinoff are offered for licensing by said supplier.

(H) For a period of ten (10) years from the effective date of this Section, from purchasing from an independent program supplier a right to first run Network Exhibition of any television entertainment program series which includes the right to exhibit repeats of episodes in years subsequent to the broadcast year of initial exhibition of such episodes, *provided that* repeat rights to three (3) initial episodes per broadcast year of each such program series may be purchased for exhibition in subsequent broadcast years as part of the right to Network Exhibition, and *provided further that* additional rights to repeats may be purchased for exhibition in subsequent broadcast years, so long as negotiation for and acquisition of such additional repeat rights takes place after CBS has agreed to order episodes of such program series for the first year of broadcast as a CBS television network entertainment program series, and *provided further that* the limitation as to the use of repeats contained in this Section VI(H) shall not apply to (i) made-for-television and theatrical feature films, (ii) specials, and (ii) cartoons or other children's programs.

(I) For a period of ten (10) years from the effective date of this Section, from asserting or exercising any right under any agreement for the services of any continuing performing or essential creative talent providing services in connection with a particular prime time entertainment program series licensed to CBS so as to preclude such talent from being able to continue to provide services in connection with that program series if licensed to any other licensee up to and including ninety (90) days after the expiration of CBS's option[s] for that series.

VII.

The following Sections of this Final Judgment shall not take effect until similar injunctive relief is obtained in a Final Order, Judgment or Decree entered against ABC in *United States v. American Broadcasting Companies, Inc.*, Civil Action No. 74–3600–RJK (C.D. Cal.) which is not appealable or from which no timely appeal is taken: V, VI(C), VI(E)(i), and VI (F) through (I) and VIII(E).

VIII.

Nothing contained in this Final Judgment shall be construed:

(A) To prohibit CBS from acquiring rights for non-network broadcast of programs by CBS owned and operated television broadcast stations where such rights are not acquired, directly or indirectly, in connection with the negotiation for or acquisition of rights including renewal rights, for the exhibition, distribution or use of any program as a CBS television network program.

(B) To prohibit CBS from seeking repayment, in whole or in part, of money or other consideration loaned, advanced or furnished by CBS in connection with the development or production of a television network program or of a project or activity that may result in a television network program, to the extent of the amount loaned, advanced or furnished, including interest.

(C) To prohibit CBS from acquiring rights with respect to non-broadcast uses, including but not limited to publication of books or music, where such rights are not acquired, directly or indirectly, in connection with the negotiation for or acquisition of rights, including renewal rights, for the exhibition, distribution or use of any program as a CBS television network program.

(D) To prohibit CBS from selling, licensing, or distributing outside the United States programs (i) produced in foreign countries and not included in CBS's television network schedule, where the acquisition of such distribution rights is not conditioned, directly or indirectly, upon the negotiation for or acquisition of rights, including renewal rights, for the exhibition, distribution or use of any program as a CBS television network program, or (ii) produced by CBS, by any person controlling CBS, or by any person in which CBS or any person controlling CBS has any ownership interest.

(E) To preclude plaintiff, upon a showing that CBS has used exclusive rights to performing or creative talent to circumvent Section VI(F) of this Final Judgment, from applying to the Court for additional relief under this Judgment against such conduct, provided that such additional relief would not place CBS at a competitive disadvantage with respect to ABC or NBC.

IX.

If a Final Order, Judgment or Decree or modification thereof is entered with respect to ABC in *United States v. American Broadcasting Companies, Inc.*, Civil Action No. 74–3600–RJK (C.D. Cal.), or with respect to NBC in *United States v. National Broadcasting Company, Inc.*, Civil Action No. 74–3601–RJK (C.D. Cal.), which is not appealable or from which no timely appeal is

taken, which shall order or decree for either ABC or NBC injunctions different in terms or provisions than those required by this Final Judgment, or which shall result in the dismissal of either or both of such actions, CBS may apply to the Court and shall be granted a modification of or relief from any terms set forth herein as may be necessary to prevent CBS from being placed at a competitive disadvantage with respect to ABC or NBC.

(A) Within thirty (30) days after the entury of this Final Judgment, CBS shall furnish to its officers, directors, and appropriate employees and agents a copy of this Final Judgment, and each year for a period of ten (10) years thereafter CBS shall furnish a copy to all new officers, directors and appropriate employees and agents. CBS shall maintain a file listing all persons to whom it has furnished such copies.

(B) Within thirty (30) days after entry of this Final Judgment and once each year during the succeeding ten (10) calendar years following entry of this Final Judgment, CBS shall send a copy of this Final Judgment to the last known address of each independent program supplier known to have offered any entertainment program to CBS for inclusion in its schedule of CBS television network programs within the preceding five (5) years and to each person listed in the then current issue of Television Factbook as a provider of television production facilities.

XI.

(A) For the purpose of determining or securing compliance with this Final Judgment, duly authorized representatives of the Department of Justice, upon written request of the Attorney General or the Assistant Attorney General in Charge of the Antitrust Division, and on reasonable notice to CBS made to its principal office, shall be permitted, subject to any legally recognized privilege:

(1) access during the office hours of CBS to all books, ledgers, accounts, coorespondence, memoranda, and other records and documents in the possession or under the control of CBS relating to any matter contained in this Final Judgment; and

(2) subject to the reasonable convenience of CBS and without restraint or interference by it, the right to interview officers or employees of CBS, who may have counsel present, regarding any such matter.

(B) CBS, upon written request of the Attorney General or the Assistant Attorney General in Charge of the Antitrust Division, made to its principal office, shall submit such written reports with respect to any of the matters contained in this Final Judgment as from time to time may be requested.

No information obtained by the means provided in this Section XI shall be divulged by any representative of plaintiff to any person other than a duly authorized representative of the Executive Branch of the United States, except in the course of legal proceedings to which the United States is a party, or for the purpose of securing compliance with this Final Judgment or as otherwise required by law.

XII.

Jurisdiction is retained by this Court for the purpose of enabling either party to this Final Judgment to apply to this Court at any time for such further orders and directions as may be necessary or appropriate for the construction or modification of any of the provisions thereof, for the enforcement of compliance therewith, and for the punishment of violations thereof.

XIII.

Entry of this Final Judgment is in the public interest.

Dated: May 8, 1980.

United States District Judge.

Appendix A [1]

(a) "Agricultural programs" include market reports, farming, or other information specifically addressed, or primarily of interest, to the agricultural population.

(b) "News programs" include reports dealing with current local, national, and international events, including weather and stock market reports; and when an integral part of a news program, commentary, analysis, and sports news.

(c) "Public affairs programs" include talks, commentaries, discussions, speeches, editorials, political programs, documentaries, forums, panels, round tables, and similar programs primarily concerning local, national, and international public affairs.

(d) "Religious programs" include sermons or devotionals; religious news; and music, drama, and other types of programs designed primarily for religious purposes.

(e) "Instructional programs" include programs (other than those classifed under Agricultural, News, Public Affairs, Religious or Sports) involving the discussion of, or primarily designed to further an appreciation or understanding of, literature, music, fine arts, history, geography, and the natural and social sciences; and programs devoted to occupational and vocational instruction, instruction with respect to hobbies, and similar programs intended primarily to instruct.

(f) "Sports programs" include play-by-play and pre- or post-game related activities and separate programs of sports instruction, news or information (e.g., fishing opportunities, golfing instructions, etc.).

Appendix B

Compliance Report—CBS Produced Programs

Compliance Period _____
No. weeks _____

Prime Time Hours

Entertainment:

Program name	Number minutes per week	Number weeks offered for network broadcast

Non-Entertainment:

Program name	Number minutes per week	Number weeks offered for network broadcast

Daytime Hours

Entertainment:

Program name	Number minutes per week	Number weeks offered for network broadcast

Non-Entertainment:

Program name	Number minutes per week	Number weeks offered for network broadcast

Fringe Hours

Entertainment:

Program name	Number minutes per week	Number weeks offered for network broadcast

Non-Entertainment:

Program name	Number minutes per week	Number weeks offered for network broadcast

[1] Taken from 47 CFR § 73.670, n. 1 (1975).

U.S District Court, Central District of California

United States of America, Plaintiff, v. *CBS INC.,* Defendant.

Civil No. 74–3599–RJK.

Filed: May 8, 1980.

Competitive Impact Statement

Pursuant to Section 2(b) of the Antitrust Procedures and Penalties Act [15 U.S.C. § 16(b)–(h) Pub. L. 93–528 (December 21, 1974)], the United States of America hereby files this competitive impact statement relating to a proposed consent judgment in the above-entitled action to be entered against the defendant, CBS Inc. ("CBS"). Entry of the proposed judgment should not, of course, bar the Government from bringing another action involving any aspect of CBS's operations should the facts warrant such an action in the future.

This proposed judgment is based in large part on the Final Judgment entered on November 28, 1977, in *United States v. National Broadcasting Company, Inc.,* 74–3601–RJK (C.D. Cal.).

(1) *Nature and purpose of the proceeding.*

This action is one of three filed on December 10, 1974, against each of the nationwide commercial television networks, [1] charging that each had combined with its affiliated stations to use its control over access to network air time to restrain and monopolize prime time television entertainment programming in violation of Sections 1 and 2 of the Sherman Act (15 U.S.C. §§ 1 and 2). This suit is similar to an earlier suit against CB, filed on April 14, 1972, which, with suits against the other two

[1] In addition to CBS, complaints were filed against American Broadcasting Companies, Inc. ("ABC") and National Broadcasting Company, Inc. ("NBC").

networks (ABC and NBC), was dismissed without prejudice to new filings by the Court on November 13, 1974. CBS's news, public affairs and sports programming are not involved in either this or the previous suit.

The complaint alleges that CBS used its control over access to the broadcasting time of the CBS Television Network during prime evening hours for the following purposes: to exclude from network broadcast those entertainment programs in which CBS had no financial interest; to compel independent program suppliers to grant to CBS financial interests in television programs which it accepted for broadcast; to refuse to sell air time to advertisers and other independent program suppliers seeking to have their own programs shown on the CBS network; to control the prices paid by CBS for television exhibition rights to motion picture feature films and to obtain competitive advantages over other producers and distributors of television entertainment programs and of motion picture feature films. In the complaint, the Government sought to have CBS enjoined from the following practices: obtaining any interest, except for the right of network exhibition, in independently produced programs; engaging in syndication of any television entertainment programs; producing entertainment programs itself; and using its control over access to the CBS Television Network to foreclose competition or obtain an unfair competitive advantage in any other field. The proposed judgment provides relief similar and substantially equivalent to that requested in the complaint.

(2) Practices and events giving rise to the alleged violation of the antitrust laws.

CBS is a substantial purchaser, exhibitor and producer of commercial television programs. There are approximately 700 television stations in the United States which are licensed by the Government to broadcast commercial television programs. CBS operates a national television network which provides television programs and related advertising messages to approximately 200 affiliated television stations located throughout the United States and to the five television stations which are owned and operated by CBS (in New York City, Los Angeles, Chicago, Philadelphia and St. Louis).

Commercial television programs are created and produced by television networks, television stations, and independent program suppliers, including motion picture studios. In 1973, the three nationwide commerical television networks (CBS, ABC, and NBC) spent more than $1,000,000,000 for television programs, of which CBS spent more than $340,000,000. In 1973, total television broadcasting revenues for the aforementioned three networks were in excess of $1,400,000,000, of which CBS received more than $500,000,000.

The value of any television program to its producer, and to an advertiser whose message is broadcast in conjunction with it, depends in large part on the number of television viewers who see the program and observe the commercial messages. CBS, through its affiliated television stations, has control over access to approximately 98 percent of all United States television households for programs which it offers for broadcast. This is because during prime evening hours [2] when television viewing is at its peak, most of the 200 CBS affiliated stations and all the CBS owned and operated stations depend upon CBS for virtually all of their television entertainment programming. In early 1976, for example, CBS's primary affiliates [3] and its owned and operated stations broadcast over 90 percent of the programs regularly offered by the CBS Television Network during prime evening hours.

The commercial value of a television entertainment program is not exhausted by its first network showing. It may also be stripped (broadcast a number of times per week) by a network. Frequently, usually after its network run is completed, a program is distributed to individual television stations in the United States for non-network broadcast (this is generally referred to as syndication). In addition, a program may be distributed to foreign television stations while it is appearing over a domestic television network. Merchandising, literary and music rights in a television program could also provide substantial revenue to the producer.

There is a substantial economic incentive for CBS to gain control of programming on its network, and CBS has exercised its control over access to the viewing public so as to exclude from the CBS Television Network programs controlled by others. One effect of this is to reduce the number of program purchasers with a resultant lessening of competition for television programs. For example, in the 1950's and early 1960's, advertisers were able to purchase television entertainment programs acceptable to CBS from independent program suppliers for broadcast on air time purchased from the CBS Television Network. In November of 1957, approximately 40 percent of all entertainment program series offered by the CBS Television Network during prime evening hours were advertiser-supplied; thus, advertisers constituted a substantial market for independent program suppliers. However, by November, 1967, only 11 percent of all entertainment program series offered by the CBS Television Network during prime evening hours were advertiser-supplied. At the present time, no such series is advertiser-supplied.

CBS embarked upon a policy of replacing advertiser-supplied programming with programs which it controlled through internal production, exclusive long-term network licenses, or talent exclusivity. Often CBS obtained rights or interests in excess of network exhibition. While, in November, 1957, only approximately 49 percent of all prime time entertainment program series offered by the CBS Television Network were programs which CBS produced or in which it had subsidiary rights or interests, such programs constituted 68 percent of all prime time entertainment program series offered by the CBS Television Network in November 1967.

As a result of this situation, which obtained on all three networks, the Federal Communications Commission ("FCC") promulgated rules which forbade CBS, ABC, and NBC from exacting certain financial interests or syndication rights in television programs from independent producers. 47 C.F.R. § 73.658(j).[4] However, despite the FCC financial interest and syndication rules, CBS and the other networks continued to exact from producers such rights as: (1) long-term yearly renewal options for exclusive CBS network exhibition of the program with pre-set license fee escalation rates; (2) exclusive use of the program by CBS as against other communications markets; (3) exclusive rights in CBS with respect to program spinoffs; (4) creative program controls in CBS; (5) CBS's right to all profits from network exhibition of the producer's program; and (6) a CBS right of first refusal at the end of the option period.[5]

Were this case to go to trial, the Government would contend that CBS had used and continues to use its dominance and control over access to the broadcasting time of the CBS Television Network, to condition independent program suppliers' access to said network upon the suppliers' relinquishing valuable rights and interests in their programs, and that this course of conduct violates Sections 1 and 2 of the Sherman Act. The Government would also contend that CBS has favored programs in which it obtained such rights and interests over other programs, with the result that trade and commerce in CBS's prime time television entertainment programming has been illegally restrained and monopolized. Finally, the Government would contend that CBS's unrestricted ability to produce prime time television entertainment programming, together with its control over access to its television network and its past and present restrictive course of conduct, constitutes an unreasonable and unlawful restraint of independent program suppliers' ability to produce and negotiate for distribution and exhibition of their programming.

(3) The proposed consent judgment and its *anticipated effect on competition.*

The proposed judgment is directed at minimizing the substantial advantage CBS has acquired in television programming because of its market power as one of the three nationwide commercial networks, which not only purchase and exhibit but also produce television programs. The structure of the market is such that each of the three networks controls program producers' and advertisers' access to the nation's commercial television audiences, and each network has abused its power by refusing

[2] 6:00 p.m. to 11:00 p.m. in the Eastern and Pacific time zones. 5:00 p.m. to 10:00 p.m. in the Central and Mountain time zones.

[3] A CBS primary affiliate is a television station to which CBS generally offers first call on television programs which it offers for broadcast.

[4] Such rights and interests included distribution rights and profit shares for domestic and foreign syndication of the program, and for merchandising, music and literary rights.

[5] At the same time, similar practices have been followed by ABC and NBC with respect to programming on their networks. The existence of uniform terms and conditions of purchase among the three major networks acts to deprive independent program suppliers of the benefits of network competition for their programs. Moreover, the network practice of obtaining exclusive exhibition rights often occurs at a time when the program is in the idea or script stage and the program supplier has little or no bargaining power.

access to programs which it did not produce or in which it had no financial interest. Consequently, the only meaningful relief that can be obtained short of restructuring the networks is to limit network program production and restrict the program rights that each network may obtain from outside suppliers to the rights essential to networking, which are those incident to the right to exhibit the program. This the proposed CBS judgment seeks to do. It would establish specific outer limits on CBS's own program production and on the type of rights and interests which CBS may acquire from independent program suppliers in addition to the right of network exhibition. This should minimize CBS's incentive to select a program on the basis of financial interests in it. The judgment does not, of course, require independent program producers to grant to CBS particular rights and interests, even to the extent permitted. However, it is anticipated that because of the proposed judgment, the forces of competition would be able to operate more freely on CBS's program procurement practices.

The following is a discussion of the key provisions of the judgment:

Section IV

The proposed judgment would enjoin CBS from acquiring syndication and other distribution rights or profit shares in the non-network exploitation of television entertainment programs produced by others, and would thereby permanently preserve the prohibitions in the FCC's financial interest and syndication rules. To prevent CBS from utilizing its inherent competitive advantage over other domestic syndicators, the proposed judgment would prohibit domestic syndication of programs by CBS, but, consistent with the FCC's rules, would allow CBS-produced programs and certain foreign programs to be distributed by CBS in foreign markets.

Section V

The judgment would enhance competition in television entertainment program production and exhibition by eliminating the possibility that CBS could substantially increase its internal production of its network programs and thereby exclude independent program suppliers. For a period of 10 years it would limit the amount of television entertainment programming which may be produced by CBS to no more than: two and one-half hours per week in prime time hours,[6] eight hours per week in daytime hours (9:00 a.m. to 6:00 p.m. in the Eastern and Pacific time zones and 9:00 a.m. to 5:00 p.m. in the Central and Mountain time zones), and eleven hours per week in fringe hours (11:00 p.m. to 2:00 a.m. and 6:00 a.m. to 9:00 a.m. in the Eastern and Pacific time zones and 10:00 p.m. to 1:00 a.m. and 6:00 a.m. to 9:00 a.m. in the Central and Mountain time zones).[7] [8]

[6] For definition, see n. 2, supra at p. 4.

[7] CBS would also be allowed to produce two additional special programs every six months. CBS will report to the Department of Justice, semi-annually, its own program production during the preceding period.

Section VI

The complaint alleges that CBS uses its control over access to its national television network to gain an unfair competitive advantage in other fields. Section VI contains prohibitions designed to prevent this from occurring and to give those competing in such other fields an opportunity to compete free of the artificial leverage which CBS, and the other networks, have exercised in the past. Because of the regulatory nature of many of the injunctions in Section VI, and the possiblity of changes in the industry, the Department has determined that the prohibitions should contain the time limitations spelled out in this section [15 years for subsections (B), (C) and (E) and 10 years in subsections (D), (F), (G), (H), and (I)].

VI(A)

The judgment would prohibit CBS from purchasing or offering to purchase exhibition rights to an independent program supplier's television entertainment program on condition that the supplier would grant CBS any right or interest other than those incident to network licensing and use of the program. This continuing injunction is based on the assumption that CBS, and the other two existing commercial television networks, will continue to have substantial market power for the foreseeable future.

VI(B)

To specifically clarify the scope of Section VI(A), this provision would assure that CBS would not, in connection with its acquisition of network exhibition rights, require that the supplier use CBS production facilities. It would expire in fifteen years.

VI(C)

For a period of fifteen years, any facilities contract between CBS and such a program supplier would be limited to the period required to produce one year's episodes, with a right to renew the contract at the end of each year.[9]

VI(D)

To guard against CBS's possible avoidance of its program production limitation through reciprocal dealing with other networks, for a period of ten years, CBS would be prohibited from purchasing network exhibition rights to any ABC or NBC entertainment program on condition that ABC or NBC purchase similar rights from CBS.

VI(E)

For a period of fifteen years, the proposed judgment would place the following outer limits on the exclusive rights that CBS may acquire from an independent program supplier in obtaining network exhibition rights for a prime time entertainment program (the supplier can, of course, grant CBS fewer and lesser rights than these):

For program series [VI(E)(i)]:

CBS's initial contracts with program suppliers for the production and network exhibition of a prime time entertainment program series could not include exclusive yearly options for more than four years and the balance of any broadcast year in which such four year period ends. However, CBS could, pursuant to the limitations set forth in this provision, renegotiate the contract with the supplier to provide for additional options as follows:

(a) *In the case of a program series which commences at the start of a broadcast year:* CBS could begin negotiating in or after the Spring of the first broadcast year for an additional one-year option, but only upon CBS's exercising its existing option for the second broadcast year could it enter into an agreement for the additional one-year option. At no time after CBS exercises its option to go to series could CBS hold more than three years of additional options to programs in this category. CBS and the supplier can negotiate a contract for an additional option at any time in or after the Spring of the first broadcast year, so long as the maximum of four years of options is not exceeded. To illustrate, if they wait until the Spring of the second broadcast year, CBS may negotiate for at most two years of additional options; if they wait until the Spring of the third year, CBS may negotiate for at most three additional options. [VI(E)(i)(a)]; [10]

(b) *In the case of a program series which commences after the start of a broadcast year:* CBS could negotiate, after twelve months subsequent to the date of first broadcast, for an additional one-year option, but CBS need not wait until it exercises its option for the following broadcast year before entering into an agreement for the additional one-year option. In subsequent broadcast years, CBS may negotiate for and obtain additional options so long as it at no time holds options for more than four years and the balance of any broadcast year in which the four-year period ends. [VI(E)(i)(b)].

In either situation, CBS and the supplier are free to negotiate for additional options at any time after CBS obtains, if it does, an additional option year, so long as the maximum limits are observed. They are, of course, also free to abstain from any additional negotiations or to negotiate for less than the limits set forth in the proposed judgment. When the contract approaches the end of its term, the supplier would be free to offer the program to others, subject only to CBS's first negotiation/first refusal rights by CBS.[11, 12]

IV (E)(ii)

CBS could not prohibit the use of any prime time television program in other domestic communications markets for more than three

[8] This provision would not take effect until similar relief is obtained against ABC. See discussion of Section VII, infra at p. 20.

[10] If negotiations are conducted in any Summer, Fall, or Winter after the Spring of the first broadcast year, CBS is limited to that which it was permitted to acquire in the Spring which preceded such negotiations. If the initial contract term were three years, rather than four, CBS could negotiate for at most two years of additional options during the first Spring following initial broadcast.

[11] CBS's permissible first refusal rights for new contracts, exercisable at the end of any contract term, could not prohibit the program supplier from entering into a new contract with someone else at the end of any contract term, if the terms were equal to or better than the supplier's last offer to CBS.

[12] This provision would not take effect until similar relief is obtained against ABC.

years,[13] except that CBS may obtain four years of exclusivity as against nonprime time stripping (the broadcast of program series episodes more than once a week after their network exhibition),[14] and may have exclusivity for prime time use of the program during the life of CBS's right to network exhibition. This provision should free a substantial number of entertainment program series for syndication and other uses much earlier than is currently possible.[15]

For theatrical feature films [VI(E)(iii)]:

(1) CBS cannot acquire exclusivity as against exhibition of feature films by theatrical and nontheatrical direct projection, on closed circuit TV in nonresidential hotels, motels, bars, restaurants, and hospitals, or on passenger-carrying vehicles.

(2) CBS cannot acquire exclusivity as against use of feature films in discs, cartridges or cassettes.

VI (F)

Program selections for each network's new fall season are generally made in the preceding spring, and for "second season" replacement, in the preceding fall. For a period of ten years, this provision would prevent CBS from retaining its exclusive options to more than 35% of the program pilots not selected by it, after CBS's program selection for the next broadcast season has been made. This provision would permit increased competition between the networks by freeing the producers of as many as 65% of the program pilots not selected by CBS to offer their pilots to other networks or television stations.[16]

VI(G)

To protect independent program suppliers' rights to additional program ideas developed from program series on CBS, for a period of ten years this provision would limit CBS's ability to obtain exclusive rights to spinoffs[17] from such series to situations involving continuing characters. Where the spinoff involves a non-continuing character,[18] CBS may obtain no contractual option beyond first negotiation and a limited first refusal right.[19] [20]

VI(H)

This provision would limit CBS's use of repeats acquired as part of Network Exhibition, to the same year as that in which the initial episodes of the program series are broadcast. However, as to three episodes of each series per year, there would be no limitation on rerunning them in subsequent years. Also, once it had ordered program series episodes for the first year of broadcast, CBS could purchase additional repeats for subsequent years. Finally, CBS would not be limited in purchasing repeat rights of made-for-television and threatrical feature films, specials, or cartoons or other children's programs.[21]

VI(I)

This provision would prevent CBS from asserting or exercising any right in any agreement with continuing[22] performing or essential[23] creative talent which is providing services in connection with a particular prime time series licensed to CBS so as to preclude such talent from being able to continue to provide services in connection with that series if it were licensed to any other licensee. This prohibition lasts for ninety days after CBS's options for that series have expired. This provision would permit the program supplier to take a series which has run out its term, or which has been cancelled by CBS, to another network or television station, with the essential talent still in the series even though CBS may have the essential talent under contract.

The ninety day period is designed to provide a reasonable time during which the program supplier could attempt to license the series, but not so much as would prevent the talent and CBS from being able to proceed with assurance on some alternative project if the series remained unlicensed.[24]

This provision would in no way limit the talent's freedom of choice. The talent would be free to stay with CBS, or to continue with the series, a choice which might otherwise be foreclosed by an exclusive agreement with CBS. While this provision does not limit CBS's ability to offer the talent projects which are alternatives to continuing with the series, it prohibits use by CBS of an existing agreement to prevent the talent from being able to continue with the series.

After the expiration of ninety days, CBS would be free to attempt to enter into a new agreement with the talent for the exclusive use of such talent's services, whether or not the series has been licensed to another licensee. Further, this provision would not affect the contracts between the talent and other suppliers or licensees. Nor would this provision prevent the talent from providing services to the series, if contractually free to do so, if the series were licensed to another licensee after the ninety-day period.[25]

Section VII

In order to avoid placing CBS at a competitive disadvantage with respect to ABC or NBC, this provision would delay the effectuation of certain Sections of the judgment [V, VI(C), VI(E)(i), VI(F)–(I), and VIII(E)] until similar injunctive relief is obtained against ABC. Similar injunctive relief has already been obtained against NBC.[26] While this type of provision is unusual in an antitrust judgment, it is warranted by the unique nature of this industry, and the pendency of the companion action.

Section VIII

This provision describes certain areas of CBS activity with which the judgment would not interfere. They are: (1) CBS's ability to acquire rights for non-network broadcast by its owned and operated television stations and rights for non-broadcasting uses, and CBS's ability to sell, license or distribute foreign or CBS produced programs abroad, provided that none of the above rights are acquired in connection with CBS's acquisition of rights for the exhibition, distribution or use of a CBS television network program; and (2) CBS's ability to recover money advanced in connection with the development or production of a television network program.

Section VIII(E) imposes no specific limitation on CBS's use of an exclusive agreement with performing or creative talent when it decides not to take a pilot to series. However, if CBS should circumvent Section VI(F) by using exclusive talent agreements to inhibit program suppliers' ability to program suppliers' ability to license CBS rejected program concepts elsewhere, this provision permits the Government to obtain appropriate relief against such conduct without having to justify a modification of the judgment.[27] [28]

Section IX

If a non-appealable judgment were entered dismissing the companion action against ABC, or decreeing injunctions in that action which were different from those in this proposal judgment, or if the Final Judgment entered in the NBC action on November 28, 1977, were modified in such a manner, CBS would be permitted to seek and obtain whatever relief, if any, were necessary to prevent it from being placed at a competitive disadvantage with respect to ABC or NBC. While this type of provision is unusual in an antitrust judgment, it is warranted by the unique nature of this industry, and the pendency of the companion action.

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[13] CBS presently has exclusive rights for the duration of its network exhibition contract.

[14] The judgment would not permit CBS to obtain further stripping rights from the suplier until after it has ordered its first year's episodes for network exhibition.

[15] To permit contract adjustments, this provision would take effect thirty days after entry of the final judgment.

[16] This provision would not take effect until similar relief is obtained against ABC.

[17] A spinoff is a new series evolving from an episode or character of a series currently being offered for broadcast.

[18] A non-continuing character is one who appears in no more than 25% of the original episodes during the twelve months prior to the time exhibiiton rights for the licensing of such spinoff are offered by the independent supplier.

[19] The first refusal right would be limited as discussed in n. 8, supra at p. 12.

[20] This provision would not take effect until similar relief is obtained against ABC.

[21] This provision would not take effect until similar relief is obtained against ABC.

[22] In this context, a continuing talent is one who appeared in more than twenty-five percent of the original episodes of the program series during the twelve months prior to cancellation or expriation of CBS's options for that series. [See Section VI(G)].

[23] The term "essential" is not limited to those persons who are "of the essence" in a license agreement; rather, it describes those persons whose services are reasonably necessary to the successful continuation of the series in the manner it has been produced for CBS.

[24] The ninety-day period was suggested by Section 24(c) of the 1977 Screen Actors Guild Television Agreement.

[25] This provision would not take effect until similar relief is obtained against ABC.

[26] See Final Judgment in *United States v. National Broadcasting Company, Inc.*, 74–3601–RJK (C.D. Cal.), entered on November 28, 1977.

[27] A similar provision was entered into by NBC and the Government which covered the use of exclusive rights to talent to circumvent any provision of the judgment. Stipulation and Order, dated may 4, 1977, *United States v. National Broadcasting Company, Inc.*, 74–3601–RJK (C.D. Cal.).

[28] This provision would not take effect until similar relief is obtained against ABC.

Section X

This provision would require CBS to furnish copies of this judgment to all its officers, directors, and appropriate employees and agents within thirty days after its entry, and for ten years thereafter to furnish copies to all new CBS officers, directors or appropriate employees, to each independent program supplier known to have offered any entertainment program to CBS within the preceding five years, and to all known providers of television production facilities.

The consent judgment would afford ways of determining compliance by permitting the Government, upon proper notice, to interview CBS employees, secure reports from CBS and inspect CBS documents and records.

The District Court would retain jurisdiction of the case to permit any necessary construction or modification of the judgment, to enforce compliance and to punish any judgment violation.

Stipulation and Order

The proposed consent judgment is subject to a stipulation between the United States and CBS that, when ordered by the Court, the Stipulation and Order providing for the entry of the CBS consent judgment shall not estop the parties or any person in this or any other action from asserting any issue of fact or law concerning CBS's acquisition of exclusivity for the exhibition of theatrical feature films as against pay television.[29]

(4) *Remedies available to potential private plaintiffs.*

Any potential private plaintiffs who might have been damaged by the alleged violations will retain the same right to sue for monetary damages, and any other legal or equitable relief to which they would have been entitled were the proposed judgment not entered. However, this judgment may not be used as *prima facie* evidence in private litigation pursuant to Section 5(a) of the Clayton Act, as amended, 15 U.S.C. § 16(a).

(5) *Procedures available for modification of the proposed consent judgment.*

The proposed consent judgment is subject to a stipulation between the United States and the defendant which provides that the United States may withdraw its consent to the proposed consent judgment at any time before the Court has found that entry of the judgment is in the public interest. By its terms, jurisdiction of this action is retained by the Court in order, among other things, to permit either of the parties to apply for such orders as may be necessary or appropriate for its modification.

As provided by the Antitrust Procedures and Penalties Act, any person believing that the proposed judgment should be modified may, during the sixty-day period prior to the effective date of the proposed judgment, submit written comments to the United States Department of Justice, Bernard M. Hollander, Chief, Judgment Enforcement Section, Antitrust Division, Washington, D.C. 20530, which will file with the Court and publish in the **Federal Register** such comments and its response to them. The Department of Justice will thereafter evaluate any and all such comments and determine whether there is any reason for withdrawal of its consent to the proposed judgment.

(6) *Alternatives to the proposed judgment considered by the United States.*

A full trial on the merits was considered as an alternative to settlement. However, because the agreed to relief would be substantially equivalent to that sought in the complaint, because significant relief would become effective upon entry of the judgment, and finally because appeals following a trial could delay the obtaining of effective relief for a period of years, the alternative of a trial on the merits was rejected.

In addition to considering provisions substantially similar to those contained in the proposed judgment, proposals considered by the Government and then rejected included the following:

(a) Section VI(E)(i) was the subject of intense negotiation between the parties. Although not specifically requested in the complaint, an important element of the proposed judgment is the initial four year limitation on yearly options obtainable by CBS when it contracts for the production and possible exhibition of a new program series. As in the NBC situation, the Government initially proposed a two year limit on the option period, and various compromises were considered, including, of course, that obtained in the NBC Final Judgment. Agreement was reached by shortening the permissible length of the option term to four one-year terms, instead of the permissible total five year term in the NBC Judgment, but permitting CBS and program suppliers the flexibility of negotiating for additional one-year options in the Spring of the first broadcast year and in subsequent broadcast years.

(b) As to Section VI(I), the Government initially sought to include as "in-house" produced programs which are limited by Section V, any program in which a performing or creative talent exclusive to CBS provided essential services. This provision was sought to prevent CBS from designating as a non "in-house" program, one over which it maintained a large degree of control through an exclusive talent agreement. A more direct solution was reached by prohibiting CBS from exercising any exclusive talent agreement so as to prevent the talent from staying with a program series which its supplier was able to license to another network or station within ninety days after the expiration of CBS's options for that series.

When the parties agreed to the concept, the Government sought to extend it to pilots which did not go to series, as well as to series which CBS dropped. It sought to do so by prohibiting CBS from using exclusive agreements with talent to prevent rejected series concepts based on pilots from being marketed to other networks or stations. Based, in part, on the lack of sufficient proof that CBS had, in fact, utilized exclusive agreements with talent for such a purpose, and also upon the recognition that pilots are part of the development process of a potential program series, and that CBS has a legitimate interest in attempting to develop successful program concepts with its exclusive talent (which may require more than one pilot to be made), a compromise was reached which permits the Government to seek additional relief upon a showing that CBS has used exclusive rights to talent to circumvent the pilot section of the judgment [Section VIII(E)].

(c) With respect to CBS's exclusive rights to the exhibition of theatrical feature films as against pay television, plaintiff was convinced during pre-trial discovery that such rights should be curtailed.[30] However, the relief initially obtained in the proposed NBC judgement was almost uniformly criticized by the commentors as establishing a detrimental industry standard. Unable to reach an agreement with CBS on a more limited period of exclusivity, the parties determined to include no provision as to exlusivity for theatrical feature films as against pay television in the proposed judgment. As in the NBC case, however, the parties have stipulated that this non-inclusion does not estop any possible future action in this area by any person, and does not constitute any evidence or admission respecting any related issue of fact or law.

Finally, had the Government prevailed at a trial on the merits, it would have considered seeking a Court order voiding CBS's existing contracts with independent program suppliers and providing an opportunity for all such suppliers to negotiate new contracts in light of the then-existing circumstances.

(7) *Determinative Documents.*

There are no materials or documents which the Government considered determinative in formulating the proposed consent judgment. Therefore, none is being filed with this competitive impact statement.

Dated: May 8, 1980.

Bernard M. Hollander
Barry J. Kaplan
Bernard J. O'Reilly
Ruth Dicker
James R. Kahn
John A. Kolar
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[29] A similar agreement was entered into by NBC and the Government. Stipulation and Order, dated May 4, 1977, *United States v. National Broadcasting Company, Inc.*, 74-3601-RJK (C.D. Cal.).

[30] The corresponding NBC situation is discussed in the Competitive Impact Statement filed in *United States v. National Broadcasting Company, Inc.*, 74-3601-RJK (C.D. Cal.) on November 17, 1976.

United States v. Rockwell International Corporation, et al.; Proposed Final Judgment, and Competitive Impact Statement

Notice is hereby given pursuant to the Antitrust Procedures and Penalties Act, 15 U.S.C Section 16(b) through (h), that a proposed Final Judgment, Stipulation and Competitive Impact Statement (CIS) have been filed with the United States District Court for the Eastern District of Pennsylvania in *United States of America* v. *Rockwell International*

Corporation, et al., Civil Action No. 78–3656. The Complaint in this case alleged that three corporations engaged in a combination and conspiracy to raise, fix, maintain and stabilize prices of gas meters in violation of Section 1 of the Sherman Act, 15 U.S.C. 1. The proposed Final Judgment enjoins the defendants from entering into or maintaining, any agreement, understanding, combination or conspiracy with any other manufacturer of gas meters to raise, fix, maintain, stablize or adhere to prices or other terms or conditions for the sale of gas meters to any third person. The proposed judgment further enjoins the defendants from communicating to, requesting from, or discussing with any other manufacturer of gas meters information about prices at which gas meters were sold or are to be bid or sold, and information concerning gas meter production or sales volume or costs. Each defendant is required to establish an antitrust compliance program which shall include the biannual distribution of the judgment and a written corporate directive to certain employees. The employees would also be required to sign a statement acknowledging their receipt of the judgment and directive, and their understanding that non-compliance may result in criminal penalties.

Public comment is invited within the statutory 60-day comment period. Such comments, and responses thereto, will be published in the **Federal Register** and filed with the court. Comments should be directed to Anthony V. Nanni, Chief, Trial Section, Room 3268, Antitrust Division, Department of Justice, Washington, D.C. 20530 (telephone: 202–633–2541).

Joseph H. Widmar,

Director of Operations, Antitrust Division.

U.S. District Court for the Eastern District of Pennsylvania

United States of America, Plantiff, v. *Rockwell International Corporation, the Singer Company, and Tetron Inc.*, Defendants.

Civil Action No. 78–3656.
Filed: May 13, 1980.

Stipulation

We stipulate that:

1. The parties consent that the court may file and enter a Final Judgment, in the form attached to this Stipulation, on the court's own motion or on motion of any party at any time after compliance with the requirements of the Antitrust Procedures and Penalties Act (15 U.S.C. 16(b)–(h)), and without further notice to any party or other proceedings, if plantiff has not withdrawn its consent, which it may do at any time before entry of the judgment by serving notice of its withdrawal on defendants and filing that notice with the court.

2. If plantiff withdraws its consent or if the proposed judgment is not entered pursuant to this stipulation, the stipulation shall be of no effect whatever and the making of it shall be without prejudice to any party in this or any other proceeding.

April —, 1980.

For the plantiff: Sanford M. Litvack, Assistant Attorney General. Joseph H. Widmar, Charles F. B. McAleer, Anthony V. Nanni, Gordon L. Lang, Sara V. Dobb, Attorneys, United States Department of Justice.

For the defendents: Edward W. Mullinix; Susan K. Herschel, Schnader, Harrison, Segal & Lewis, 1719 Packard Building, Philadelphia, Pennsylvania 19102, Attorneys for Rockwell International Corporation. Harold R. Tyler, Jr., Patterson, Belknap, Webb & Tyler, 30 Rockefeller Plaza, New York, New York 10020, Attorney for the Singer Company. Henry P. Sailer, Covington & Burling, 888 Sixteenth Street, N.W., Washington, D.C. 20006, Attorney for Textron Inc.

U.S. District Court for the Eastern District of Pennsylvania

United States of America, Plaintiff, v. *Rockwell International Corporation, the Singer Company, and Textron Inc.*, Defendants.

Civil Action No. 78–3656.
Filed: May 13, 1980.

Final Judgment

Plaintiff, United States of America, having filed its Complaint herein on November 1, 1978, and plaintiff and defendants, by their respective attorneys, having consented to the entry of this Final Judgment without trial or adjudication of any issue of fact or law and without this Final Judgment constituting any evidence against or an admission by any party with respect to any such issue;

Now, therefore, before the taking of any testimony and without trial or adjudication of any issue of fact or law and upon consent of the parties, it is hereby,

Ordered, adjudged and decreed as follows:

I

This court has jurisdiction of the subject matter of this action and of the parties. The Complaint states a claim upon which relief may be granted against each defendant under Section 1 of the Sherman Act (15 U.S.C. 1).

II

As used in this Final Judgment:

A. "Person" shall mean any individual, partnership, firm, corporation, association or other business or legal entity;

B. "Gas meters" shall mean all sizes of diaphragm meters used to measure the flow of gas.

III

This Final Judgment applies to each defendant and to each of its officers, directofs, agents, employees, subsidiaries, successors and assigns, and to all other persons in active concert or participation with any of them who receive actual notice of this Final Judgment by personal service or otherwise. This Final Judgment does not apply to sales for use outside the United States in which delivery is made to the vendee outside the United States.

IV

Each defendant is enjoined and restrained from directly or indirectly entering into, adhering to, maintaining or furthering any contract, agreement, understanding, plan, program, combination or conspiracy with any other manufacturer of gas meters to raise, fix, stabilize, maintain or adhere to prices, discounts or other terms or conditions for the sale of gas meters to any third person.

V

Each defendant is enjoined and restrained from communicating to, requesting from or discussing with any other manufacturer of gas meters information about (a) any past, present, future or proposed bid, or the consideration of whether to make any bid, for the sale of gas meters to any third person; (b) any past, present, future or proposed price, discount or other term or condition for the sale of gas meters or the consideration of whether to make any change in any actual or proposed price, discount or other term or condition for the sale of gas meters; or (c) gas meter production or sales volume or costs; provided, however, that this Section V shall not apply to (1) any communication that is made to the public or the trade generally but is not made directly to any other manufacturer of gas meters and (2) any necessary communication in connection with a bona fide contemplated or actual purchase or sales transaction between the parties to the communication.

VI

A. Each defendant shall, within 60 days after entry of this Final Judgment, furnish a copy of it to each of its employees who has management responsibility for the sale of gas meters or any responsibility for or authority over the establishment of prices for gas meters.

B. Each defendant shall furnish a copy of this Final Judgment to each person who becomes an employee described in subsection A of this section, within 60 days after he assumes the position that brings them within that description.

C. Each defendant shall take additional affirmative steps to advise each of its employees described in subsections A and B of this section of its and of their obligations. These steps shall include distribution to each of them, at least once every two years, of copies of this Final Judgment and of a written directive about the defendant's policy requiring compliance with the Sherman Act and with the judgment. The directive shall include an admonition that noncompliance will result in appropriate disciplinary action, which may include dismissal, and advice that the defendant's legal advisors are available to confer about any compliance questions. The defendant shall require that each of them submit to it a signed statement, which it shall retain in its files, acknowledging each receipt of copies of the judgment and the directive, acknowledging that he has read them, acknowledging that he has been advised and understands that noncompliance will result in appropriate disciplinary action, which may

include dismissal, and acknowledging that he has been advised and understands that noncompliance with the judgment may also result in conviction for contempt of court and fine or imprisonment, or both.

D. Each defendant shall file with the court and serve on the plaintiff, within 90 days from the date of entry of this Final Judgment, an affidavit as to the fact and manner of its compliance with subsection A of this section.

VII

Each defendant shall require, as a condition of the sale or other disposition of all, or substantially all, of the total assets of its gas meter business, that the acquiring party agree to be bound by the provisions of this Final Judgment. The acquiring party shall file with the court, and serve on the plaintiff, its consent to be bound by this Final Judgment.

VIII

For the purpose of determining or securing compliance with this Final Judgment, upon written request of the Attorney General or the Assistant Attorney General in charge of the Antitrust Division or his agent made to any defendant at its principal office, subject to any legally recognized privilege:

A. On reasonable notice to the defendant, which may have counsel present, duly authorized representatives of the Department of Justice shall be permitted:

1. Access, during office hours of the defendant, to inspect and copy all books, ledgers, accounts, correspondence, memoranda and other records and documents in the possession or under the control of the defendant relating to any matters contained in this Final Judgment; and

2. Subject to the reasonable convenience of the defendant and without restraint or interference from it, to interview officers, directors, employees or agents of the defendant, any of whom may have counsel present, regarding any matters contained in this Final Judgment; and

B. The defendant shall submit such reports in writing, under oath if requested, with respect to any matters contained in this Final Judgment as may be requested.

No information or documents obtained by the means provided in this Section VIII shall be divulged by any representative of the Department of Justice to any person other than a duly authorized representative of the executive branch of the United States, except in the course of legal proceedings to which the United States is a party or for the purpose of securing compliance with this Final Judgment or as otherwise required by law.

If, at the time information or documents are furnished by a defendant to plaintiff, the defendant represents and identifies in writing the material in the information or documents to be of a type described in Rule 26(c)(7) of the Federal Rules of Civil Procedure and the defendant marks each pertinent page of such material, "Subject to claim of protection under Rule 26(c)(7) of the Federal Rules of Civil Procedure," then plaintiff shall give ten day's notice to the defendant before divulging the material in any legal proceeding (other than a grand jury proceeding) to which the defendant is not a party.

IX

Jurisdiction is retained by this court for the purpose of enabling any of the parties to apply to this court at any time for such further orders and directions as may be necessary or appropriate for the construction or carrying out of this Final Judgment, for the modification of any of its provisions, for the enforcement of compliance with it or for the punishment of any violation of it.

X

This Final Judgment shall be in effect for the period of ten years following the date of its entry.

XI

Entry of this Final Judgment is in the public interest.

J.

U.S. District Court, Eastern District of Pennsylvania

United States of America, Plaintiff, v. *Rockwell International Corporation, The Singer Company, and Textron Inc.*, Defendants.

Civil Action No. 78-3656.

Filed: May 13, 1980.

Competitive Impact Statement

Pursuant to Section 2(b) of the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16(b)-(h), the United States files this Competitive Impact Statement relating to the proposed Final Judgment submitted for entry in this civil antitrust proceeding.

I. Nature and Purpose of the Proceeding

On November 1, 1978, the United States filed a civil antitrust Complaint under Section 4 of the Sherman Act (15 U.S.C. § 4) to enjoin the above-named corporate defendants from continuing or renewing violations of Section 1 of the Sherman Act (15 U.S.C. § 1).

The Complaint alleges that beginning in or about May 1973 and continuing thereafter until November 1977, the defendants engaged in a combination and conspiracy to restrain interstate commerce by fixing, maintaining and stabilizing the prices of gas meters. The Complaint seeks a judgment by the court that the defendants engaged in a combination and conspiracy in restraint of trade in violation of Section 1 of the Sherman Act and an order to enjoin them from continuing or resuming such activities in the future.

Proceedings in this case were stayed pending disposition of a companion criminal prosecution, *United States v. Rockwell International Corporation, et al.*, Criminal No. 78-325 (E.D. Pa.). The indictment, returned by a grand jury on November 1, 1978, charged Rockwell International Corporation and Textron Inc. with a criminal violation of the Sherman Act arising out of the same conspiracy alleged in the Complaint. On January 15, 1979, Rockwell International Corporation entered a plea of guilty. On January 25, 1979, Textron Inc. was found guilty after a jury trial. On January 26, 1979, the Honorable Edward N. Cahn, United States District Court Judge, imposed fines of $525,000 against Rockwell and $200,000 against Textron. Both fines were paid on February 8, 1979, and the criminal case is now concluded.

The Singer Company was named as an unindicted co-conspirator in the criminal case. Singer was not indicted in the criminal case because of its voluntary disclosure to the Department of Justice of its participation in the price-fixing conspiracy. The decision not to press criminal charges against Singer was in accord with the Antitrust Division policy of leniency designed to encourage business firms to come forward with information about suspected antitrust wrongdoing.

II. The Terms of the Alleged Conspiracy

The three corporate defendants are engaged in the production and sale of the types and sizes of gas meters commonly used by public utility companies, and commercial and industrial concerns to measure the flow of gas. Rockwell International makes and sells gas meters under the Rockwell name. Textron Inc. makes and sells gas meters through a division called Sprague Meter Company. The Singer Company makes and sells gas meters through a division called American Meter Company. The Complaint alleges that the defendant corporations have accounted for approximately 98 percent of total sales in the United States of such gas meters. During the period of time covered by the Complaint the total sales of such gas meters by the defendants amounted to approximately 5.9 million units valued at approximately $231 million.

The Complaint alleges that the defendants combined and conspired to restrain interstate commerce beginning in or about May 1973 until November 1977 in violation of Section 1 of the Sherman Act by fixing, raising, maintaining and stabilizing the prices of gas meters. As stated in the Complaint, for the purpose of forming and effectuating the conspiracy, the defendants: agreed to increase the prices of gas meters; published price lists and adopted pricing schedules in accordance with agreements reached; agreed to maintain published prices of gas meters; exchanged price lists and sales data for gas meters; telephoned or otherwise contacted one another to coordinate prices to be bid on the sale of gas meters; telephoned or otherwise contacted one another to police the agreement and secure adherence to agreed upon increased prices; met periodically at hotels, motels, restaurants and airports and at the occasion of meetings of the American Gas Association, Institute of Gas Technology, Guild of Ancient Suppliers and other industry trade groups, and discussed pricing strategy including the coordinated increase of prices for gas meters and the curtailment and elimination of price cutting and discount practices; and coordinated bids so as to divide business and obtain either alternate awards or split awards of orders for gas meters. According to the Complaint, the conspiracy among the defendants has had the effect throughout the United States of raising and stabilizing the prices of gas meters at artificial and non-competitive levels, depriving buyers of gas meters of free and open competition in the sale of gas meters, and eliminating competition between the defendants in the sale of gas meters.

III. Explanation of the Proposed Judgment

The United States and the defendants have stipulated that the proposed Final Judgment may be entered by the court at any time after compliance with the Antitrust Procedures and Penalties Act. The Final Judgment between the parties provides that there is no admission by any party with respect to any issue of fact or law. Under the provisions of Section 2(e) of the Antitrust Procedures and Penalties Act, entry of the proposed Final Judgment is conditioned upon a determination by the court that the proposed Final Judgment is in the public interest.

Gas meters are defined in the proposed Final Judgment as all sizes of diaphragm meters used to measure the flow of gas. This definition is consistent with the focus of the investigation leading to the criminal indictment and the filing of the Complaint and the evidence introduced at the criminal trial of Textron Inc.

The proposed Final Judgment enjoins and restrains each defendant from directly or indirectly entering into, adhering to, maintaining or furthering any contract, agreement, understanding, plan, program, combination or conspiracy with any other manufacturer of gas meters to raise, fix, stabilize, maintain or adhere to prices, discounts or other terms or conditions for the sale of gas meters to any third person.

The proposed Final Judgment also enjoins and restrains each defendant from communicating to, requesting from or discussing with any other manufacturer of gas meters information about (a) any past, present, future or proposed bid, or the consideration of whether to make any bid, for the sale of gas meters to any third person; (b) any past, present, future or proposed price, discount or other term or condition for the sale of gas meters or the consideration of whether to make any change in any actual or proposed price, discount or other term or condition for the sale of gas meters; or (c) gas meter production or sales volume or costs. This restraint on communications does not apply to any communication that is made to the public or the trade generally but is not made directly to any other manufacturer of gas meters and any necessary communication in connection with a bona fide contemplated or actual purchase or sales transaction between the parties to the communication.

The proposed Final Judgment requires each defendant to take affirmative steps to advise each of its employees who has management responsibility for the sale of gas meters or any responsibility for or authority over the establishment of gas meter prices of the defendant's and the employee's obligations under the judgment and the Sherman Act. Each defendant is required to furnish a copy of the Final Judgment to each of the described employees within 60 days after the judgment is entered, and to each person who becomes a described employee within 60 days of the person's assuming the described position. In addition, each defendant is required to distribute, at least once every two years, a copy of the Final Judgment and a written directive to each of the described employees. The directive must include a warning that noncompliance with the Final Judgment and the Sherman Act will result in disciplinary action, which may include dismissal, and advice that the defendant's legal advisors are available for consultation concerning compliance questions. Upon receipt of the judgment and directive, the employee must submit a signed statement to his employer. The signed statement must acknowledge that the employee has received and read the judgment and directive, that he had been advised and understands that noncompliance will result in disciplinary action, which may include dismissal, and that he had been advised and understands that noncompliance with the judgment may result in conviction for contempt of court and fine or imprisonment, or both.

The proposed Final Judgment also provides that each defendant require, as a condition of the sale or other disposition of all, or substantially all, of the total assets of its gas meter business that the acquiring party agree to be bound by the provisions of the Final Judgment. The acquiring party must file with the court, and serve on the United States, its consent to be bound by the judgment.

The Department of Justice is given access under the proposed Final Judgment to the files and records of the defendant corporations, subject to reasonable notice requirements, in order to examine such records to determine compliance or noncompliance with the Final Judgment. The Department is also granted access to interview officers, directors, agents or employees of the defendants to determine whether the defendants and their representatives are complying with the Final Judgment. Finally, the defendants, upon the written request of the Department of Justice, shall submit reports in writing, under oath if requested, with respect to any of the matters contained in the Final Judgment.

The Final Judgment is to be in effect for ten years from its date of entry.

IV. Remedies Available to Private Litigants

Section 4 of the Clayton Act (15 U.S.C. § 15) provides that any person who has been injured as a result of conduct prohibited by the antitrust laws may bring suit in federal court to recover three times the damages such person has suffered, as well as costs and reasonable attorney's fees. The entry of the proposed Final Judgment will neither impair nor assist any person in bringin or prosecuting any private antitrust claim arising out of the combination and conspiracy charged in the Complaint. Under Section 5(a) of the Clayton Act, 15 U.S.C. § 16(a), this Final Judgment may not be used as prima facie evidence in legal proceedings against the defendants.

Shortly after the commencement of this case and the criminal case by the United States a number of private actions were filed in various federal district courts throughout the United States seeking treble damages. On January 17, 1979, the Panel on Multi-district Litigation consolidated the private actions before Judge Charles R. Weiner, *In Re Gas Meter Antitrust Litigation*, M.D.L. No. 341 (E.D. Pa.). All of the consolidated private actions were settled by the parties and have been dismissed.

V. Procedures Available for Modification of the Proposed Final Judgment

As provided by the Antitrust Procedures and Penalties Act, any person believing that the proposed Final Judgment should be modified may submit written comments to Anthony V. Nanni, Department of Justice, Antitrust Division, 10th & Constitution Avenue, N.W., Washington, D.C. 20530, within the 60-day period provided by the Act. The comments and the government's responses to them will be filed with the court and published in the **Federal Register.** All comments will be given due consideration by the Department of Justice, which remains free to withdraw its consent to the proposed Final Judgment at any time prior to its entry if it should determine that some modification is appropriate and necessary to the public interest. The proposed Final Judgment provides that the court will retain jurisdiction over this action, and that the parties may apply to the court for such orders as may be necessary or appropriate for its modification or enforcement. The Final Judgment is to remain in effect for a period of ten years from the date of its entry.

IV. Alternatives to the Proposed Final Judgment

The United States originally proposed a decree provision requiring each defendant to withdraw its present price announcements and lists, to adopt new gas meter prices and terms and conditions of sale for gas meter on the basis of its own cost figures and judgment, and to submit an affidavit to the court and plaintiff certifying that such new prices and conditions for sale were independently arrived at. This proposal was withdrawn because each of the defendants had issued new prices after the initiation of the civil and criminal cases. In addition, each of the defendants has submitted to the Department of Justice an affidavit executed by one of its officers stating that its current prices were independently determined. These affidavits are filed by the United States with this Competitive Impact Statement.

The proposed Final Judgement will dispose of the United States' claim for injunctive relief. The only alternative available to the Department of Justice is a trial of this case on the merits. Such a trial would require a substantial expenditure of public funds and judicial time. Since the relief obtained in the proposed Final Judgment is substantially similar to the relief the Department of Justice would expect to obtain after winning a trial on the merits, the United States believes that entry of the proposed Final Judgement is in the public interest.

VII. Determinative Materials

Each of the defendants has submitted an affidavit stating its current prices were independently determined. Those affidavits are filed with this Competitive Impact Statement.

Respectfully submitted,

Gordon L. Lang,

Attorney, U.S. Department of Justice, Antitrust Division, Room 3248, 10th & Pennsylvania Avenue, NW., Washington, D.C. 20530 (202) 633-2485.

COMMONWEALTH OF PENNSYLVANIA

County of Philadelphia, SS:

Richard W. Bohlen, being duly sworn according to law, deposes and says that he is Vice President and Division Manager of the Municipal & Utility Division of Rockwell International Corporation ("Rockwell"), that he is authorized to make this affidavit on its behalf, and that, to the best of his knowledge and belief, all prices of gas meters and terms and conditions for the sale of gas meters that Rockwell has adopted and issued since November 1977 have been adopted and issued solely as a result of Rockwell's independent business judgment.

Richard W. Bohlen,

Vice President and Division Manager, Municipal & Utility Division, Rockwell International Corporation.

Affidavit

COMMONWEALTH OF PENNSYLVANIA

County of Philadelphia, SS:

Jack H. Venner, being duly sworn, deposes and says:

1. I am the President of the American Meter Division of The Singer Company, and I am authorized to make this affidavit on its behalf.

2. Based upon my personal knowledge and my consultations with other officers and employees of the American Meter Division of The Singer Company, to the best of my knowledge and belief, all prices of gas meters and terms and conditions for the sale of gas meters that the American Meter Division of The Singer Company has dopted and issued since at least November 1977 have been adopted and issued solely as a result of the American Meter Division of The Singer Company's independent business judgment.

Jack H. Venner.

COMMONWEALTH OF CONNECTICUT

County of Fairfield, SS:

Philip R. Sayre, being duly sworn according to law, deposes and says that he is the President of the Sprague Meter Division of Textron Inc., that he is authorized to make this affidavit on its behalf, and that, to the best of his knowledge and belief, all prices of gas meters and terms and conditions for the sale of gas meters that Sprague Meter Division of Textron Inc. has adopted and issued since November 1977 have been adopted and issued solely as a result of Sprague Meter Division of Textron Inc. independent business judgment.

Philip R. Sayre,

President, Sprague Meter, Division of Textron Inc.

[FR Doc. 80-15636 Filed 5-21-80; 8:45 am]

BILLING CODE 4410-01-M

NATIONAL TRANSPORTATION SAFETY BOARD

[N-AR 80-21]

Accident Reports, Safety Recommendations and Responses; Availability

Aircraft Accident Report: *Thurman L. Munson Cessna Citation 501, N15NY, near Canton, Ohio, August 2, 1979 (NTSB-AAR-80-2).*—The National Transportation Safety Board on May 12 released its formal investigation report on the crash of last August 2 which occurred short of runway 19 at the Akron-Canton Airport. The pilot, famed baseball star Thurman Munson, was practicing touch-and-go landings during a local flight with two passengers aboard. The aircraft first touched down in a relatively level, clear area about 870 ft short of the runway. The aircraft slid through a small clump of trees, hit a large stump, and came to rest on a road adjacent to the airport boundary fence. Fire erupted immediately after the aircraft came to rest. The two passengers escaped from the wreckage, and the pilot was killed.

The Safety Board has determined that the probable cause of the accident was the pilot's failure to recognize the need for, and to take action to maintain, sufficient airspeed to prevent a stall into the ground during an attempted landing. The pilot also failed to recognize the need for timely and sufficient power application to prevent the stall during an approach conducted inadvertently without flaps extended. Contributing to the pilot's inability to recognize the problem and to take proper action was his failure to use the appropriate checklist and his nonstandard pattern procedures which resulted in an abnormal approach profile.

Highway Accident Report: *Van/Slow-Moving Farm Vehicle Collision, U.S. Route 6/50, near Delta, Utah, September 12, 1979 (NTSB-HAR-80-2).*—The Safety Board's investigation report, released May 12, shows that when the 1976 Dodge van, occupied by 14 senior citizens, overtook the slow-moving farm vehicle, the right front corner of the van struck the left rear edge of the 15½-ft-wide cutting attachment that was mounted to the front of the farm vehicle. The van rolled onto its left wheels, traveled off the right side of the road, and struck a concrete bridge parapet that was located 4½ ft beyond the edge of the pavement. Eight of the van occupants were killed, and six were injured; the driver of the farm vehicle was not injured.

The Safety Board determined that the probable cause of this accident was the farm vehicle's inadequate rear lighting system, which failed to identify the slow-moving, overwidth windrower as a hazard to higher-speed traffic approaching from the rear, and the van driver's inability to detect and avoid striking the projecting cutting attachment on the windrower while operating at the posted speed limit.

As a result of its investigation of this accident, the Safety Board on May 5 issued one recommendation (H-80-36) to the American Society of Agricultural Engineers, calling for reevaluation of present ASAE lighting and marking standards applicable to agricultural equipment being driven on public highways. Also, the Safety Board asked the National Committee on Uniform Traffic Laws and Ordinances to provide guidelines in the Uniform Vehicle Code to insure that farm equipment lighting and delineation systems do not mask each other and to require systems delineating the extreme projections of all overwidth equipment (H-80-37). The Governors of all the States were asked by recommendation H-80-38 to adopt amended Uniform Vehicle Code Standards regarding the marking and lighting of farm vehicles (implements of husbandry). The Safety Board, also on May 5, recommended that the Utah Highway Patrol insure that its selective enforcement program properly emphasize enforcement of Utah regulations concerning safe operation of farm vehicles on the highway (H-80-39) and that the State of Utah reactivate its roadside obstacle elimination program to emphasize improvement of unsafe bridge traffic barrier systems and assign project priorities according to accident experience (H-80-40). (See also 45 FR 32147, May 15, 1980.)

Pipeline Accident Report: *Columbia LNG Corporation Explosion and Fire of Substation, Cove Point, Maryland, October 6, 1979 (NTSB-PAR-80-2).*—The investigation report, released May 14, shows that an explosion caused by liquefied natural gas vapors (LNG) destroyed a transformer building at the reception facility of the Columbia LNG Corporation. Odorless liquefied natural gas leaked through an inadequately tightened LNG pump seal, vaporized, passed through approximately 210 ft of underground electrical conduit, and entered the substation building. One person was killed and one person was seriously injured. Damage to the facility was estimated at about $3 million.

The Safety Board determined that the probable cause of this accident was LNG which leaked through an inadequately tightened LNG pump seal, vaporized, and migrated through a 3-inch conduit, into a substation building where the vaporized LNG-air mixture was ignited by the arcing contacts of a circuit breaker interlock. Contributing to the accident was the absence of any combustible gas indicator to detect and warn personnel of the presence of flammable vapors in the building.

Six days after the accident, the Safety Board recommended to the American Gas Association immediate industrywide inspection of electric conduit seals and appropriate preventive action. (44 FR 62972, November 1, 1979.) On May 7, the Board issued 13 additional recommendations to the Department of Transportation's Research and Special Programs Administration (P–80–26 through –30), the United States Coast Guard (P–80–31 through –33), and to the Columbia LNG Corporation (P–80–34 through –38). In addition to further tightening of LNG facility regulations by DOT, the recommendations seek for all LNG facilities (1) a Federal program of safety inspection, (2) licensing or certification of operating personnel, (3) required periodic and realistic emergency drills, (4) regulations requiring adequately protected firefighting water systems, and (5) adequately marked firefighting facilities. The Board also recommended for Cove Point adequate LNG vapor detection and improved firefighting facilities and training. (See also 45 FR 32148, May 15, 1980.)

Safety Recommendation Letters

Aviation

A–80–36 and –37 to the Federal Aviation Administration, May 8, 1980.) Because of the burgeoning increase in air taxi and commuter carrier operations, the matter of pilot age and physical condition in Part 135 operations has become increasingly important from the standpoint of aviation safety and the protection of the traveling public. Safety Board investigation of three air taxi/commuter accidents has disclosed significant medical problems involving pilots over 60 years old.

The Board notes that studies to assess the effects of aging on human performance have generally been inconclusive. However, the progressive degeneration of certain important physiological functions in humans is important to aviation safety when it may cause sudden incapacitation, such as cardiovascular disease, metabolic disease, and central nervous system disorders—conditions relating to a pilot's ability to resist fatigue, to adapt to rapidly changing environmental conditions, and to perform under stress.

Based on these physiological factors and other considerations, FAA in 1959 promulgated a regulation restricting the services of pilots in air carrier operations to those under age 60 (14 CFR 121.383). Because the air taxi industry at that time was not a significant factor in transportation and was minimally regulated, it was not included in this regulation. Today, the air taxi/commuter industry has attained a scale of operations which rivals that of air carriers. The Board notes that because of the nature of air taxi/commuter-type operations—the shorter flight segments, the numerous approaches, landings and takeoffs, and the relatively low altitudes which subject these flights to more weather-related problems—the duty day of the pilot in Part 135 operations may be more arduous than that worked by most pilots in Part 121 operations. Moreover, pilots may fly certain aircraft in Part 135 operations without a copilot. Consequently, the Safety Board believes that since the rationale used to establish the age limitation in 14 CFR 121 has, in the FAA's opinion, established an acceptable level of safety for commercial operations, this requirement should be equally and immediately applied to Part 135 operations on an interim basis.

Also, the Board notes that recently, Congress mandated the National Institutes of Health, in consultation with the Department of Transportation, to further study the aging process with respect to a pilot's ability to safely perform his duties, to determine the efficacy of medical certification of pilots, and to determine the medical need for an age limitation for pilots. The results of this study may well require FAA to reevaluate the present age limitation rule in 14 CFR 121.383. The Board believes, however, that the operational environment and operating rules for Part 135 operators are sufficiently different from Part 121 operations to warrant a separate study or expansion of the current study to include the effects of fatigue and stress on pilots engaged in air taxi and commuter operations with a view toward establishing the need for a different age limitation in 14 CFR Part 135.

Therefore, the Safety Board recommends that FAA:

Determine through a study of the operating environment and rules for Part 135 operators whether the working conditions of Part 135 pilots are sufficiently different to warrant an age limitation different from that established for Part 121 pilots. (A–80–36)

Amend 14 CFR 135.95 to include as an interim measure, pending completion of an appropriate study, an upper age limit for airmen under this Part which provides a level of safety equivalent to air carrier operations. (A–80–37)

A–80–38 to the Federal Aviation Administration, May 14, 1980.—Last August 7 a Beech 65–80 (Queen Air), N99FA, serial No. LD–26, departed Gaithersburg, Md., and climbed southbound. Shortly after reaching 20,000 feet m.s.l., the crew saw white smoke and smelled fumes in the cockpit. An emergency was declared and the aircraft was landed without further incident at Dulles International Airport, Washington, D.C.

Board investigation revealed that both voltage regulators and both alternator-rectifiers were inoperative and the nickel-cadmium battery was venting gas overboard. Fire damage was found on the voltage regulators and associated wire bundles under the cockpit floor between the pilot seats, and both alternator field windings were burned and shorted. The alternators are protected by two alternator field (10 ampere) circuit breakers which are mounted on the floor, in the aisle, adjacent to the right pilot's seat and by two mainline (105 ampere) circuit breakers which are similarly floor-mounted in the aisle adjacent to the left pilot's seat. Both of the mainline circuit breakers and the adjacent landing gear circuit breaker were mechanically damaged.

Both of the alternator field circuit breakers were also damaged, the Board notes. The housing of one circuit breaker was partially separated from the metal retaining cap which allowed dust and other debris to collect within the housing in the contact point area. There was arcing within the breaker housing across the foreign material at the contact points, which welded both sets of contact points closed. This closed the circuit and left the field without circuit breaker protection. The damaged and inoperable floor-mounted circuit breakers failed to provide protection to the electrical system which resulted in damage to the d.c. alternator system, and an electrical fire.

The Safety Board is aware of a Service Bulletin issued December 29, 1967, by Beech Aircraft Corporation, requiring relocation of circuit breakers. This bulletin, No. 67–28, affects Queen Airs such as the incident aircraft model. The purpose of the bulletin is to prevent accidental damage to the alternator field circuit breakers. It gives the procedure for relocating the floor-mounted field circuit breaker bracket to a lower, less vulnerable position. This Service Bulletin was not accomplished on the incident aircraft.

Further, the Board notes that a General Aviation Inspection Aid was issued in August 1968 by FAA regarding the alternator field circuit breakers floor-mounted location for Beech Model 65–80. This Inspection Aid states:

These floor-mounted circuit breakers are subject to damage as a result of heavy foot pressures and inadvertently being struck by persons in the cockpit. If damaged, these

circuit breakers may not provide protection for the alternator field circuit and associated aircraft wiring.

Cockpit personnel are cautioned to avoid stepping on these circuit breakers.

The Beechcraft Shop Manual, Section VII, Queen Air Series, requires that the circuit breakers be checked for looseness and proper operation during the 100-hour inspection in the pilot's compartment.

Information received from FAA records shows that there are 95 registered Beech Models 65–80 aircraft recorded as of January 10, 1980. The Safety Board believes that Beech Model 65–80 owner-operators and maintenance personnel should again be reminded that floor-mounted circuit breakers can be damaged and made inoperative if they are not protected. They should be informed of the importance of complying with Beech Service Bulletin No. 67–28.

Accordingly, the Safety Board recommends that FAA:

Issue a General Aviation Airworthiness Alert describing the effects of damage to the floor-mounted alternator field current breakers and mainline circuit breakers in Beech Model 65–80 aircraft. The advisory should emphasize the desirability of compliance with Beech Service Bulletin No. 67–28, dated December 29, 1967. (A–80–38)

Each of the above aviation safety recommendations is classified "Class II, Priority Action."

Highway

H–80–41 through –44 to the City of Spokane, Washington, May 14, 1980.—The accident which prompted these recommendations concerned the collision last November 2 of a westbound Union Pacific train on the Spokane subdivision of the Spokane International Railroad with a gasoline truck and trailer at the Stone Street crossing. The trailer's cargo tank ruptured, resulting in an explosion and ignition of its 5,500-gallon cargo of gasoline. Two brakemen and a foreman in the cab of the diesel locomotive unit were killed. The engineer was critically injured.

Safety Board investigation disclosed that the train was moving at about 10 mph, which was within the maximum timetable speed of 20 mph. The estimated speed of the truck was less than 5 mph. Washington State law and the Code of Federal Regulations require a driver of any motor vehicle carrying a flammable liquid as a cargo to stop within 50 feet but not less than 15 feet from the nearest rail of a railroad crossing. The driver said that he stopped before proceeding across the tracks. However, because a building and a parked boxcar obstructed his view, the truckdriver could not see the train from a lawfully stopped position. The truckdriver said that his window was half open but that he did not hear the engine's bell which, according to a witness, was ringing. Its sound could have been attenuated by the obstructions or drowned out by the noise from the truck's engine. Once the truck had started from the stopped position and the truckdriver could see the train, the truck could be neither stopped short of the tracks nor accelerated clear of the tracks before being struck by the train.

A Spokane ordinance prohibits the use of a train whistle within city limits except in emergency situations. The engineer said that he had sounded the whistle when he first saw the truck, but the driver said he never heard it. The driver noticed the locomotive unit's headlights, but only after he was on the tracks.

The Safety Board notes there are three additional railroad/highway grade crossings within 1,000 feet west of the Stone Street crossing, at Lee, Crestline, and Napa Streets. Of these, only Napa Street has active crossing protection which consists of crossbucks and double-flashing lights; however, it does not have advance signs and pavement markings as required by the Manual on Uniform Traffic Control Devices.

A traffic count made last November 5 showed that during the 24-hour period beginning at 10 a.m., 383 vehicles crossed the tracks at Stone Street, 67 vehicles cross at Lee Street, 229 vehicles crossed at Crestline Street, and 8,295 vehicles crossed at Napa Street. If there had not been crossings at Stone, Lee, or Crestline Streets, the truckdriver probably would have used Napa Street to cross the tracks. The active devices there would have given him advance warning of the approaching train, and the collision probably would not have occurred. Since it is generally accepted that elimination of crossings increases transportation safety, crossings which are not necessary for traffic flow should be closed. The Safety Board believes that the low number of vehicles using the Stone, Lee, and Crestline Street crossings suggests that these crossings could be closed without adversely affecting traffic flow in the area. Board investigation also revealed that other railroad/highway grade crossings in the city are potential candidates for closing. The Napa Street crossing should be studied to determine if gates are warranted, especially with the increased traffic which can be expected if the other three crossings are closed.

Therefore, the Safety Board recommends that the city of Spokane:

Examine the effects of closing Stone, Lee, and Crestline Street crossings using the Railroad-Highway Grade Crossing Handbook as a guide and take appropriate action to either close these crossings or install active crossing protective devices, and inform the Safety Board of the action taken. (Class II, Priority Action) (H–80–41)

Erect Railroad Advance Warning signs and pavement markings on Napa Street at the crossing with the Spokane International Railroad. The signs and markings and their installation should be in accordance with the Manual and Uniform Traffic Control Devices. (Class I, Urgent Action) (H–80–42)

Prohibit the parking of railroad boxcars within the critical sight triangle of those railroad/highway grade crossings where only passive control devices exist. Require that flagmen be provided when such standing is necessary during loading or unloading. (Class I, Urgent Action) (H–80–43)

Study and evaluate all other railroad/highway grade crossings in the city of Spokane, with a view to closing those not necessary for traffic flow and upgrading crossing protection where warranted, and inform the Safety Board of the action taken. (Class II, Priority Action) (H–80–44)

Railroad

R–74–9 (reiterated) to Federal Railroad Administration, May 12, 1980.—On June 25, 1973, two Southern Pacific Transportation Company (SP) freight trains were involved in a rear-end collision at Indio, Calif. The engineer and head brakeman were killed, and the damage was estimated at $1,632,199. In part, the Safety Board determined that the probable cause of that accident was the failure of the crew of Extra 8992 West to stop their train, which was being operated at excessive speed by an engineer under the influence of alcohol.

As a result of investigation of that accident, the Safety Board recommended that the FRA:

Include in its proposed Standards for Rules Governing the Operation of Trains, regulations that will in effect prohibit the use of narcotics and intoxicants by employees for a specified period prior to their reporting for duty and while they are on duty. (R–74–9)

FRA responded that it have reviewed its accident causal code and modified it to broaden its data base to be used for a study of the alcohol/drug problem. On the basis of it statistical records, FRA concluded that, since the use of alcohol was the confirmed cause of only one accident during 1975 and two accidents during 1976, Federally enforced regulations would not be effective and, in fact, would be inferior to a cooperative program already in progress that was being supported by railroad labor and management. Also, SP responded to recommendation R–74–9 with the connotation that it supported

FRA and that it was of the opinion that SP's current Rule G was more restrictive than the intent of the Safety Board recommendation.

On July 24, 1979, two SP freight trains were involved in a rear-end collision at Thousand Palms, Calif., about 10 miles west of Indio. The engineer died as a result of the fire which erupted after the impact, and damage was estimated at $1,479,700. The Safety Board determined that the probable cause of that accident was the failure of the engineer, whose performance was significantly impaired by alcohol, to stop his train as required by the stop aspect displayed by the interlocking home signal. (See 45 FR 20254, March 27, 1980). The circumstances of the accident at Thousand Palms closely paralleled those of the Indio accident; i.e., the activities of the crews during their layover status at Yuma, Ariz., and the involvement of alcohol.

On October 1, 1979, a ConRail Freight train disregarded signal indications and the attempts of a flagment to stop it and struct the rear of a standing ConRail train. The accident occurred near Royersford, Pa. The engineer and conductor, who were on the lead locomotive unit, were killed. Damage was estimated at $562,000. The Safety Board determined that the probable cause of that accident was the failure of the conductor of train ALPG–2, who was operating the train without authority and under the influence of marijuana, to comply with a "stop and proceed" signal aspect located 3,600 feet from the collision site and to respond to flagging protection provided by the rear brakeman of train APJ–2 and stop the train. Contributing to the accident was the conductor's failure to perform has assigned duties by (1) ensuring that the head breakeman performed his duties in his assigned location in the locomotives; and (2) ensuring that the engineer was physically fit and capable of operating the train in conformity with all applicable rules and regulations. Also contributing was the absence of an adequate backup system to control the train in the event that the crew failed to do so. (See also 45 FR 22311, April 3, 1980.)

The Safety Board notes that since recommendation R–74–9 was issued, FRA has revised its accident causal code to allow railroads to report the involvement of alcohol as a cause of accidents. Little has been done to change the effect of alcohol, drugs, or hallucinogens on railroad operations. FRA's lack of action is not acceptable to the Safety Board. Further, the Board believes that it is unrealistic to assume that railroad management and labor unions cannot agree on the need for and a method that will identify an employee who has been using intoxicants or drugs and who should not be allowed to assume a tour of duty.

The Board is firmly convinced that FRA cannot remain adamant any longer about a real problem, which is with the industry here and now, and which will not go away or be reduced unless positive, comprehensive action is taken. This action must be in the form of enforceable regulations with the penalty being a sufficient deterrant. Accordingly, the Board reiterates recommendation R–74–9 to FRA.

Responses to Safety Recommendations

Aviation

A–80–13 and –14, from the Federal Aviation Administration, May 13, 1980.—Response is to recommendations issued last February 13 as a result of investigation of a fatal accident of a Beech 70 Excalibur Conversion (Queen Air), N777AE, which crashed just after takeoff on March 1, 1979, at Gulfport, Miss. The recommendations asked FAA to take action to provide double failure protection by means of a secondary locking device on nose baggage doors of light twin engine aircraft engaged in Part 135 operations (A–80–13), and to require that the nose baggage door interrupter system on all Beech Aircraft models so equipped be operational before flight (A–80–14). (See 45 FR 11629, February 21, 1980.)

FAA concurs in the intent of recommendation A–80–13. FAA will initiate a study to determine if an additional nose baggage door locking mechanism is needed for any specific light twin engine aircraft engaged in Part 135 operations. If the study shows that additional mechanism is needed on certain model airplanes, FAA will coordinate with the appropriate manufacturer to develop such an improvement, and will inform the Board.

FAA also concurs in the requirement of recommendation A–80–14. Federal Aviation Regulations (FAR's) 135.143a, 91.29, and 91.165 were cited by enforcement action that was completed on February 7, 1980, against Universal Airways, Inc., as a result of operating airplane N777AE in an unairworthy condition with the baggage door starter interrupter system inoperative. FAA notes that Approved Minimum Equipment Lists that are related to FAR 135.179 do not mention the interrupter system; however, this system is specified by the type designs for the airplanes that are under consideration. Consequently, FAR 135.143 requires the interrupter system to be operational before flight for air taxi coperations. For general operations, the same requirements are imposed by FAR's 91.29 and 91.165.

FAA notes that noncompliance with the above requirements, rather than the absence of requirements, caused the service difficulties cited by the Board. In order to achieve compliance, Order 8440.5A was revised on April 9, 1979, to incorporate revised Operations Bulletin No. 75–1; FAA also issued a Maintenance Note on page 12 of General Airworthiness Alert No. 10 during May 1979 (copies provided).

A–80–20 and –21, from the Federal Aviation Administration, May 13, 1980.—Response is to recommendations issued during investigation of a door failure and rapid decompression at 16,000 feet of a Swearingen SA–226 AT on March 8 near Albany, N.Y. The Board's preliminary examination of the aircraft indicated that there were static failures of the door's latching mechanism, possibly because the mechanism was adjusted improperly. The Safety Board urged FAA to issue telegraphic Airworthiness Directives requiring an immediate inspection of the door latching mechanism of the aft cargo doors on all Swearingen SA–226 aircraft to assure proper adjustment and structural integrity (A–80–20) and restricting the cabin pressure differential in Swearingen SA–226 aircraft until the cause of the aft cargo door failure can be determined and an appropriate corrective action carried out (A–80–21). (See 45 FR 20225, March 27, 1980.)

FAA reports that emergency telegraphic Airworthiness Directive (AD), No. T80SW 14, applicable to operators of Swearingen Model SA226TC and SA226AT airplanes, was issued on March 15, 1980. The AD required an immediate inspection of the door latching mechanism of the aft cargo door to assure proper adjustment, operation, and structural integrity, and prohibited flight operation with a pressurized cabin. Later on March 15, AD T80W 14 was amended by adding a clarifying paragraph requiring compliance prior to further flight.

On March 19, telegraphic AD T80SW 15 was issued, superseding AD T80SW 14, as amended. This AD T80SW 15 includes the provisions of AD T80SW 14 and provides for inspection at 250-hour intervals to assure proper adjustment, operation, and structural integrity of the door system. (Copies of all referenced AD's were provided.)

The Safety Board on May 5 advised FAA that recommendations A–80–20 and –21 were to be classified in a "Closed—Acceptable Action" status.

since the Board is satisfied that compliance with these AD's will fulfill the Board's intent.

Marine

M–79–32 through –37, from the United States Coast Guard, April 29, 1980.—Response is to Safety Board letter of February 6, 1980, commenting on USCG's previous response of last October 1 to recommendations developed as a result of investigation and analysis of the collision of the SS FROSTA and the ferry M/V GEORGE PRINCE in the Mississippi River above New Orleans, La., October 26, 1976. (See 44 FR 64933, November 8, 1979.)

With respect to M–79–32 and M–79–33, the Safety Board expressed acceptance of the statement that USCG lacks authority to require not-for-hire State operated ferry systems to perform the activities outlined in these recommendations. The Board classified these two recommendations as "Closed-Reconsidered" and stated in its February 6 letter that the Louisiana State Department of Highways, the operator of the ferry, would be approached concerning passenger safety during emergencies.

The Board agreed that the implementation of 33 CFR 164.15 may help to achieve some of the results sought in issuing M–79–34. The Board expressed concern, however, as to the future of this regulation, since the lack of a list of confined or congested waters leaves 164.15 with no area of application. The Board wished to know if/when the list of confined or congested waters will be published. The Board believes that a propulsion machinery readiness requirement at designated "caution" areas is needed even though Coast Guard estimates that this is a standard operating procedure for most vessels in or near pilotage waters. The Board asked Coast Guard to substantiate its statement with numbers of vessels that have this readiness requirement in a set of written operating procedures.

The Board accepted Coast Guard's proposals for fulfilling recommendation M–79–35 through publication of the final unified inland rules. The Board accepted the planned rulemaking activity without the cautionary note regarding the closing of pilot house windows and doors, and stated that these proposed actions will be adequate to solve the problem addressed by the recommendation.

With respect to recommendation M–79–36, the Safety Board's February 6 letter notes that on the portion of the National Oceanic and Atmospheric Administration (NOAA) Nautical Chart 11370 "Mississippi River, New Orleans, to Baton Rouge, Louisiana" that shows the Luling-Destrehan ferry crossing, there is a "CAUTION" note near the ferry crossing which is concerned with a bridge under construction and there are three general notes on "crossing channels," "river lights," and "river bouys." The ferry crossing is depicted by a thin dashed line with the word "Ferry" in small print on each bank. The words are lost because of the dark chart coloring and the symbols for dike structures. The line and the lettering tend to blend in with other general charge features. The Board notes that while symbols on maps and charts make the document more readable, they must also be effective in communicating the desired message. Ferry crossings as now depicted on NOAA Charts do not effectively illustrate or express any sense of urgency that would require special attention or caution when navigating past ferry crossings. The Board urges the Coast Guard to work with NOAA to at least have the ferry crossing track lines emphasized and illustrated in more vivid cautionary coloring.

The Safety Board is holding recommendations M–79–34 through –36 in open status.

Recommendation M–79–37 was, by the Safety Board's letter of February 6, classified "Closed—Reconsidered." The Board has restudied the possible effects of requiring nonskid surfacing for vessels such as the GEORGE PRINCE and has determined that the concept would not greatly enhance the safety of the operation. The Board further agrees that the use of restraints for individual vehicles in this type of quick turnaround roll-on/roll-off operation may be too restrictive.

Coast Guard's April 29 response to the Safety Board's February 6 comments addresses recommendations M–79–34 and M–79–36. Coast Guard reiterates its nonconcurrence with recommendation M–79–34, stating, "This recommendation would require pilots to ring "stand-by" in main engines or use other means to alert the engineroom when approaching cross-traffic lanes on U.S. navigable waterways. We still maintain that too frequent use of the stand-by bell would degrade its effectiveness." In regard to the Board's inquiry as to the implementation of the 33 CFR 164.15 (Navigation underway: confined or congested waters) rulemaking project, Coast Guard provided a discussion of the problems and possible solutions associated with the project.

Coast Guard also reiterates its nonconcurrence with recommendation M–79–36, stating that the previous discussion in its letter of last October 1 still applies. The cautionary notation referenced in the excerpt from NOAA Nautical Chart 11370 enclosed in the Safety Board's letter of February 6 was intended to notify mariners of a potentially hazardous and unusual situation which might exist from time to time as bridge construction continued at approximately mile 121.8 lower Mississippi River. Coast Guard said that it noted previously that using similar notations for marking situations which demand routine increased attentiveness, such as ferry crossings, would clutter a chart and reduce the value of cautionary notes. Additionally, a pilot is employed, when required, for the express purpose of providing unfamiliar vessel crews with the local knowledge necessary to safely navigate their vessel. By using periodically published charts to obtain general information and notices to mariners to identify situations requiring special care, all vessel crews are provided with up-to-date and accurate navigational information. Coast Guard states that the chart symbol used to designate ferry crossings is an International Hydrographic Organization-approved symbol and recognized by at least 47 member nations. Coast Guard has consulted with NOAA and has determined that it would be inappropriate to recommend any action, national or international, to modify an established chart symbol that would not materially improve vessel safety.

Railroad

R–79–75 through –77 and R–80–17 through –19, from Illinois Central Gulf (ICG), April 30, 1980.—Response is to recommendations resulting from investigation of the collision last October 12 at Harvey, Ill., of an Amtrak passenger train and an ICG freight train. The three "Class I, Urgent Action" recommendations issued last December 18 asked ICG to provide at the Harvey Yard location an interlocking or other positive means to prevent inadvertent misalignment of switches in advance of a train operating within the signal block (R–79–75); to restrict speeds through the Harvey crossover area, until positive safeguards can be provided for operation of switches, so that trains can be stopped short of a switch which is not properly aligned, but not exceeding 20 mph (R–79–76); and to immediately qualify all switchmen/brakemen who function as switchtenders by providing sufficient training in the specific rules that apply to switchtenders, in the physical layout of tracks and switches, and in train operations in the area of

their responsibility (R–79–77). (See 44 FR 76606, December 27, 1979.)

In response to these recommendations, ICG reports that electric lock switches have been installed at the Harvey Yard accident location to preclude inadvertent switch misalignment in advance of a train operating within the signal block (R–79–75), and that restricted train operating speeds through the Harvey crossover imposed since the accident have been continued in effect, notwithstanding the installation of the electric lock switches positive safeguards (R–79–76). With respect to recommendation R–79–77, ICG reports that a training/conference room has been constructed at the Chicago Division headquarters location (Markham Yard). Further, the superintendent has designated an operating officer from his staff to serve as instructor-trainer in brakemen-switchmen training. His safety training responsibility and activities are coordinated with those of ICG's northern region assistant superintendent—safety. ICG also notes that full-day program of safety refresher training has been implemented for all Chicago Division brakemen and switchmen with less than 18 months ICG service. Operating rules and procedures as well as safety rules were stressed in these remedial sessions. A performance evaluation was completed on each employee.

ICG further notes that the safety training program for new Chicago Division Transportation Department employees has been redesigned. The program comprehends classroom and field instruction built around student trips. In addition to the study and review of relevant safety and Transportation Department rules, "Special Instructions for Guidance of Employees in the Transportation Department in the Operation of Markham Yard" are covered, as well as utilization of an Open Book Quiz for new Transportation Department employees.

Recommendations R–80–17 through –19, issued April 21, called on ICG to: Install a system that will ensure that the switchtender at Harvey and the train director can have direct communication when necessary for moving trains through the Harvey area (R–80–17); when radios with multiple channels are used in train operations by employees who must use several channels, to issue instructions that identify the channel the employee must monitor for receiving instructions (R–80–18); and to instruct supervisors to monitor the activities of the employees performing the switchtender duties at Harvey for fitness and ability to perform those duties of the assignment (R–80–19). (See 45 FR 29145, May 1, 1980.)

In response to these recommendations, ICG reports: Three telephones are available to the switchtender at Harvey for purposes of direct communication with the train director (R–80–17); radio channel selection is coordinated between interested parties prior to commencement of duty—yardmaster-engineer-engine foreman (R–80–18); and employee safety performance audits and Transportation Department rule efficiency tests are conducted at regular intervals by division officers, with particular attention focused on new employees to ascertain employee fitness and ability (R–80–19).

Note.—Single copies of Safety Board reports are available without charge, as long as limited supplies last. Copies of Board recommendation letters and responses or related correspondence are also provided free of charge. All requests for copies must be in writing, identified by report or recommendation number. Address requests to: Public Inquiries Section, National Transportation Safety Board, Washington, D.C. 20594.

Multiple copies of Safety Board reports may be purchased from the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22161

(49 U.S.C. 1903(a)(2), 1906)

Margaret L. Fisher,

Federal Register Liaison Officer.

May 19, 1980.

[FR Doc. 80–15747 Filed 5–21–80; 8:45 am]

BILLING CODE 4910–58–M

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards; Notice of Meeting

In accordance with the purposes of Sections 29 and 182b. of the Atomic Energy Act (42 U.S.C. 2039, 2232 b.), the Advisory Committee on Reactor Safeguards will hold a meeting on June 5–7, 1980, in Room 1046, 1717 H Street, NW, Washington, DC. Notice of this meeting was previously published on May 15, 1980 (45 FR 32151).

The agenda for the subject meeting will be as follows:

Thursday, June 5, 1980

8:30 a.m.–9:15 a.m.: Executive Session (Open)

The Committee will hear and discuss the report of the Acting ACRS Chairman regarding matters to be considered during the meeting with the NRC Commissioners and miscellaneous matters relating to ACRS activities.

The Committee will hear and discuss the report of its Subcommittee and consultants who may be present on the request for an operating license for the Sequoyah Nuclear Power Plant, Unit 1.

9:15 a.m.–1:00 p.m.: Sequoyah Nuclear Power Plant, Unit 1 (Open)

The Committee will hear reports from and hold discussions with representatives of the NRC Staff and the Tennessee Valley Authority regarding the request for a full-power operating license for this plant.

Portions of this session will be closed as necessary to discuss Proprietary Information applicable to this matter.

2:00 p.m.–4:30 p.m.: Meeting with NRC Staff (Open)

The NRC Staff will brief the Committee on the April 19, 1980 incident at the Davis-Besse Nuclear Power Plant, Unit 1 which resulted in loss of decay heat removal capability and will discuss the proposed NRC rule (10 CFR Part 50) on emergency planning.

4:30 p.m.–7:00 p.m.: Executive Session (Open)

The Committee will discuss its proposed report to the NRC on the Stability of Babcock and Wilcox-Designed Reactors (NUREG–0667) and will discuss comments to the NRC Chairman clarifying the ACRS report of March 11, 1980 on the NRC Action Plan, Near-Term Operating Licenses.

Portions of this session will be closed as necessary to discuss Proprietary Information.

Friday, June 6, 1980

8:30 a.m.–9:15 a.m.: Executive Session (Open)

The Committee will hear and discuss comments of the Subcommittee Chairman regarding preparation of the ACRS report to the NRC on the proposed FY–82 Safety Research Program and related budget.

Portions of this session will be closed as necessary to discuss Proprietary Information and information the release of which would frustrate the ACRS in the accomplishment of its statutory responsibilities.

9:15 a.m.–12:30 p.m.: Meeting with NRC Staff (Open)

The Committee will hear and discuss reports from designated Generic Subcommittee chairmen and representatives of the NRC Staff regarding the proposed NRC Safety Research Program and related budget for FY–82.

Portions of this session will be closed as necessary to discuss Proprietary Information and information the release of which would frustrate the ACRS in the accomplishment of its statutory responsibilities.

1:30 p.m.–2:15 p.m.: Meeting with NRC Chairman and Other NRC Commissioners (Open)

The Committee will meet with the NRC Chairman, John F. Ahearne, and other Commissioners who may have an interest in discussing ACRS activities.

2:15 p.m.–3:30 p.m.: Meeting with NRC Staff (Open)

The Committee will continue to hear and discuss reports from designated Generic

Subcommittee chairmen and representatives of the NRC Staff regarding the proposed NRC Safety Research Program and related budget for FY–82.

Portions of this session will be closed as necessary to discuss Proprietary Information and information the release of which would frustrate the ACRS in the accomplishment of its statutory responsibilities.

3:30 p.m.–6:00 p.m.: Executive Session (Open)

The Committee will hear and discuss the report of its Subcommittee and consultants who may be present regarding development of quantitative risk criteria. Proposed ACRS comments regarding the April 19, 1980 incident at the Davis-Besse Nuclear Power Plant, Unit 1 will also be discussed.

Saturday, June 7, 1980

8:30 a.m.–3:30 p.m.: Executive Session (Open)

The Committee will complete discussion of and prepare its reports to the NRC regarding matters considered during this meeting. In addition, the Committee will discuss proposed reports to the NRC regarding safety related items identified by individual members including shutdown heat removal in nuclear power plants, and systematic analysis of routinely reported information from operating nuclear facilities.

A status report of the ACRS Subcommittee on Regulatory Activities and the schedule for future Committee activities will also be discussed.

The Committee will discuss the qualifications of candidates proposed for appointment to the Committee.

Portions of this session will be closed as necessary to discuss Proprietary Information and information the release of which would frustrate the ACRS in the accomplishment of its statutory responsibilities. Portions of this session will also be closed as necessary to protect information the release of which would represent an unwarranted invasion of privacy.

Procedures for the conduct of and participation in ACRS meetings were published in the **Federal Register** on October 1, 1979 (44 FR 56408). In accordance with these procedures, oral or written statements may be presented by members of the public, recordings will be permitted only during those portions of the meeting when a transcript is being kept, and questions may be asked only by members of the Committee, its consultants, and Staff. Persons desiring to make oral statements should notify the ACRS Executive Director as far in advance as practicable so that appropriate arrangements can be made to allow the necessary time during the meeting for such statements. Use of still, motion picture and television cameras during this meeting may be limited to selected portions of the meeting as determined by the Chairman. Information regarding the time to be set aside for this purpose may be obtained by a telephone call to the ACRS Executive Director (R. F. Fraley) prior to the meeting. In view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with the ACRS Executive Director if such rescheduling would result in major inconvenience.

I have determined in accordance with Subsection 10(d) Pub. L. 92–463 that it is necessary to close portions of this meeting as noted above to protect Proprietary Information (5 U.S.C. 552b(c)(4)), to protect information the release of which would constitute a clearly unwarranted invasion of personal privacy (5 U.S.C. 552b(c)(6)), and to enable frank discussions with members of the NRC Staff regarding budget information which would not be possible if held in public. Such discussions must be held in closed session to prevent frustration of the ACRS in performance of its statutory responsibilities (5 U.S.C. 552b(c)(9)(B)).

Further information regarding topics to be discussed, whether the meeting has been cancelled or rescheduled, the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted therefor can be obtained by a prepaid telephone call to the ACRS Executive Director, Mr. Raymond F. Fraley, or in his absence the ACRS Deputy Director, Mr. Marvin C. Gaske, (telephone 202/634–3265), between 8:15 a.m. and 5:00 p.m. EDT.

Dated: May 19, 1980.

John C. Hoyle,

Advisory Committee Management Officer.

[FR Doc. 80–15731 Filed 5–21–80; 8:45 am]

BILLING CODE 7590–01–M

[Docket No. 50–320–OLA]

Metropolitan Edison Co., et al.; Establishment of Atomic Safety and Licensing Board To Preside in Processing

Pursuant to Commission order, an Atomic Safety and Licensing Board is being established in the following proceeding to rule on requests for hearing and to preside over the proceeding in the event that a hearing is ordered.

Metropolitan Edison Company, Et Al.

(Three Mile Island Nuclear Station, Unit 2)

Facility Operating Lincense No. DPR–73

This action is in reference to an order of the Commission dated May 12, 1980, concerning a February 11, 1980, order of the Director, Office of Nuclear Reactor Regulation, published in the **Federal Register** on February 20, 1980 (45 F.R. 11282–84).

The Chairman of this Board and his address is as follows:

John F. Wolf, Esq., 3409 Shepherd Street, Chevy Chase, Maryland 20015.

The other members of the Board and their addresses are as follows:

Dr. Oscar H. Paris, U.S. Nuclear Regulatory Commission, Atomic Safety and Licensing Board Panel, Washington, D.C. 20555.

Mr. Frederick J. Shon, U.S. Nuclear Regulatory Commission, Atomic Safety and Licensing Board Panel, Washington, D.C. 20555.

All parties are requested to use the intials "OLA" following the docket number on all future filings in this proceeding to designate the case as an "Operating Lincense Amendment" proceeding

Dated at Bethesda, Md., this 15th day of May 1980.

Robert M. Lazo.

Acting Chairman, Atomic Safety and Licensing, Board Panel.

[FR Doc. 80–15725 Filed 5–21–80; 8:45 am]

BILLING CODE 7590–01–M

[Docket No. 50–245]

Northeast Nuclear Energy Co., Hartford Electric Light Co., Western Massachusetts Electric Co. and Connecticut Light & Power Co.; Issuance of Amendment to Provisional Operating License

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 67 to Provisional Operating License No. DPR–21, issued to Northeast Nuclear Energy Company, the Hartford Electric Light Company, Western Massachusetts Electric Company, and Connecticut Light and Power Company (the licensees), which revised the Technical Specifications for operation of the Millstone Nuclear Power Station, Unit No. 1 (the facility) located in Waterford, Connecticut. The amendment is effective as of its date of issuance.

The amendment revises the Appendix A Technical Specifications to add an automatic initiation of the Isolation Condenser on reactor vessel low-low water level and to allow credit for the Isolation Condensor System in the Emergency Core Cooling System performance calculations.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the

Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated March 19, 1980, and supplements thereto dated April 16, 1980, April 29, 1980 and May 2, 1980 and the licensee's letter dated February 14, 1980, (2) Amendment No. 67 to License No. DPR–21, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., 20555, and at the Waterford Public Library, Rope Ferry Road, Route 156, Waterford, Connecticut 06385. A single copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 8th day of May 1980.

For the Nuclear Regulatory Commission.

Dennis M. Crutchfield, Chief,

Operating Reactors Branch No. 5, Division of Licensing.

[FR Doc. 80–15726 Filed 5–21–80; 8:45 am]

BILLING CODE 7590–01–M

[Docket Nos. 50–387 and 50–388]

Pennsylvania Power & Light Co. and Allegheny Electric Cooperative, Inc. (Susquehanna Steam Electric Station, Units 1 and 2), Assignment of Atomic Safety and Licensing Appeal Board

Notice is hereby given that, in accordance with the authority conferred by 10 CFR 2.787(a), the Chairman of the Atomic Safety and Licensing Appeal Panel has assigned the following panel members to serve as the Atomic Safety and Licensing Appeal Board for this operating license proceeding:

Richard S. Salzman, Chairman, Dr. John H. Buck, Thomas S. Moore.

Dated: May 16, 1980.

C. Jean Bishop,

Secretary to the Appeal Board.

[FR Doc. 80–15727 Filed 5–21–80; 8:45 am]

BILLING CODE 7590–01–M

Screening Committee for Lawyer Vacancies on the Licensing Board Panel; Meetings

Notice is hereby given in accordance with Section 10 of the Federal Advisory Committee Act that the NRC's Advisory Screening Committee for Lawyer Vacancies on the Licensing Board Panel will hold its third, fourth, and fifth meetings on May 27, 1980, June 6, 1980, and June 9, 1980, respectively. Each meeting will be held in the Chairman's Conference Room at 1717 H Street, N.W., Washington, D.C. on each of the days noticed.

Notice of the third meeting of this advisory committee was first published on page 28030 of the **Federal Register** for Friday, April 25, 1980. That notice gave the time and location of the meeting as 9:30 a.m. at East-West Towers, 4350 East-West Highway, Room 415, Bethesda, Maryland 20014. This notice announces that the time for the third meeting has been changed to 9:00 a.m. and that all three meetings will be held at the H Street location. The time for the fourth and fifth meetings on June 6 and June 9 is 9:30 a.m.

The Committee will meet in closed session in all of these meetings. The Committee will interview candidates for the position of Chairman of the Atomic Safety and Licensing Board Panel and will consider the qualifications of applicants.

I have determined, in accordance with Subsection 10(d) of the Federal Advisory Committee Act, Pub. L. 92–463, that it is necessary to close these meetings in order to protect information the release of which would represent an unwarranted invasion of personal privacy, under Sec. 5 U.S.C. 552b(c)(6). Separation of factual information from information considered exempt from disclosure is not considered practical.

For further information contact Charles J. Fitti, Assistant Executive Secretary, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission 20555. (Telephone: (301) 492–7814).

Dated in Washington, D.C., this 19th day of May 1980.

John C. Hoyle,

Advisory Committee Management Officer.

[FR Doc. 80–15730 Filed 5–21–80; 8:45 am]

BILLING CODE 7590–01–M

[Docket No. 50–206]

Southern California Edison Co. and San Diego Gas & Electric Co; Issuance of Modification To Relief Granted From ASME Section XI Inservice Inspection (Testing) Requirements

On September 26, 1979, the U.S. Nuclear Regulatory Commission (the Commission) issued Amendment No. 46 to Provisional Operating License No. DPR–13 to Southern California Edison Company and San Diego Gas & Electric Company (the licensees), which revised the Technical Specifications for operation of the San Onofre Nuclear Generating Station, Unit No. 1 (the facility) located in San Diego County, California. The amendment incorporated an inservice program in accordance with 10 CFR section 50.55a and granted relief from certain requirements of the ASME Code, Section XI (44 FR 58557, October 10, 1979).

By letter dated April 30, 1980, as supported by the Safety Evaluation (SE) pages 1, 11, 12, and 13 enclosed thereto, the Commission has modified the relief from certain requirements of ASME Code, Section XI discussed in Item I.A. 1 of the SE supporting Amendment No. 46 to: (1) Include relief from repairs of the pressure retaining boundary for Class 2 and Class 3 components and (2) require, in the event that the repaired cavity exceeds 10% of the minimum design wall thickness, performance of hydrostatic tests for piping, pump and valve repairs that do not penetrate through the pressure boundary.

The request for the revised relief complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the letter and the appropriate safety evaluation pages granting the modified relief.

The Commission has determined that the granting of the modified relief will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this action.

For further details with respect to this action, see (1) the licensee's submittal dated February 14, 1980, (2) Amendment No. 46 to License No. DPR–21, dated September 26, 1979, and the Commission's supporting SE, and (3) the Commission's letter to the licensee

dated April 30, 1980, and replacement pages 1, 2, 5, 8, 11, 12, 13, and 14 for the above referenced SE enclosed thereto. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. 20555, and at the Mission Viejo Branch Library, 24851 Crisanta Drive, Mission Viejo, California 92676. A single copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Project Management.

Dated at Bethesda, Md., this 30th day of April 1980.

For the Nuclear Regulatory Commission.

Dennis M. Crutchfield

Acting Chief, Operating Reactors Branch No. 2, Division of Operating Reactors.

[FR Doc. 80-15728 Filed 5-21-80; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-266-CO]

Wisconsin Electric Power Co.; Establishment of Atomic Safety and Licensing Board To Preside in Proceeding

Pursuant to Commission order, an Atomic Safety and Licensing Board is being established in the following proceeding to rule on a request for hearing and to preside over the proceeding in the event that a hearing is ordered.

Wisconsin Electric Power Co.

(Point Beach Nuclear Plant, Unit 1)

Facility Operating License No. DPR-24

This action is in reference to an order of the Commission dated May 12, 1980, concerning a November 30, 1979, order of the director, Office of Nuclear Reactor Regulation (NRR) entitled, "Confirmatory Order for Modification of License", published in the **Federal Register** on December 7, 1979 (44 FR 70608-09) and a subsequent January 3, 1980, order of the Director of NRR entitled "Order Modifying Confirmatory Order of November 30, 1979" published in the **Federal Register** on January 11, 1980 (45 FR 2452).

The Chairman of this Board and his address is as follows:

Herbert Grossman, Esq., U.S. Nuclear Regulatory Commission, Atomic Safety and Licensing Board Panel, Washington, D.C. 20555.

The other members of the Board and their addresses are as follows:

Dr. Richard F. Cole, U.S. Nuclear Regulatory Commission, Atomic Safety and Licensing Board Panel, Washington, D.C. 20555.

Dr. J. Venn Leeds, 10807 Atwell, Houston, Texas 77096.

All parties are requested to use the initials "CO" following the docket number on all future filings in this proceeding to designate the case as a "Confirmatory Order" proceeding.

Dated at Bethesda, Md., this 15th day of May 1980.

Robert M. Lazo,

Acting Chairman, Atomic Safety and Licensing Board Panel.

[FR Doc. 80-15729 Filed 5-21-80; 8:45 am]

BILLING CODE 7590-01-M

OFFICE OF THE FEDERAL REGISTER

Agreements Between the American Institute in Taiwan and the Coordination Council for North American Affairs

AGENCY: Office of the Federal Register (NARS).

ACTION: Notice of availability of agreements.

SUMMARY: The American Institute in Taiwan has concluded a number of agreements with the Coordination Council for North American Affairs in order to maintain cultural, commercial and other unofficial relations between the American people and the people on Taiwan. The Director of the **Federal Register** is publishing the list of these agreements on behalf of the American Institute in Taiwan in the public interest.

SUPPLEMENTARY INFORMATION: Cultural, commercial and other unofficial relations between the American people and the people on Taiwan are maintained on a nongovernmental basis through the American Institute in Taiwan (AIT), a private nonprofit corporation incorporated under the laws of the District of Columbia. The Coordination Council for North American Affairs (CCNAA) is its nongovernmental Taiwan counterpart.

Pursuant to section 12(a) of the Taiwan Relations Act (Pub. L. 96-8; 93 Stat. 14), agreements concluded between the AIT and the CCNAA are transmitted to the Congress, and pursuant to sections 6 and 10(a) of the Act, such agreements have full force and effect under the law of the United States. The texts of the agreements are available from the American Institute in Taiwan, 1700 North Moore Street, 17th floor, Arlington, Virginia 22209. For further information contact Joseph Kyle, at this address, telephone (703) 525-8474.

Following is a list of agreements concluded by AIT with CCNAA as of May 1, 1980:

Aviation

Air transport agreement, with exchange of letters. Signed at Washington March 5, 1980; entered into force March 5, 1980.

Education and Cultural

Implementing agreement financing certain educational and cultural exchange programs. Exchange of letters at Taipei April 14 and June 4, 1979; entered into force June 4, 1979.

Privileges and Immunities

Agreement relating to privileges and immunities of courier system. Signed at Washington and Arlington December 31, 1979 and January 7, 1980; entered into force January 7, 1980.

Trade and Commerce

Agreement on trade matters, with annexes. Exchange of letters at Arlington and Washington October 24, 1979; entered into force October 24, 1979.

Implementing agreement relating to trade in cotton, wool and man-made fiber textiles and textile products. Exchange of letters at Arlington and Washington November 5 and 21, 1979; entered into force November 21, 1979.

Implementing agreement relating to trade in cotton, wool and man-made fiber textiles and textile products. Exchange of letters at Arlington and Washington December 13 and 17, 1979; entered into force December 17, 1979.

Implementing agreement relating to trade in cotton, wool and man-made fiber textiles and textile products. Exchange of letters at Arlington and Washington March 7 and April 10, 1980; entered into force April 10, 1980.

Dated: May 15, 1980.

Joseph B. Kyle,

Corporate Secretary, American Institute in Taiwan.

Dated: May 19, 1980.

Ernest J. Galdi,

Director of the Federal Register.

[FR Doc. 80-15779 Filed 5-21-80; 8:45 am]

BILLING CODE 1505-01-M

OFFICE OF MANAGEMENT AND BUDGET

Agency Forms Under Review

May 19, 1980.

Background

When executive departments and agencies propose public use forms, reporting, or recordkeeping requirements, the Office of Management and Budget (OMB) reviews and acts on those requirements under the Federal Reports Act (44 U.S.C., Chapter 35). Departments and agencies use a number of techniques including public hearings to consult with the public on significant reporting requirements before seeking OMB approval. OMB in carrying out its responsibility under the Act also considers comments on the forms and

recordkeeping requirements that will affect the public.

List of Forms Under Review

Every Monday and Thursday OMB publishes a list of the agency forms received for review since the last list was published. The list has all the entries for one agency together and grouped into new forms, revisions, extensions, or reinstatements. Some forms listed as revisions may only have a change in the number of respondents or a reestimate of the time needed to fill them out rather than any change to the content of the form. The agency clearance officer can tell you the nature of any particular revision you are interested in. Each entry contains the following information:

The name and telephone number of the agency clearance officer (from whom a copy of the form and supporting documents is available);

The office of the agency issuing this form;

The title of the form;

The agency form number, if applicable;

How often the form must be filled out;

Who will be required or asked to report;

An estimate of the number of forms that will be filled out;

An estimate of the total number of hours needed to fill out the form; and

The name and telephone number of the person or office responsible for OMB review.

Reporting or recordkeeping requirements that appear to raise no significant issues are approved promptly. Our usual practice is not to take any action on proposed reporting requirements until at least ten working days after notice in the **Federal Register** but occasionally the public interest requires more rapid action.

Comments and Questions

Copies of the proposed forms and supporting documents may be obtained from the agency clearance officer whose name and telephone number appear under the agency name. The agency clearance officer will send you a copy of the proposed form, the request for clearance (SF–83), supporting statement, instructions, transmittal letters, and other documents that are submitted to OMB for review. If you experience difficulty in obtaining the information you need in reasonable time, please advise the OMB reviewer to whom the report is assigned. Comments and questions about the items on this list should be directed to the OMB reviewer or office listed at the end of each entry.

If you anticipate commenting on a form but find that time to prepare will prevent you from submitting comments promptly, you should advise the reviewer of your intent as early as possible.

The timing and format of this notice have been changed to make the publication of the notice predictable and to give a clearer explanation of this process to the public. If you have comments and suggestions for further improvements to this notice, please send them to Jim. J. Tozzi, Assistant Director for Regulatory and Information Policy, Office of Management and Budget, 726 Jackson Place, Northwest, Washington, D.C. 20503.

DEPARTMENT OF AGRICULTURE

Agency Clearance Officer—Richard J. Schrimper—447–6201

New Forms

Farmer's Home Administration
Pretest—Rural congregate housing demonstration evaluation
Other (see SF–83)
Elderly applicants for congregate housing
Charles A. Ellett, 395–7340

Revisions

Economics, Statistics, and Cooperatives Service Cooperative oil seed mills
Annually
Cooperative cottonseed and soybean plants, 30 responses; 136 hours
Office of Federal Statistical Policy and Standard, 673–7974

Farmer's Home Administration
7CFR 1945–C, insured economic emergency loans
1845–22, 1940–38
On occasion
Farmers suffering from economic emergency, 243,660 responses; 49,794 hours
Charles A. Ellett, 395–7340

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Agency Clearance Officer—Joseph J. Strnad—245–7488

New Forms

Social Security Administration
Energy assistance for low income families
On occasion
State agency administering Federal energy programs
Barbara F. Young, 395–6880

Revisions

Center for Disease Control
National disease surveillance—I. Case reports
On occasion
State and territorial health departments, 35,864 responses; 12,047 hours
Office of Federal Statistical Policy and Standard, 673–7974

Social Security Administration
Student's statement regarding resumption of attendance
SSA–1386
On occasion
Student beneficiaries, 650,000 responses; 65,000 hours
Barbara F. Young, 395–6880

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Agency Clearance Officer—Robert G. Masarsky—755–5184

Extensions

Housing Management
Report of construction status of advance planning project
HUD–4435
Annually
Non-Federal public bodies, 2,800 responses; 2,800 hours
Richard Sheppart, 395–6880

DEPARTMENT OF LABOR

Agency Clearance Officer—Paul E. Larson—523–6341

Extensions

Bureau of Labor Statistics
Annual OSHA prenotification of recordkeeping requirements and survey
OSHA 200s and OSHA No. 200PRE
Annually
Employers in the private sector and State and local government, 280,000 responses; 70,000 hours
Arnold Strasser, 395–6880

Reinstatements

Employment Standards Administration
Coal mine employment statements
CM–913, CM–918, CM–1093
On occasion
Coal miners and survivors, 55,000 responses; 17,500 hours
Arnold Strasser, 395–6880

EXECUTIVE OFFICE OF THE PRESIDENT, OTHER

Agency Clearance Officer—Roy A. Nierenberg—456–6286

New Forms

Council on Wage and Price Stability
Form Pay–1
Semi-annually
Private sector companies, 1,400 responses; 5,600 hours
Warren Topelius, 395–7340

FEDERAL EMERGENCY MANAGEMENT AGENCY

Agency Clearance Officer—Linda Shirley—254–9515

Reinstatements

Fair Plan Quarterly Report
FEMA form
Quarterly
State fair plan (insurance), 112 responses; 1,120 hours
Edward C. Springer, 395–4814

FEDERAL RESERVE SYSTEM

Agency Clearance Officer—Carolyn B. Doying—452–3512

New Forms

Statement of purpose of extension of credit by a creditor
FR T–4
On occasion
Brokers/dealers that extend credit to purchase sec. and cust.
Warren Topelius, 395–7340

Record of facts concerning non-U.S. credit collateralized by securities
FR X–1
On occasion
U.S. borrowers of overseas credit secured by U.S. sec.
Warren Topelius, 395–7340

Extensions

Registration statement, deregistration statement,
Annual report
G–1, G–2 G–4
On occasion
Lendr (othr than bks brokr/dealr) who ext cped sec by stk, 671 responses; 1,311 hours
Warren Topelius, 395–7340

INTERNATIONAL COMMUNICATION AGENCY

Agency Clearance Officer—Mary Jane Winnett—523–4308

New Forms

Supplemental qualifications statement international radio broadcaster
LA–1178
On occasion
Nationwide, 200 responses; 400 hours
Phillip T. Balazs, 395–4814

NATIONAL SCIENCE FOUNDATION

Agency Clearance Officer—Herman Fleming—357–7811

New Forms

Alan T. Waterman award nomination for national medal of science
NSF 1122, 1123, 1124
Scientists, 300 responses; 1,200 hours
Marsha D. Traynham, 395–7340

RAILROAD RETIREMENT BOARD

Agency Clearance Officer—Pauline Lohens—312–751–4692

Revisions

Annuitant's report of earnings and disability
RL–150
On occasion
Disability annuitants, 150 responses; 38 hours
Barbara F. Young, 395–6880

SMALL BUSINESS ADMINISTRATION

Agency Clearance Officer—John Anderson—653–6890

New Forms

Groundfish vessel questionnaire
Single time
Groundfish fisheries in New England, 1,170 responses; 585 hours
Edward C. Springer, 395–4814

C. Louis Kincannon,

Acting Deputy Assistant Director for Reports Management.

[FR Doc. 80–15753 Filed 5–21–80; 8:45 am]

BILLING CODE 3110–01–M

OFFICE OF SCIENCE AND TECHNOLOGY POLICY

Intergovernmental Science, Engineering, and Technology Advisory Panel; Meeting

In accordance with the Federal Advisory Committee Act, Pub. L. 92–463, the Office of Science and Technology Policy announces the following meeting:

Name: Intergovernmental Science, Engineering, and Technology Advisory Panel (ISETAP); Human Resources Task Force.
Date: Friday, June 6, 1980, 9:30 a.m.–3:00 p.m.
Place: Municipal Building, 1600 Pacific Highway, San Diego, Ca.
Type of Meeting: Open.
Contact Person: Dr. Michael Gruber, Staff Director, ISETAP Human Resources Task Force, U.S. Department of Health and Human Services, 202/245–6156.

Minutes of the meeting: Executive minutes of the meeting will be available from the office of Dr. Gruber.

Agenda

9:30 a.m. Briefing on the status of the OMB memorandum;
10:30 a.m. Report on research into the fiscal crisis of public hospitals; Discussion and panel recommendations;
11:30 a.m. Discussion and adoption of resolution on Administration on Aging's project for technology transfer in support of the frail elderly;
12:30 p.m. Lunch;
1:30 p.m. Discussion and adoption of resolution on research into health aspects of hazardous chemical dumps;
2:20 p.m. Discussion and recommendations on Long Term Care research strategy at the Department of Health and Human Services;
3:00 p.m. Open discussion of task force plans and other activities.

William J. Montgomery,

Executive Officer, Office of Science & Technology Policy.

[FR Doc. 80–15721 Filed 5–21–80; 8:45 am]

BILLING CODE 3170–01–M

POSTAL RATE COMMISSION

[Docket No. A80–9]

Huggins, Mo. 65484 (Laveta Kelley, Petitioner); Notice and Order of Filing of Appeal

May 15, 1980.

On May 5, 1980, the Commission received a handwritten letter from Laveta Kelley (hereinafter "Petitioner"), concerning alleged United States Postal Service plans to close the Huggins, Missouri, post office. Although the letter makes no explicit reference to the Postal Reorganization Act, we believe it should be construed as a petition for review pursuant to section 404(b) of the Act [39 U.S.C. 404(b)], so as to preserve Petitioner's right to appeal which is subject to a 30-day time limit.[1] The petition does not conform perfectly with the Commission's rules of practice, which also require a petitioner to attach a copy of the Postal Service's Final Determination to the petition.[2] However, section 1 of the Commission's rules of practice calls for a liberal construction of the rules to secure just and speedy determination of issues.[3]

The Act requires that the Postal Service provide the affected community with at least 60 days' notice of a proposed post office closing so as to "ensure that such persons will have an opportunity to present their views."[4] The petition requests that the decision to close the Huggins post office be reversed. From the face of the petition it is unclear whether any hearings were held and whether a determination has been made under 39 U.S.C. 404(b)(3). (Petitioner failed to supply a copy of the Postal Service's Final Determination, if one is in existence.) The Commission's rules of practice require the Postal Service to file the administrative record of the case within 15 days after the date

[1] 39 U.S.C. 404(b)(5). 39 U.S.C. 404(b) was added to title 39 by Pub. L. 94–421 (September 24, 1976), 90 Stat. 1310–11. Our rules of practice governing these cases appear at 39 CFR 3001.110 *et seq.*

[2] 39 CFR 3001.111(a).

[3] 39 CFR 3001.1.

[4] 39 U.S.C. 404(b)(1).

on which the petition for review is filed with the Commission.[5]

The Postal Reorganization Act states:

> The Postal Service shall provide a maximum degree of effective and regular postal services to rural areas, communities, and small towns where post offices are not self-sustaining. No small post office shall be closed solely for operating at a deficit, it being the specific intent of the Congress that effective postal services be insured to residents of both urban and rural communities.[6]

Section 404(b)(2)(C) of the Act specifically includes consideration of this goal in determinations by the Postal Service to close post offices. The effect on the community is also a mandatory consideration under section 404(b)(2)(A) of the Act.

The petition appears to set forth the Postal Service action complained of in sufficient detail to warrant further inquiry to determine whether the Postal Service complied with its regulations for the discontinuance of post office.[7]

Upon preliminary inspection, the petition appears to raise the following issues of law:

1. Whether the Postal Service considered the importance of the post office to the community under the effect on the community factor, section 404(b)(2)(A). The Petitioner alleges that the post office is the focal point of the community.

2. Whether the Postal Service considered the change the closing would cause in the community's use of postal services under the effect on postal service factor, section 404(b)(2)(C). The Petitioner claims that residents of a wide area around the post office go there to purchase money orders and stamps.

3. Whether the Postal Service must consider as an effect on the community [section 404(b)(2)(A)] the inconvenience and expense to the Huggins' residents of changing their addresses.

4. Whether the Postal Service's proposed substitute for the post office is in compliance with the policy stated in 39 U.S.C. 101(b).

Other issues of law may become apparent when the Commission has had the opportunity to examine the determination made by the Postal Service. Such additional issues may emerge when the parties and the Commission review the Service's determination for consistency with the principles announced in *Lone Grove, Texas, et al.*, Docket Nos. A79–1, *et al.* (May 7, 1979), and the Commission's subsequent decisions on appeals of post office closings and consolidations. The determination may be found to resolve adequately one or more of the issues involved in the case.

In view of the above, and in the interest of expediting this proceeding under the 120-day decisional deadline imposed by section 404(b)(5), the Postal Service is advised that the Commission reserves the right to request a legal memorandum from the Service on one or more of the issues described above and/or any further issues of law disclosed by the determination made in this case. In the event that the Commission finds such memorandum necessary to explain or clarify the Service's legal position or interpretation on any such issue, it will, within 20 days of receiving the determination and record pursuant to section 113 of the rules of practice [39 CFR 3001.113] make the request therefor by order, specifying the issues to be addressed.

When such a request is issued, the memorandum shall be due within 20 days of the issuance, and a copy of the memorandum shall be served on the Petitioner by the Service.

In briefing the case or in filing any motion to dismiss for want of prosecution, in appropriate circumstances the Service may incorporate by reference all or any portion of a legal memorandum filed pursuant to such an order.

The Act does not contemplate appointment of an Officer of the Commission in section 404(b) cases,[8] and none is being appointed. The Commission orders that:

(A) The letter of May 5, 1980, from Laveta Kelley be construed as a petition for review pursuant to section 404(b) of the Act [39 U.S.C. 404(b)].

(B) The Secretary of the Commission shall publish this Notice and Order in the **Federal Register.**

(C) The Postal Service shall file the administrative record in this case on or before May 20, 1980, pursuant to the Commission's rules of practice [39 CFR 3001.113(a)].

By the Commission.

David F. Harris,

Secretary.

Appendix

May 5, 1980: Filing of Petition.
May 15, 1980: Notice and Order of Filing of Appeal.
May 14, 1980: Record filed by Postal Service [*see* 39 CFR 3001.113(a)].
May 26, 1980: Last day for filing of petitions to intervene [*see* 39 CFR 3001.111(b)].
June 4, 1980: Petitioner's initial brief [*see* 39 CFR 3001.115(a)].
June 19, 1980: Postal Service answering brief [*see 39 CFR 3001.115(b)].*
July 7, 1980:
(1) Petitioner's reply brief, should petitioner choose to file such brief [*see* 39 CFR 3001.115(c)].
(2) Deadline for motions by any party requesting oral argument. The Commission will exercise its discretion, as the interests of prompt and just decision may require, in scheduling or dispensing with oral argument.
Sept. 2, 1980: Expiration of 120-day decisional schedule [*see* 39 U.S.C. 404(b)(5)].

[FR Doc. 80-15647 Filed 5-21-80; 8:45 am]
BILLING CODE 7715-01-M

[5] 39 CFR 3001.113(a). The Postal Rate Commission informs the Postal Service of its receipt of such an appeal by issuing PRC Form No. 56 to the Postal Service upon receipt of each appeal.

[6] 39 U.S.C. 101(b).

[7] 42 FR 59079–85 (November 17, 1977); the Commission's standard of review is set forth at 39 U.S.C. 404(b)(5).

[8] In the Matter of Gresham, S.C., Route No. 1, Docket No. A78–1 (May 11, 1978).

POSTAL SERVICE

Permanent Change in Mail Classification Schedule; Merchandise Return Service

On August 13, 1979, the United States Postal Service requested the Postal Rate Commission to submit to the Governors of the Postal Service a recommended decision on a change in the mail classification schedule establishing a new merchandise return service, pursuant to Chapter 36 of Title 39, United States Code (Postal Rate Commission Docket No. MC 79–4). An explanation of the Postal Service proposal was published in the **Federal Register** by the Postal Rate Commission on August 28, 1979 (44 FR 50420).

On January 7, 1980, a settlement proposal recommending a modified merchandise return service was filed with the Postal Rate Commission by several parties to the merchandise return proceeding. The Postal Service and the Officer of the Commission were among the signatories of the settlement proposal. The one party which had expressed opposition to the concept of merchandise return subsequently withdrew its opposition and signed the proposal.

Because the Postal Rate Commission had not transmitted its recommended decision to the Governors of the Postal Service within 90 days after submission of the settlement proposal (January 7, 1980), the Postal Service, under the authority of 39 U.S.C. 3641(e), placed the changes in the mail classification schedule proposed in the settlement into effect on April 27, 1980 (45 FR 26194 (April 17, 1980)).

On April 21, 1980, the Postal Rate Commission issued a Recommended Decision in Docket No. MC79–4. The

Commission recommended that the Governors adopt the merchandise return service as provided in the settlement proposal. On May 6, 1980, the Governors, pursuant to 39 U.S.C. 3625, approved the Commission's Recommended Decision and ordered the recommended changes in the mail classification schedule into effect on a permanent basis. The Board of Governors concurrently determined that those changes would become effective at 12:01 a.m. on May 21, 1980. (The Governors's decision, the record of the Commission's hearings, and the Commission's recommended decision may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Governors' decision and the Commission's recommended decision are available for inspection in the Library at Headquarters, United States Postal Service, 475 L'Enfant Plaza West, S.W., Washington, D.C. 20260.)

In accordance with these actions by the Governors and the Board of Governors, the Postal Service hereby gives notice that the changes to the classification schedule and rate schedules established on a temporarty basis on April 27, 1980, and set forth at 45 FR 26194 (April 17, 1980) become effective permanently at 12:01 a.m., May 21, 1980 (39 USC 3625). The temporary changes will remain in effect until that time.

W. Allen Sanders,

Associate General Counsel, Office of General Law and Administration.

[FR Doc. 80-15669 Filed 5-21-80; 8:45 am]

BILLING CODE 7710-12-M

SECURITIES AND EXCHANGE COMMISSION

[Rel. No. 21579; 70-6434]

Alabama Power Co.; Proposed Issuance and Sale of First Mortgage Bonds at Competitive Bidding

Notice is hererby given that Alabama Power Company ("Alabama"), 600 North 18th Street, Birmingham, Alabama 35291, a public-utility subsidiary company of The Southern Company, a registered holding company, has filed an application and amendments thereto with this Commission pursuant to the Public Utility Holding Company Act of 1935 ("Act"), designated Section 6(b) of the Act and Rule 50 promulgated thereunder as applicable to the following proposed transaction. All interested persons are referred to the application, which is summarized below, for a complete statement of the proposed transaction.

Alabama proposes to issue and sell, subject to the competitive bidding requirements of Rule 50 under the Act, up to $100,000,000 principal amount of its First Mortgage Bonds of a new series having a term of not less than five nor more than 30 years. Alabama will determine and give notice to prospective bidders of the amount and the term of the new bonds not less than 24 hours prior to the time of bidding. The interest rate of the bonds and the price, exclusive of accrued interest, to be paid to Alabama, which will be not less than 98% nor more than 101¾% of the principal amount thereof, will be determined by competitive bidding. It is stated that Alabama may request by amendment that such proposed sale be excepted from the competitive bidding requirements of Rule 50 should circumstances develop which, in the opinion of Alabama's management make such exception in the best interest of Alabama and its investors and consumers.

The new bonds will be issued under the Indenture dated as of January 1, 1942, between Alabama and Chemical Bank, as Trustee, as heretofore supplemented by various indentures supplemental thereto and as to be further supplemented by a supplemental Indenture to be dated as of June 1, 1980. The supplemental indenture will include a prohibition, for a period of not more than five years, against refunding the bonds, directly or indirectly, with funds borrowed at a lower effective interest cost.

Alabama intends to use the proceeds from the sale of the new bonds, along with other funds, principally in financing its construction costs, estimated for 1980 to be $459,165,000, and in paying outstanding short-term unsecured indebtedness.

The fees and expenses to be incurred in connection with the proposed transaction are estimated at $338,000, including legal fees of $38,000, accountants' fee of $12,000, and charges of the system service company, at cost, of $7,000. It is stated that the issuance and sale of the new bonds have been expressly authorized by the Alabama Public Service Commission and that no other state or federal commission, other than this Commission, has jurisdiction over the proposed transaction.

Notice is further given that any interested person may, not later than June 2, 1980, request in writing that a hearing be held on such matter, stating the nature of his interest, the reasons for such request, and the issues of fact or law raised by said application which he desires to controvert; or he may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed: Secretary, Securities and Exchange Commission, Washington, D.C. 20549. A copy of such request should be served personally or by mail upon the applicant at the above-stated address, and proof of service (by affidavit or, in case of an attorney at law, by certificate) should be filed with the request. At any time after said date, the application, as amended or as it may be further amended, may be granted as provided in Rule 23 of the General Rules and Regulations promulgated under the Act, or the Commission may grant exemption from such rules as provded in Rules 20(a) and 100 thereof or take such other action as it may deem appropriate. Persons who request a hearing or advice as to whether a hearing is ordered will receive any notices or orders issued in this matter, including the date of the hearing (if ordered) and any postponements thereof.

For the Commission, by the Division of Corporate Regulation, pursuant to delegated authority.

George A. Fitzsimmons,

Secretary.

[FR Doc. 80-15770 Filed 5-21-80; 8:45 am]

BILLING CODE 8010-01-M

[Re. No. 34-16814; File No. SR-Amex-80-9]

American Stock Exchange, Inc.; Self-Regulatory Organization; Proposed Rule Change

Pursuant to Section 19(b)91) of the Securities Exchange Act of 1934 (the "Act"), 15 U.S.C. 78s(b)(1), as amended by Pub. L. No. 94-29, 16 (June 4, 1975), notice is hereby given that on May 2, 1980 the above-mentioned self-regulatory organization filed with the Securities and Exchange Commission a proposed rule change as follows:

The Exchange's Statement of the Terms of Substance of the Proposed Rule Change

The American Stock Exchange has adopted amendments to Rules 576 and 585 which deal with the transmission by member organizations of any issuer's proxy solicitation materials and other corporate reports to stockholders.

Rules 576 and 585 require member organizations holding customer securities in street name to transmit proxy solicitation material and interim financial reports to each beneficial owner whenever the issuer furnishes the materials to such member and agrees to reimburse the firm for its reasonable

expenses, including clerical costs. The amendments to Rule 576 and 585 will:

(1) increase the reimbursement rate for followup proxy solicitation mailings from 10¢ perset of material to 30¢ per set if mailed to all stockholders, or 50¢ per set if selectively mailed only to shareholders who did not reply to the initial solicitation;

(2) increase the minimum charge for transmitting proxy materials from $3 to $5 (the initial per set charge remains the same);

(3) increase the reimbursement rate for mailing interim reports from 10¢ per copy to 20¢ per copy and establish a $2 minimum; and

(4) modify the form of invoice used by member organizations in order to specify all charges.

The new rate increases were endorsed by the Exchange's Listed Company Advisory Committee. They are identical to changes made in comparable New York Stock Exchange rules approved by the SEC last year (SR–NYSE–79–47).

The Exchange's Statement of Purpose and Basis

The reimbursement rates set forth in Rules 576 and 585 have not been changed since 1974. The rates are now being changed solely to permit member organizations to recoup increased costs, thereby enabling them to maintain adequate clerical staff devoted to the timely and efficient processing of proxy solicitation and other corporate mailings. Moreover, it is believed that the detailed presentation of these charges in the revised invoice form will permit easier review and processing by the issuer. The cost impact on issuers is not expected to be significant.

The amendments to Rule 576 and 585 are consistent with Section 6(b) of the Act in general and further the objectives of Section 6(b)(5) in particular in that the rate increases will insure the continued orderly processing and transmittal of corporate materials, thereby effectively protecting investors and the public interest.

Comments Received from Members, Participants, or Others on Proposed Rule Change

The Exchange's Listed Company Advisory Committee has endorsed the amendments to Rules 576 and 585.

The Exchange's Burden on Competition

The Exchange has determined that no burden on competition will be imposed by these amendments.

The foregoing rule change has become effective, pursuant to Section 19(b)(3) of the Securities Exchange Act of 1934. 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 Securities Exchange Act of 1934.

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons desiring to make written submissions should file six (6) copies thereof with the Secretary of the Commission, Securities and Exchange Commission, Washington, D.C. 20549. Copies of the filing with respect to the foregoing and of all written submissions 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 referenced in the caption above and should be submitted on or before June 12, 1980.

For the Commission by the Division of Market Regulation, pursuant to delegated authority.

George A. Fitzsimmons,

Secretary.

May 16, 1980

[FR Doc. 80–15767 Filed 5–21–80; 8:45 am]

BILLING CODE 8010–01–M

[Rel. No. 34–16810; File No. SR–BSE–80–5]

Boston Stock Exchange, Inc.; Self-Regulatory Organizations; Proposed Rule Change

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934, 15 U.S.C. 78s(b)(1), as amended by Pub. L. No. 94–29, 16 (June 4, 1975), notice is hereby given that on May 5, 1980, the above-mentioned self-regulartory organization filed with the Securities and Exchange Commission a proposed rule change as follows:

1. *Exchange's Statement of the Terms of Substance of the Proposed Constitutional Change.*

To rescind in their entirety the provisions of sub-sections (e), (f), and (g) of Section 3 of Article I of the Constitution, as follows:

[Associate member

(e) The term "associate member" means an individual admitted to associate membership in the Exchange in accordance with the provisions of Article XXII of the Constitution.

Associate member firm

(f) The term "associate member-firm" means a firm, transacting business as a broker or dealer in securities, at least one of whose general partners is an associate member of the Exchange.

Associate member corporation

(g) The term "associate member-corporation" means a corporation, transacting business as a broker or a dealer in securities, at least one of whose officers is an associate member of the Exchange.]

To rescind in its entirely Article XXII of the Constitution, as follows:

[Associate Membership

Eligibility

Sec. 1. Associate membership shall be available (a) to all present or future members of the Philadelphia Stock Exchange, Inc., who qualify, in accordance with written Agreements entered into from time to time by the Board of Governors of the Boston Stock Exchange, Inc., of the Philadelphia Stock Exchange, Inc.; (b) to all present or future members of the Montreal Stock Exchange who qualify, in accordance with written Agreements entered into from time to time by the Board of Governors of the Boston Stock Exchange, Inc., and the Governing committee of the Montreal Stock Exchange.

Privileges

Sec. 2. The rights and benefits of associate membership shall be restricted solely to such trading privileges as may be defined in the written Agreements provided for in Section I of this Article, such trading privileges to be exercised under such rules and regulations as such Agreements shall prescribe.

Dues

Sec. 3. The dues of associate members shall be in such amount and shall be payable in such manner as the Agreements provided for in Section I of this Article may prescribe.

Not Transferable

Sec. 4. Associate membership shall not be transferable and shall be available only as prescribed in Section 1 of this Article.]

2. *Procedures of Self-Regulatory Organization.*

The Board of Governors approved the proposed amendments on April 24, 1980.

3. *Exchange's Statement on Purpose of the Proposed Changes.*

To rescind the provisions of the Constitution dealing with Associate Membership which has been in effect since 1957. The objectives of such Agreements are now being achieved through the capabilities of the Intermarket Trading System to reach out to other participant markets.

4. *Exchange's Statement on Bases of Proposed Change.*

The bases under the Act for the proposed Constitutional changes are Section 6(b)(5) and 11(a)(1). By rescinding the Associate Membership provision, all orders will now be exposed to ITS and all of its participants, rather than to individual exchanges with which this Exchange had reciprocal agreements for Associate Membership.

5. *Comments Received from Members, Participants or Others on Proposed Constitutional Changes.*

No comments were solicited or received. The Board of Governors of the Philadelphia Stock Exchange, Inc., voted on March 19, 1980, to terminate the Associate Membership Agreement between the Exchanges.

6. *Exchange's Statement on Burden on Competition.*

No burden on competition is perceived by the termination of Associate Membership.

7. *Extension of Time Periods for Commission Action.*

The Exchange does not consent to the extension of the time period specified in Rule 19(b)(2) of the Act.

On or before June 26, 1980, or within such longer period (i) as the Commission may designate up to 90 days of such date, if it finds such longer period to be appropriate and published its reasons for so finding, or (ii) as to which the above-mentioned self-regulatory organization consents, the Commission will:

(a) By order approve such proposed constitutional change, or

(b) Institute proceedings to determine whether the proposed constitutional change should be disapproved.

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons desiring to make written submissions should file six copies thereof with the Secretary of the Commission, Washington, DC 20549. Copies of the filing with respect to the foregoing and of all written submissions will be available for inspection and copying in the Public Reference Room 1100 L Street, NW., Washington, DC. Copies of such filing will also 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 referenced in the caption above and should be submitted on or before June 12, 1980.

For the Commission by the Division of Market Regulation, pursuant to delegated authority.

George A. Fitzsimmons,

Secretary.

May 15, 1980.

[FR Doc. 80-15768 Filed 5-21-80; 8:45 am]

BILLING CODE 8010-01-M

[Rel. No. 34-16815; File No. SR-BSE-80-2]

Boston Stock Exchange, Inc., Self-Regulatory Organization; Proposed Rule Change

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934, 15 U.S.C. 78s(b)(1), as amended by Pub. L. No. 94-29, 16 (June 4, 1975), notice is hereby given that on April 14, 1980, the above-mentioned self-regulatory organization filed with the Securities and Exchange Commission a proposed rule change to amend Chapter XII-A of their rules, concerning odd-lot dealers in securities the primary market for which is on another market. The proposed rule would require odd-lot orders to be filled on the basis of the last reported round-lot transaction on the primary market, rather than the current rule which requires specialists to wait two minutes after an order is received before executing it on the basis of the next round lot transaction. The rule also would state that specialists may charge a reasonable differential, although the rules would not require differentials to be charged, and they would specifically prohibit the charging of differentials on odd-lot market orders received before the opening of trading for execution at the opening.

Exchange's Statement of Purpose of the Proposed Rule Change

In the present environment of large volume in the primary markets it becomes virtually impossible to adhere to an execution of odd-lot transactions based upon the "two-minute rule". With the interrogation equipment now in place on our Floor, a specialist can immediately ascertain the last sale of a security on such primary markets and such odd-lots will be executed against that last round lot transaction, plus or minus a differential, if any.

By executing the odd-lots on the last sale on the primary market, the Exchange will have an effective and uniform method of determining the accuracy of such executions for surveillance purposes and instantaneous reports of execution will be generated.

Exchange's Statement of Basis Under the Act of the Proposed Rule Change

The proposed rule change relates to Section 6(b)(5), and 11(a) of the Act in that it would assist the Exchange by providing an effective and uniform method for the execution of odd-lots, thereby protecting the investors and the public and providing a means of determining the accuracy of execution for surveillance purposes.

Comments Received from Members, Participants or Others on Proposed Rule Change

No comments were solicited or received.

Exchange's Statement on Burden on Competition

No burden on competition is perceived by adoption of the proposed amendment. The Exchange believes the proposed Rule will aid in the protection of investors and the public interest by providing instantaneous reports of executions.

On or before June 26, 1980, or within such longer 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 above mentioned self-regulatory organization consents, the Commission will:

(A) By order approve such proposed rule change, or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons desiring to make written submissions should file 6 copies thereof with the Secretary of the Commission, Securities and Exchange commission, Washington, DC 20549.

Copies of the filing with respect to the foregoing and of all written submissions will be available for inspection and copying in the Public Reference Room, 1100 L Street, N.W. Washington, D.C. Copies of such filing will also 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 referenced in the caption above and should be submitted on or before June 12, 1980.

For the Commission by the Division of Market Regulation, pursuant to delegated authority.

George A. Fitzsimmons,

Secretary.

May 16, 1980.

[FR Doc. 80-15766 Filed 5-21-80; 8:45 am]

BILLING CODE 8010-01-M

[Rel. No. 21580; 70-6459]

Central and South West Corp.; Proposal To Issue and Sell Authorized and Unissued Common Stock

May 16, 1980.

Notice is hereby given that Central and South West Corporation ("CSW"), 2700 One Main Place, Dallas, Tex. 75250, a registered holding company, has filed a declaration with this Commission pursuant to the Public Utility Holding Company Act of 1935 ("Act") designating Sections 6(a) and 7 of the Act and Rule 50 promulgated thereunder as applicable to the proposed transaction. All interested persons are referred to the declaration, which is summarized below, for a complete statement of the proposed transaction.

CSW proposes to issue and sell, pursuant to the competitive bidding requirements of Rule 50 under the Act, 6,000,000 shares of its authorized and unissued common stock par value $3.50 per share ("additional shares").

The net proceeds, estimated at approximately $87,000,000, to be derived by CSW from the sale of the additional shares (after deducting expenses of issue), will be used to retire a like amount of short-term borrowings and commercial paper by CSW (see File No. 70-6163) which were incurred to finance in part capital contributions aggregating $30,000,000 to Central Power and Light Company and $45,000,000 to Southwestern Electric Power Company, each of which is a wholly owned subsidiary company of CSW. The capital contributions were, in each case, added to the respective subsidiary companies' common equity and will be used to repay short-term debt incured in connection with 1980 construction expenditures.

CSW will issue and sell the additional shares whenever it feels market conditions are most advantageous. Based on current conditions, they will be issued and sold no later than August 31, 1980. No funds generated from the additional shares, any of the borrowings retired thereby nor any of the subsidiary companies' expenditures, will be or have been utilized to pay the cost of facilities which would not be needed to provide service to customers of the subsidiary companies if they were not part of the Central and South West System, nor will any expenditures be made for the construction or acquisition of which would be part of any proposal forming the subject of the proceedings in *Central and South West Corporation, et. al.* (Admin. Proc. File No. 3-4951) would be needed to provide services to customers of the subsidiary companies if they were not part of the Central and South West System.

It is stated that no state commission and no federal commission, other than this Commission, has jurisdiction over the proposed transaction. Fees and expenses to be incurred in connection with the proposed transaction will be supplied by amendment.

Notice is further given that any interested person may, not later than June 9, 1980, request in writing that a hearing be held on such matter, stating the nature of his interest, the reasons for such request, and the issues of fact or law raised by said declaration which he desires to controvert; or he may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed: Secretary, Securities and Exchange Commission, Washington, D.C. 20549. A copy of such request should be served personally or by mail upon the declarant at the above-stated address and proof of service (by affidavit or, in case of an attorney at law, by certificate) should be filed with the request. At any time after said date, the declaration, as filed or as it may be amended, may be permitted to become effective as provided in Rule 23 of the General Rules and Regulations promulgated under the Act, or the Commission may grant exemption from such rules as provided in Rules 20(a) and 100 thereof or take such other actions as it may deem appropriate. Persons who request a hearing or advice as to whether a hearing is ordered will receive any notices and orders issued in this matter, including the date of the hearing (if ordered) and any postponements thereof.

For the Commission, by the Division of Corporate Regulation, pursuant to delegated authority.

George A. Fitzsimmons,

Secretary.

[FR Doc. 80-15769 Filed 5-21-80; 8:45 am]

BILLING CODE 8010-01-M

[Rel. 34-16812; File No. SR-NASD-80-5]

National Association of Securities Dealers, Inc.; Self-Regulatory Organizations; Proposed Rule Change

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934, 15 U.S.C. 78s(b)(1), as amended by Pub. L. No. 94-29, 16 (June 4, 1975) notice is hereby given on May 5, 1980, the above-mentioned self-regulatory organization filed with the Securities and Exchange Commission a proposed rule change as follows:

The NASD's Statement of the Terms of Substance of the Proposed Rule Change

Text of Proposed Rule Change

The following is the full text of the proposed revisions to Schedule D under Section XVI of the By-Laws of the National Association of Securities Dealers, Inc., (new language is italicized deleted language is bracketed. Material omitted by ellipses is unchanged).

I

Qualifications of Users of Service

A. Level 1 Service

1. Nature of Service. This service will provide the subscriber with *the highest bid and the lowest ask quotation* [data in the form of representative bid and ask quotations] for each authorized security [in] *for* which a minimum of two registered market makers are entering [quotes] *quotations* during the day. *Provided, however, that in the case of a locked or crossed market, only the highest bid will be displayed.*

XI

Publication and Dissemination of Quotations to the News Media

All quotations released to newspapers or other news media shall be [inter-dealer quotations only, and shall reflect a representative spread, and shall contain, except in unusual circumstances, both bid and asked quotations.] *Level I quotations in the case of NASDAQ Securities and, in the case of issues not included in NASDAQ, bid and ask quotations representative of the inter-dealer market.* "Asked only" and nominal quotations shall not be released for publication. Also, no issue shall appear in either the National OTC-NASDAQ or Additional OTC-NASDAQ Lists unless the issue has been continually quoted in the NASDAQ System during the 30 calendar days prior to its appearance.

A. National OTC-NASDAQ List

The National OTC-NASDAQ List shall include approximately 1,400 NASDAQ issues which have the highest dollar value of average weekly volume*

*Explanation of Average Weekly Volume—To monitor security volume data in NASDAQ, a statistical moving average method called exponential averaging is used and is recomputed weekly. This technique gives more weight to the most current volume and less weight to the most

Footnotes continued on next page

(i.e., the product of their average weekly volume multiplied by the *Level 1* [representative] bid quotation at the time of compilation of the list). In addition, no issue shall be initially eligible for inclusion in the list, or continue to be eligible for such list when revised, whose average weekly volume is less than 750 shares at the time of compilation. [See Paragraph D below].

B. Additional OTC–NASDAQ List

The additional OTC–NASDAQ List shall include approximately 950 NASDAQ issues which have the next highest dollar value of average weekly volume (i.e., the product of their average weekly volume multiplied by the *Level 1* [representative] bid quotation at the time of compilation of the list).

Procedures for Self Regulatory Organization

The proposed amendments were developed by the Association's NASDAQ Committee and approved by the Board of Governors at its March 1980 meeting.

The NASD's Statement of Purpose of Proposed Rule Change

The proposed rule change will conform Schedule D to the dissemination of inside quotation requirements contained in SEC Rule 11Acl–2 (17 C.F.R. § 240.11Acl–2).

In addition, the proposed rule change amends the footnote to Section A of Part XI of Schedule D to reflect a technical change in the ranking formula for average weekly volume.

The NASD's Statement of Basis Under the Act for the Proposed Rule Change

Section 11A(c) of the Act provides that no self-regulatory organization may collect, process, distribute or publish any information with respect to quotations in contravention of such rules and regulations prescribed by the Commission. SEC Rule 11Acl–2 prohibits vendors from providing a representative bid or ask.

Comments Received From Members, Participants or Others on Proposed Rule Change

Article XVI of the Association's By-Laws does not require membership approval of changes to Schedule D. Therefore, no comments were solicited or received regarding this proposed rule change.

The NASD's Statement on Burden on Competition

As noted above, this rule change is filed in direct response to the adoption of SEC Rule 11Acl–2. The Association envisions no effects on competition beyond those considered by the Commission in the adoption of such rule.

On or before June 26, 1980, or within such longer 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 above-mentioned self-regulatory organization consents, the Commission will:

(a) by order approve such proposed rule change, or

(b) institute proceedings to determine whether the proposed rule change should be disapproved.

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons desiring to make written submissions should file six (6) copies thereof with the Secretary of the Commission, Securities and Exchange Commission, Washington, D.C. 20549. Copies of the filing with respect to the foregoing and of all written submissions will be available for inspection and copying in the Public Reference Room, 1100 L Street, N.W., Washington, D.C. Copies of such filing will also 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 referenced in the caption above and should be submitted on or before June 12, 1980.

For the Commission by the Division of Market Regulation, pursuant to delegated authority.

George A. Fitzsimmons,

Secretary.

May 16, 1980.

[FR Doc. 80–15772 Filed 5–21–80; 8:45 am]

BILLING CODE 8010–01–M

[Rel. No. 21575; 31–774]

Sho-Me Power Corp. et al.; Application for Exemption Pursuant to Section 3(a)(1) or 3(a)(2)

In the Matter of Sho-Me Power Corporation, P.O. Drawer D, Marshfield, Missouri 65706; Crawford Electric Coop., Inc., P.O. Box 10, Bourbon, Missouri 65441; Gascosage Electric Coop., P.O. Drawer G, Dixon, Missouri 65459; Howell-Oregon Electric Coop., Inc., P.O. Box 649, West Plains, Missouri 65775; Intercounty Electric Coop., P.O. Box 209, Licking, Missouri 65542; Laclede Electric Coop., P.O. Drawer M, Lebanon, Missouri 65536; SE–MA–NO Electric Coop., P.O. Box 318, Mansfield, Missouri 65704; Southwest Electric Coop., P.O. Box 150, Bolivar, Missouri 65613; Webster Electric Coop., P.O. Box 87, Marshfield, Missouri 65706; and White River Valley Electric Coop., P.O. Box 969, Branson, Missouri 65616; (31–774).

Notice is hereby given that Sho-Me Power Corporation ("Sho-Me"), an electric utility company organized under the laws of Missouri, and each of the nine rural electric distribution cooperative corporations ("the Distribution Cooperatives") which own all of the issued and outstanding capital stock of Sho-Me, have filed an application for exemption pursuant to Section 3(a)(1) and (a)(2) of the Public Utility Holding Company Act of 1935 ("Act"). All interested persons are referred to the application, which is summarized below, for a complete statement as to the basis upon which the exemption is sought.

Sho-Me is the wholesale power supplier for the Distribution Cooperatives and for eighteen municipalities in Missouri, and serves approximately 8000 retail customers in rural Missouri. Sho-Me has 24,993 shares of common stock issued and outstanding which are owned equally by the nine Distribution Cooperatives. At December 31, 1979, Sho-Me reported total assets of $54,042,765, and, for the year then ended, gross operating revenues of $40,592,173.

Each of the Distribution Cooperatives is organized under the laws of and operates exclusively within Missouri. The Distribution Cooperatives are subject to regulation by the Rural Electrification Administration. They are not engaged in any business other than the business of supplying electric energy to their respective consumer members, and have no subsidiary companies other than Sho-Me. At December 31, 1979, and for the year ended, the Distribution Cooperatives reported total assets and operating revenues and patronage capital as follows:

Distribution cooperative	Total assets	Operating revenues and patronage capital
1. Crawford Electric Coop., Inc	$12,203,453	$4,815,103
2. Gascosage Electric Coop	3,858,079	2,247,549
3. Howell-Oregon Electric Coop., Inc	14,157,955	6,340,855
4. Intercounty Electric Coop., Assn	17,792,378	8,918,459
5. Laclede Electric Coop	14,898,639	7,204,687
6. Se-Ma-No Electric Coop	[1] 3,890,203	[2]
7. Southwest Electric Coop	15,124,479	7,779,556
8. Webster Electric Coop	5,887,719	3,209,057

Footnotes continued from last page

distant past. For example, at present the weighting parameter is chosen to give [20%] *10%* weight to the most current volume and less than 1% weight to the volume that occurred [13] *23* weeks ago. Thus, the significance of the reported volume as maintained for more than [one quarter] *6* months is virtually nil. Wherever average weekly volume requirements are mentioned in this Section, they are compiled in the above manner.

Distribution cooperative	Total assets	Operating revenues and patronage capital
9. White River Valley Electric Coop., Inc	20,257,315	8,986,304

[1] At August 31, 1979.
[2] To be supplied by amendment.

Section 3(a) provides, in part, that the Commission may exempt a holding company and its subsidiaries, as such, if:

(1) such holding company, and every subsidiary company thereof which is a public-utility company from which such holding company derives, directly or indirectly, any material part of its income, are predominantly intrastate in character and carry on their business substantially in a single State in which such holding company and every such subsidiary company thereof are organized; (or)

(2) such holding company is predominantly a public-utility company whose operations as such do not extend beyond the State in which it is organized and States contiguous thereto.

On the basis of the facts in the application, the Distribution Cooperatives state that they are entitled to an exemption under Section 3(a)(1) or (a)(2), and that the exemption would be in the public interest and interest of investors and consumers.

Notice is further given that any interested person may, not later than June 9, 1980, request in writing that a hearing be held on such matter, stating the nature of his interest, the reasons for such request, and the issues of fact or law raised by said application which he desires to controvert; or he may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed: Secretary, Securities and Exchange Commission, Washington, D.C. 20549. A copy of such request should be served personally or by mail upon the applicants at the above-stated addresses and proof of service (by affidavit or, in case of an attorney at law, by certificate) should be filed with the request. At any time after said date, the application, as filed or as it may be amended, may be granted in the manner provided in Rule 23 of the General Rules and Regulations promulgated under the Act, or the Commission may take such other action as it deems appropriate. Persons who request a hearing or advice as to whether a hearing is ordered will receive any notices and orders issued in this matter, including notice of the date of the hearing (if ordered) and any postponements thereof.

For the Commission, by the Division of Corporate Regulation, pursuant to delegated authority.

George A. Fitzsimmons,

Secretary.

[FR Doc. 80-15771 Filed 5-21-80; 8:45 am]

BILLING CODE 8010-01-M

DEPARTMENT OF STATE

[Public Notice CM-8/299]

Oceans and International Environmental and Scientific Affairs Advisory Committee; Open Meeting

The General Panel of the Oceans and International Environmental and Scientific Affairs Advisory Committee will meet at 9:15 a.m. on Monday, June 2, 1980 in the Boardroom, National Academy of Science, Washington, D.C.

At this meeting, officers responsible for scientific and environmental affairs in the Department of State and members of the Advisory Committee will discuss three broad issues: Follow-up to the International Nuclear Fuel Cycle Evaluation, Controls on the Export of Toxic Wastes and Hazardous Materials and U.S./Soviet S&T relations. This session will be open to the public. The public will be admitted to the session to the limits of seating capacity and may be given the opportunity to participate in discussions according to the instructions of the Chairperson.

Requests for further information on the meetings may be directed to Bronson Percival of the OES Policy Assessment Staff, Department of State. He may be reached by telephone on (202) 632-0796.

Thomas R. Pickering,

Chairman.

May 7, 1980.

[FR Doc. 80-15638 Filed 5-21-80; 8:45 am]

BILLING CODE 4710-09-M

[Public Notice CM-8/300]

Study Group 8 of the U.S. Organization for the International Radio Consultative Committee (CCIR); Meeting

The Department of State announces that Study Group 8 of the U.S. Organization for the International Radio Consultative Committee (CCIR) will meet on June 17, 1980, from 9:00 am until 12:30 pm in the Auditorium of the Communications Satellite Corporation Building, 950 L'Enfant Plaza SW., Washington, D.C.

Study Group 8 studies matters relating to systems of radiocommunications and radiodetermination for the mobile services. The purpose of the meeting will be to review and adopt documents proposed for submission to the international meeting of Study Group 8 in November, 1980.

Members of the general public may attend the meeting and join in the discussions subject to instructions of the Chairman. Requests for further information should be directed to Mr. Gordon Huffcutt, State Department, Washington, D.C. 20520, telephone (202) 632-2592.

Gordon L. Huffcutt,

Chairman, U.S. CCIR National Committee.

May 13, 1980.

[FR Doc. 80-15639 Filed 5-21-80; 8:45 am]

BILLING CODE 4710-09-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. PE-80-15]

Petitions for Exemption; Summary of Petitions Received and Dispositions of Petitions Issued

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of petitions for exemptions received and of dispositions of petitions issued.

SUMMARY: Pursuant to FAA's rulemaking provisions governing the application, processing, and disposition of petitions for exemption (14 CFR Part 11), this notice contains a summary of certain petitions seeking relief from specified requirements of the Federal Aviation Regulations (14 CFR Chapter I) and of dispositions of certain petitions previously received. The purpose of this notice is to improve the public's awareness of, and participation in, this aspect of FAA's regulatory activities. Publication of this notice and any information it contains or omits is not intended to affect the legal status of any petition or its final disposition.

DATES: Comments on petitions received must identify the petition docket number involved and must be received on or before: June 11, 1980.

ADDRESSES: Send comments on any petition in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Petition Docket No.———, 800 Independence Avenue, SW., Washington, D.C. 20591.

FOR FURTHER INFORMATION: The petition, any comments received and a

copy of any final disposition are filed in the assigned regulatory docket and are available for examination in the Rules Docket (AGC-204), Room 916, FAA Headquarters Building (FOB 10A), 800 Independence Avenue, SW, Washington, D.C. 20591; telephone (202) 426-3644.

This notice is published pursuant to paragraphs (c), (e), and (g) of § 11.27 of Part 11 of the Federal Aviation Regulations (14 CFR Part 11).

Issued in Washington, D.C. on May 16, 1980.

Edward P. Faberman,

Acting Assistant Chief Counsel, Regulations and Enforcement Division.

Petitions for Exemptions

Docket No.	Petitioner	Regulations affected	Description of relief sought
20352	Amyway Corporation	14 CFR 61.58(c)	To permit the petitioner's pilots to complete the entire 24-month pilot-in-command check in an FAA approved flight simulator.
20353	Elmer F. Collin	14 CFR 122.383(c)	To permit petitioner to serve as a pilot crewmember in Part 121 operations after reaching his 60th birthday.
20354	Sky Flite, Inc	14 CFR 135.89 and 121.333(c) (3) and (4).	To permit flightcrews to operate Learjet aircraft above FL 350 up to and including FL 410 without requiring one pilot to wear and use oxygen mask at all times.
20355	Aero America, Inc	14 CFR 121.48, 121.49, and 121.55.	To provide relief from a requirement to prepare, certify, and provide certain financial reports to the Federal Aviation Administration (FAA).
20356	United Airlines	14 CFR 61.39(a)	To allow certain airmen to take the Airline Transport Pilot Rating Flight Test (ATPR) in spite of interrupted employment.
20358	Key Airlines	14 CFR 121.61(c)(1)	To allow Mr. Sidney Hurst to serve as Director of Maintenance for Key Airlines without meeting the full 5-year experience requirement.

Dispositions of Petitions for Exemptions

Docket No.	Petitioner	Regulations affected	Description of relief sought—disposition
19278	Moody Aviation	14 CFR 135.115	Reconsideration of the denial of a petition for exemption to allow the operation of aircraft with a second in command who does not meet Section 135.115 qualifiation Requirements. *Denied 5/7/80.*
20165	British Midland Airways, Ltd. (BMA)	14 CFR Parts 21 and 91	To amend Exemption No. 2931, as amended, to name Deutsche Lufthansa in place of Sabena Airlines as the Federal Aviation Administration (FAA) repair station responsible for maintenance support of BMA's leased B-707-321C aircraft N448M. *Granted 5/9/80).*
20320	Air Tanzania Corp	14 CFR Parts 21 and 91	To permit petitioner to operate and maintain a B-707-331 aircraft of United States Registry, N762TW, leased from Caledonian Airlines, Inc., using an FAA-approved Master Minimum Equipment List (MMEL). *Granted 5/9/80.*

[FR Doc. 80-15661 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

Radio Technical Commission for Aeronautics (RTCA), Special Committee 143—Ground Based Automated Weather Observation Equipment; Meeting

Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463; 5 U.S.C. App I) notice is hereby given of a meeting of RTCA Special Committee 143 on Ground Based Automated Weather Observation Equipment to be held on June 19-20, 1980 in RTCA Conference Room 261, 1717 H Street, N.W., Washington, D.C. commencing at 9:30 a.m.

The Agenda for this meeting is as follows: (1) Chairman's Introductory Remarks; (2) Approval of Minutes of Fifth Meeting Held on March 19-20, 1980; (3) Review Comments Received on Second Draft Report on Minimum Operational Performance Standards for Automated Weather Observation Equipment; and (4) Other Business.

Attendance is open to the interested public but limited to space available. With the approval of the Chairman, members of the public may present oral statements at the meeting. Persons wishing to present statements or obtain information should contact the RTCA Secretariat, 1717 H Street, N.W., Washington, D.C. 20006; (202) 296-0484. Any member of the public may present a written statement to the committee at any time.

Issued in Washington, D.C. on May 9, 1980.

Karl F. Bierach,

Designated Officer.

[FR Doc. 80-15662 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

Timely Submission of Preapplications Under the Airport Development Aid Program (ADAP)

In order to allow sufficient time to process requests for Federal assistance under the Airport Development Aid Program (ADAP) (14 CFR Part 152) this fiscal year, airport sponsors are advised to submit preapplications no later than June 30. Unless this deadline is met, the Federal Aviation Administration (FAA) cannot assure processing of preapplications in time to allocate funds, including funds apportioned to the sponsors of air carrier airports. This deadline is necessary to assure the efficient administration and effective use of ADAP funds.

This deadline is intented for projects that require normal handling. Submission prior to June 30, however, cannot guarantee processing of any project. For projects involving time-consuming issues such as substantial environmental concerns, earlier submission will be necessary and timetables for these will have to be considered with FAA field offices on a case-by-case basis.

Sponsors may submit preapplications after June 30, but processing of late submissions may not be accomplished this fiscal year.

Issued in Washington, D.C., May 15, 1980.

Paul L. Galis,

Acting Director, Office of Airport Planning and Programming.

[FR Doc. 80-15663 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-13-M

Federal Highway Administration

Environmental Impact Statement; Jim Wells County, Tex.

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 highway project in Jim Wells County, Texas.

FOR FURTHER INFORMATION CONTACT: W. L. Hall, Jr., P.E., District Engineer, Federal Highway Administration, 826 Federal Building, Austin, Texas 78701, Telephone: (512) 397-5966.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the Texas State Department of Highways and Public Transportation (DHT), intends to prepare an environmental impact statement (EIS) on a proposal to improve U.S. Highway 281 (U.S. 281), from north of Alice, Texas to south of Alice, Texas. Because of difficulty in predicting availability of funds, the State Department of Highways and Public Transportation has not decided whether to use state or federal funds to finance construction of this project.

Overall plans call for the upgrading of U.S. 281 to serve as an inter-regional route. When the present and planned improvements are complete, the highway will be an integral part of a four lane route, from San Antonio, Texas to the Rio Grande Valley in South Texas. The current project consists of approximately eight miles of improvements.

The existing route now traverses through the city of Alice. Numerous businesses line both sides of the route.

Proposed improvements will relieve the congestion caused by access to the businesses and the local street intersections. Travel time from one side of the city to the other will be reduced. Local traffic will have a more free flow due to the reduced congestion. This improvement in free flow will also conserve energy. Access to business and recreation facilities will be enhanced due to the decrease in congestion.

Four alternatives will be considered for this project: (1) East route will by-pass the city to the east, (2) West route—this route will by-pass the city to the west, (3) upgrading the existing facility, and (4) no-build.

There are currently no plans to hold a formal scoping meeting for this proposal. A public meeting was held during the early stages of project planning. This meeting was held October 25, 1979. Additional public meetings will be limited to the Public Hearing held during the middle of 1980. Adequate notice will be given to the public through the news media as to the time and place of the meeting.

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.

Issued on: May 13, 1980.

W. L. Hall, Jr.,

District Engineer, Austin, Texas.

[FR Doc. 80-15664 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-22-M

Environmental Impact Statement: Monroe County, Ind.

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 two proposed intersections improvements (SR 37 and SR 45) and (SR 37 and SR 48) on the west side of Bloomington, Monroe County, Indiana.

FOR FURTHER INFORMATION CONTACT: Mr. John Breitwieser, Staff Environmentalist, Federal Highway Administration, Room 254 Federal Office Building, 575 North Pennsylvania Street, Indianapolis, Indiana 46204. Telephone: (317) 269-7481.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the Indiana State Highway Commission, will prepare an environmental impact statement (EIS) on a proposal to improve two intersections, on SR 37 at the intersection of SR 45 and SR 48. Two intersections, located on the western edge of the city of Bloomington, Indiana, within the Urban Area Limits, are independent of each other. However, as the secondary impacts arising from the operating characteristics of specified proposals at each site are interrelated, a combined environmental impact statement will be prepared for the two projects.

Improvements to these two intersections are considered necessary to efficiently accommodate the traffic demands for existing and projected levels in these corridors.

For each site, the following alternatives are being considered: (1) Do-nothing; (2) upgrading the existing intersection; (3) construct an interchange (grade separation with access ramps).

The project has been coordinated with the following: Heritage Conservation and Recreation Service, Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Soil Conservation Service, Indiana Aeronautics Commission, Indiana Geological Survey, Indiana Stream Pollution Control Board, Wayne-Hoosier National Forest, and the Monroe County Commissioners. The city of Bloomington has agreed to participate as a coordinating agency, and a public information meeting was held on January 24, 1980. In addition, the opportunity for a public hearing will be advertised. Public notice will be given of the time and place of the public hearing, if a hearing is requested. The draft EIS will be available for public and agency review and comment. No formal scoping meeting is planned.

To ensure that the full range of issues related to this proposed action are addressed and that all significant issues are identified, comments and suggestions are invited from all interested parties. Agencies, organizations and individuals interested in submitting comments and/or questions should direct them to the FHWA at the address provided above.

Issued on: May 14, 1980.

G. D. Gibson, Jr.,

Division Administrator, Indianapolis, Indiana.

[FR Doc. 80-15665 Filed 5-21-80; 8:45 am]

BILLING CODE 4910-22-M

Environmental Impact Statement: Monroe County, Ga.

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 highway safety project in Monroe County, Georgia.

FOR FURTHER INFORMATION CONTACT: David H. Densmore, Development Engineer, Federal Highway Administration, Suite 700, 1422 West Peachtree Street, N.E., Atlanta, Georgia 30309, telephone (404)881-4758, or Peter Malphurs, Environmental Analysis Engineer, Georgia Department of Transportation, Office of Environmental

Analysis, 65 Aviation Circle, Atlanta, Georgia 30336.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the Georgia Department of Transportation (Georgia DOT) will prepare an environmental impact statement (EIS) on the proposal consisting of safety improvements to two interchanges along I–75 through central Monroe County in the vicinity of Forsyth, Georgia. The proposed project is identified as I–75–2(93). Improvements would involve the reconstruction of existing elements of I–75 associated with the safety improvements at the two interchanges (Juliette Road and State Route 83) along a distance of 2.7 miles. The Georgia DOT is considering, as an alternate to the safety improvements, the construction of a bypass to the northeast of the City of Forsyth (5.9 miles). If the Georgia DOT proceeds with the bypass construction, it would include access to existing I–75.

Scoping will be handled through correspondence with appropriate Federal, State and local agencies and any local citizens or other interested persons wishing to participate in the scoping process. An advertised public information meeting to inform local citizens and concerned persons of the proposed project was held on October 11, 1979 in the City of Forsyth. In addition, a committee of local citizens has been formed to aid in the planning of the proposed project. A public hearing will also be held. Public notice will be given for the time and place of the hearing. The draft EIS will be available for public and agency review and comment.

To ensure that the full range of issues related to this proposed project 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 addressed to either the FHWA, or the Georgia DOT, addresses of which are provided above.

Issued on: May 12, 1980.

David H. Densmore,

Development Engineer, Atlanta, Georgia.

[FR Doc. 80–15384 Filed 5–21–80; 8:45 am]

BILLING CODE 4910–22–M

Federal Railroad Administration

[FRA Waiver Petition Docket HS–80–3]

Portland Traction Co.; Petition for Exemption From the Hours of Service Act

In accordance with 49 CFR 211.41 and 211.9, notice is hereby given that the Portland Traction Company (PTC) has petitioned the Federal Railroad Administration (FRA) for an exemption from the Hours of Service Act (83 Stat. 464, Pub. L. 91–169, 45 U.S.C. 64a(e)). That petition requests that the PTC be granted authority to permit certain employees to continuously remain on duty for in excess of twelve hours.

The Hours of Service Act currently makes it unlawful for a railroad to require or permit specified employees to continuously remain on duty for a period in excess of twelve hours. However, the Hours of Service Act contains a provision that permits a railroad, which employs no more than fifteen employees who are subject to the statute, to seek an exemption from this twelve hour limitation.

The PTC seeks this exemption so that it can permit certain employees to remain continuously on duty for periods not to exceed sixteen hours. The petitioner indicates that granting this exemption is in the public interest and will not adversely affect safety. Additionally, the petitioner asserts that it employs no more than fifteen employees and has demonstrated good cause for granting this exemption.

Interested persons are invited to participate in this proceeding by submitting written views or comments. FRA has not scheduled an opportunity for oral comment since the facts do not appear to warrant it. Communications concerning this proceeding should identify the Docket Number, Docket Number HS–80–3 and must be submitted in triplicate to the Docket Clerk, Office of the Chief Counsel, Federal Railroad Administration, Department of Transportation (Nassif Building), 400 Seventh Street, SW, Washington, DC 20590. Communications received before June 30, 1980, will be considered by the FRA before final action is taken. Comments received after that date will be considered as far as practicable. All comments received will be available for examination both before and after the closing date for comments, during regular business hours in Room 8211, Department of Transportation (Nassif Building), 400 Seventh Street, SW, Washington, DC 20590.

(Section 5 of the Hours of Service Act of 1969 (45 U.S.C. 64a), 1.49(d) of the regulations of the Office of the Secretary, 49 CFR 1.49(d))

Issued in Washington, DC on May 9, 1980.

J. W. Walsh,

Chairman, Railroad Safety Board.

[FR Doc. 80–15385 Filed 5–21–80; 8:45 am]

BILLING CODE 4910–06–M

Sunshine Act Meetings

Federal Register
Vol. 45, No. 101
Thursday, May 22, 1980

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).

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1

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice of Agency Meeting. Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that the Federal Deposit Insurance Corporation's Board of Directors will meet in open session at 2:00 p.m. on Tuesday, May 27, 1980, to consider the following matters:

Disposition of minutes of previous meetings.

Memorandum and Resolution re: Final rule amending Parts 341 and 343 of the Corporation's rules and regulations by deleting forms.

Reports of committees and officers:

Minutes of the actions approved by the Committee on Liquidations, Loans and Purchases of Assets pursuant to authority delegated by the Board of Directors.

Reports of the Director of the Division of Bank Supervision with respect to applications or requests approved by him and the various Regional Directors pursuant to authority delegated by the Board of Directors.

Memorandum from the Office of Corporate Audits regarding the Corporation's Security Portfolio as of June 30 and December 31, 1979.

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550 - 17th Street, N.W., Washington, D.C.

Requests for information concerning the meeting may be directed to Mr. Hoyle L. Robinson, Executive Secretary of the Corporation, at (202) 389-4425.

Dated: May 20, 1980.

Federal Deposit Insurance Corporation.

Hoyle L. Robinson,

Executive Secretary.

[S-1016-80 Filed 5-20-80; 11:56 am]

BILLING CODE 6714-01-M

2

FEDERAL DEPOSIT INSURANCE CORPORATION.

Notice of Agency Meeting. Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that at 2:30 p.m. on Tuesday, May 27, 1980, the Federal Deposit Insurance Corporation's Board of Directors will meet in closed session, by vote of the Board of Directors pursuant to sections 552b (c)(2), (c)(6), (c)(8), (c)(9)(A)(ii) and (c)(9)(B) of Title 5, United States Code, to consider the following matters:

Applications for consent to merge and establish branches:

The Dime Savings Bank of New York, New York (Brooklyn), New York, an insured mutual savings bank, for consent to merge, under its charter and title, with First Federal Savings and Loan Association of Port Washington, Port Washington, New York, a Federally insured mutual savings and loan association, and for consent to establish the five offices of First Federal Savings and Loan Association of Port Washington as branches of the resultant bank.

First Trust Union Bank, Wellsville, New York, an insured State nonmember bank, for consent to merge, under its charter and title, with The State Bank of Fillmore, Fillmore, New York, and for consent to establish the sole office of The State Bank of Fillmore as a branch of the resultant bank.

Recommendations regarding the liquidation of a bank's assets acquired by the Corporation in its capacity as receiver, liquidator, or liquidating agent of those assets:

Case No. 44,316-SR—Elm Creek State Bank, Elm Creek, Nebraska.
Case No. 44,319-L—The State National Bank of Lovelady, Lovelady, Texas.
Case No. 44,324-L—The Hamilton National Bank of Chattanooga, Chattanooga, Tennessee.
Case No. 44,326-L—Banco Credito y Ahorro Ponceno, Ponce, Puerto Rico.
Case No. 44,328-L—American National Bank, Houston, Texas.
Case No. 44,330—Farmers Bank of the State of Delaware, Dover, Delaware.
Memorandum re: Northeast Bank of Houston, Houston, Texas.

Receivership Audit Report dated March 28, 1980.

Recommendations with respect to the initiation, termination, or conduct of administrative enforcement proceedings (cease-and-desist proceedings, termination-of-insurance proceedings, suspension or removal proceedings, or assessment of civil money penalties) against certain insured banks or officers, directors, employees, agents, or other persons participating in the conduct of the affairs thereof:

Names of persons and names and locations of banks authorized to be exempt from disclosure pursuant to the provisions of subsections (c)(6), (c)(8), and (c)(9)(A)(ii) of the "Government in the Sunshine Act" (5 U.S.C. 552b (c)(6), (c)(8), and (c)(9)(A)(ii)).

Personnel actions regarding appointments, promotions, administrative pay increases, reassignments, retirements, separations, removals, etc.:

Names of employees authorized to be exempt from disclosure pursuant to the provisions of subsections (c)(2) and (c)(6) of the "Government in the Sunshine Act" (5 U.S.C. 552b (c)(2) and (c)(6)).

Grievance officer's findings and recommendations in connection with the formal grievance of a Corporation employee:

Name of employee authorized to be exempt from disclosure pursuant to the provisions of subsection (c)(6) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(6)).

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550—17th Street, N.W., Washington, D.C.

Requests for information concerning the meeting may be directed to Mr. Hoyle L. Robinson, Executive Secretary of the Corporation, at (202) 389-4425.

Federal Deposit Insurance Corporation.
Dated: May 20, 1980.

Hoyle L. Robinson,

Executive Secretary.

[S-1017-80 Filed 5-20-80; 11:56 am]

BILLING CODE 6714-01-M

3

FEDERAL DEPOSIT INSURANCE CORPORATION.

Notice of Changes in Subject Matter of Agency Meeting. Pursuant to the provisions of subsection (e)(2) of the "Government in the Sunshine Act" (5 U.S.C. 552b(e)(2)), notice is hereby given that at its closed meeting held at 2:30 p.m. on Monday, May 19, 1980, the

Corporation's Board of Directors determined, on motion of Chairman Irvine H. Sprague, seconded by Director John G. Heimann (Comptroller of the Currency), that Corporation business required the addition to the agenda for consideration at the meeting, on less than seven days' notice to the public, of the following matters:

Application of First Peoples Bank of New Jersey, Haddon Township (P.O. Westmont), New Jersey, for advance consent to the retirement of preferred stock.

Memorandum re: Fair Lending Analysis System—Housing (FLASH)

The Board further determined, by that same majority vote, that no earlier notice of these changes in the subject matter of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting by authority of subsections (c)(6), (c)(8), and (c)(9)(A)(ii) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(6), (c)(8), and (c)(9)(A)(ii)).

Dated: May 19, 1980.

Federal Deposit Insurance Corporation.

Hoyle L. Robinson,

Executive Secretary.

[S-1015-80 Filed 5-20-80; 11:56 am]

BILLING CODE 6714-01-M

4

[FR No. 977]

FEDERAL ELECTION COMMISSION.

PREVIOUSLY ANNOUNCED DATE AND TIME: 10 a.m., Thursday, May 22, 1980.

CHANGE IN MEETING: The following items have been added:

FEC forms 4, 5, and 7.
Clearinghouse project review (continued from May 14 meeting).
Impact of free distribution of regulations.
* * * * *

DATE AND TIME: 10 a.m., Thursday, May 29, 1980.

STATUS: Portions of this meeting will be open to the public and portions will be closed.

MATTERS TO BE CONSIDERED: Portions open to the public:

Setting of dates for future meetings.
Correction and approval of minutes.
Certifications.
Draft advisory opinion 1980-60—C. Page Hamrick, III, Treasurer, Galperin for Congress Committee.
1980 Election and related matters.
Appropriations and budget.
Pending legislation.
Classification actions.
Routine administration matters.

Portions closed to the public (follows conclusion of Open Meeting):

Audit and review policy. Personnel. Compliance. Audit matter.

PERSON TO CONTACT FOR INFORMATION: Mr. Fred Eiland, Public Information Officer, telephone: 202-523-4065.

Lena L. Stafford,

Acting Secretary to the Commissioner.

[S-1020-80 Filed 5-20-80; 2:54 pm]

BILLING CODE 6715-01-M

5

FEDERAL HOME LOAN BANK BOARD.

TIME AND DATE: 9:30 a.m., May 22, 1980.

PLACE: 1700 G Street NW., amphitheater, second floor, Washington, D.C.

STATUS: Closed meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Marshall (202-377-6677).

MATTERS TO BE CONSIDERED:

Request for Waiver Under Section 5(d)(12)(B) of the HOLA.
Permission to Organize a New Federal Association.
No. 347, May 20, 1980.

[S-1019-80 Filed 5-20-80; 12:23 p.m.]

BILLING CODE 6720-01-M

6

FEDERAL MARITIME COMMISSION.

TIME AND DATE: May 28, 1980, 10 a.m.

PLACE: Hearing Room One, 1100 L Street NW., Washington, D.C. 20573.

STATUS: Open.

MATTERS TO BE CONSIDERED:

1. Agreement No. 10355: Bank and Saville Line, Ltd. and Shipping Corporation of New Zealand, Ltd. joint service arrangement.
2. Amendments to General Order 13 accommodating the tariff filing requirements for controlled carriers under the Ocean Shipping Act of 1978.
3. Identification of Controlled Carriers.
4. Proposed rule to exempt certain non-exclusive husbanding agreements from the approval requirements of section 15, Shipping Act, 1916.
5. Docket No. 80-15: Rules of Practice and Procedure Proceedings Under the Intercoastal Shipping Act—Consideration of comments received in response to notice of proposed rulemaking.
6. Docket No. 79-86: Japan/Korea-Atlantic and Gulf Freight Conference Rules Pertaining to Chassis Availability and Demurrage Charges That Result When Chassis are not Made Available—Compliance with Commission Order.

CONTACT PERSON FOR MORE INFORMATION: Francis C. Hurney, Secretary (202) 523-5725.

[S-1014-80 Filed 5-20-80; 11:56 am]

BILLING CODE 6730-01-M

7

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

TIME AND DATE: 10 a.m., Tuesday, May 27, 1980.

PLACE: 20th Street and Constitution Avenue NW., Washington, D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Proposed purchases, under competitive bidding, of high speed currency equipment by the Federal Reserve System.
2. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.
3. Any agenda items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board (202) 452-3204.

Dated: May 19, 1980.

Griffith L. Garwood,

Deputy Secretary of the Board.

[S-1013-80 Filed 5-20-80; 10:36 am]

BILLING CODE 6210-01-M

8

INTERSTATE COMMERCE COMMISSION

TIME AND DATE: 9:30 a.m., Tuesday, May 27, 1980.

PLACE: Hearing Room A, Interstate Commerce Commission Building, 12th and Constitution Avenue NW., Washington, D.C. 20423.

STATUS: Reminder of Open Special Conference.

MATTERS TO BE DISCUSSED:

1. Compliance and Enforcement Issues.
2. Fitness Policy.

CONTACT PERSON FOR MORE INFORMATION: Douglas Baldwin, Director, Office of Communications, Telephone: (202)275-7252.

May 19, 1980.

[S-1018-80 Filed 5-20-80; 12:14 pm]

BILLING CODE 7035-01-M

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Federal Register

Vol. 45, No. 101

Thursday, May 22, 1980

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AGENCY PUBLICATION ON ASSIGNED DAYS OF THE WEEK

The following agencies have agreed to publish all documents on two assigned days of the week (Monday/Thursday or Tuesday/Friday). This is a voluntary program. (See OFR NOTICE FR 32914, August 6, 1976.)

Monday	Tuesday	Wednesday	Thursday	Friday
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DOT/FAA	USDA/FNS		DOT/FAA	USDA/FNS
DOT/FHWA	USDA/FSQS		DOT/FHWA	USDA/FSQS
DOT/FRA	USDA/REA		DOT/FRA	USDA/REA
DOT/NHTSA	MSPB/OPM		DOT/NHTSA	MSPB/OPM
DOT/RSPA	LABOR		DOT/RSPA	LABOR
DOT/SLSDC	HEW/FDA		DOT/SLSDC	HEW/FDA
DOT/UMTA			DOT/UMTA	
CSA			CSA	

Documents normally scheduled for publication on a day that will be a Federal holiday will be published the next work day following the holiday.

Comments on this program are still invited. Comments should be submitted to the Day-of-the-Week Program Coordinator, Office of the Federal Register, National Archives and Records Service, General Services Administration, Washington, D.C. 20408

REMINDERS

The "reminders" below identify documents that appeared in issues of the **Federal Register** 15 days or more ago. Inclusion or exclusion from this list has no legal significance.

Rules Going Into Effect Today

HOUSING AND URBAN DEVELOPMENT DEPARTMENT

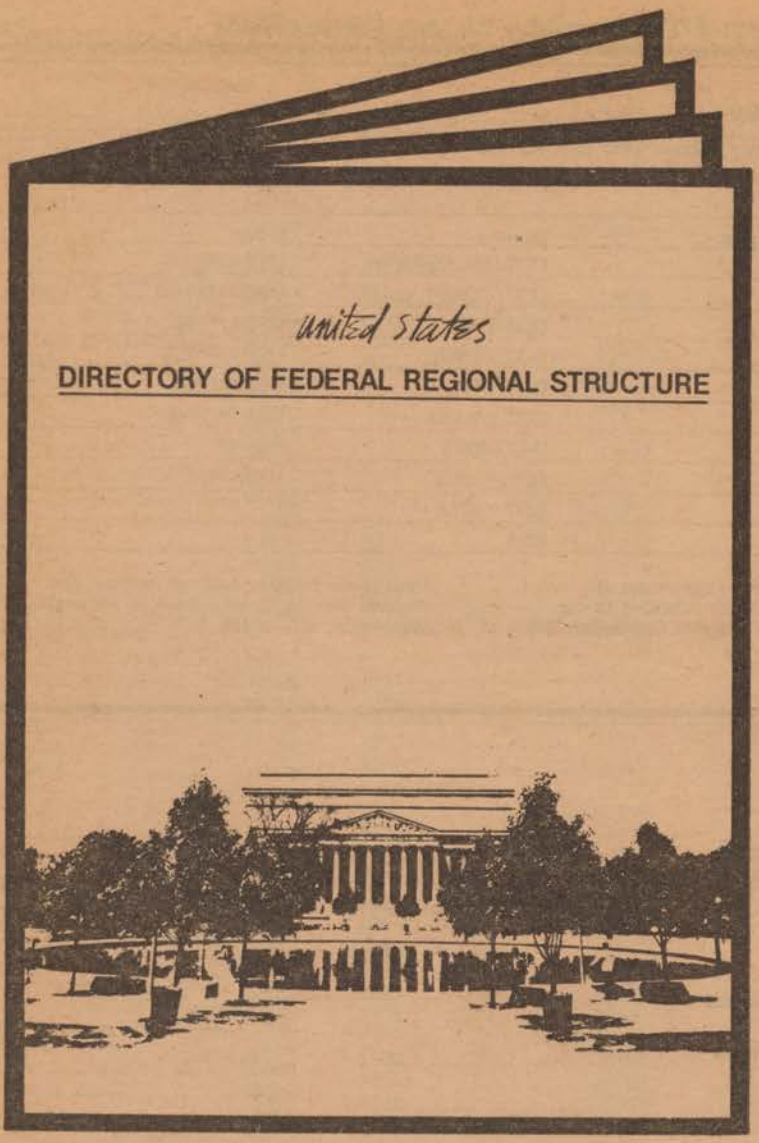
Community Planning and Development, Office of Assistant Secretary—

27382 4–22–80 / Community Development Block Grants; policies for use of reallocated funds

List of Public Laws

Last Listing May 21, 1980

Note: No public bills which have become law were received by the Office of the Federal Register for inclusion in today's **List of Public Laws.**



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Guidelines for the May 1980 Calendar of Federal Regulations

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Light-Duty Diesel Vehicles; Revised Motor Vehicle Exhaust Emission Standards for Oxides of Nitrogen for 1981-1982 Model Years; Applications for Waiver of 1981-1985 Model Year Oxides of Nitrogen Emission Standard

34752 Part V—Pennsylvania Avenue Development Corporation:
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34759 Part VI—Interior/NPS:
Mount McKinley National Park; Mining, Climbing and Vehicle Regulations

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Visibility Protection for Federal Class I Areas

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Motor Vehicle Emission Control System Performance; Warranty Regulations; Warranty Short Tests

34846 Part X—DOE/ERA:
Gasohol Pricing and Allocation

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Part II

Department of Transportation

Research and Special Programs Administration

Transport of Hazardous Wastes and Hazardous Substances

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Parts 171, 172, 173, 174, 176, 177

[Docket Nos. HM-118, 126A, 126B, 145A, 145B, 159, and 171; Amdt. Nos. 171-53, 172-58, 173-137, 174-37, 176-11, 177-48]

Identification Numbers, Hazardous Wastes, Hazardous Substances, International Descriptions, Improved Descriptions, Forbidden Materials, and Organic Peroxides

AGENCY: Materials Transportation Bureau (MTB), Research and Special Programs Administration, Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The purpose of this final rule is to accomplish the following: (1) adopt a numerical identification system for hazardous materials transported in commerce; (2) adopt regulations pertaining to the transportation of hazardous wastes; (3) adopt regulations pertaining to the identification of, and discharge notifications for, hazardous substances; (4) list certain forbidden materials by name and revise the general criteria applicable to forbidden materials; (5) provide proper shipping names for organic peroxides; (6) require inclusion on shipping papers of the technical names of certain hazardous components of materials covered by n.o.s. entries; and (7) provide for the optional use of certain United Nations shipping descriptions. The principal objective of this rule, as it pertains to the use of the identification numbers, is to improve the capabilities of emergency response personnel, such as firemen and policemen, to quickly identify hazardous materials and to assure the accurate transmission of information to and from the scenes of accidents involving hazardous materials.

EFFECTIVE DATE: November 20, 1980, unless otherwise specified in the regulations adopted under this rulemaking. Shipments may be prepared, offered for transportation, and transported in accordance with these amendments beginning July 1, 1980.

FOR FURTHER INFORMATION CONTACT: L. Metcalfe (202-426-0656) or Delmer Billings (202-426-2075), Standards Division, Office of Hazardous Materials Regulation, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590. Office hours are 8 a.m. to 4:30 p.m. Eastern Time, Monday through Friday.

SUPPLEMENTARY INFORMATION: This action by the Materials Transportation Bureau (MTB) consolidates several related rulemakings into one final rule. By "related", MTB means that in many instances, the same sections of the Hazardous Materials Regulations are affected by the different rulemakings covered by this final rule. The notices of rulemakings containing the proposals, identified by docket number, Federal Register publication, date of publication and title are as follows:

1. Docket HM-118, Notice No. 74-9 (39 FR 25235, July 9, 1974), Expanded Polystyrene Resin and the Definition of a Flammable Solid.
2. Docket HM-145A, Notice No. 78-6 (43 FR 22626, May 25, 1978), Transportation of Hazardous Waste Materials.
3. Docket HM-145B, Notice No. 79-2 (44 FR 10676, February 22, 1979), Transportation of Hazardous Substances.
4. Docket HM-126A, Notice No. 79-9 (44 FR 32972, June 7, 1979), Display of Hazardous Materials Identification Numbers; Improved Emergency Response Capability.
5. Docket HM-126A (additional proposal), Notice No. 79-9 (44 FR 43858, July 26, 1979), Descriptions for Organic Peroxides.
6. Docket HM-159, Notice No. 79-12 (44 FR 43861, July 26, 1979), Forbidden Materials.
7. Docket HM-171, Notice No. 79-11 (44 FR 43864, July 26, 1979), Use of United Nations Shipping Descriptions.
8. Docket HM-126B, Notice No. 79-14 (44 FR 65020, November 8, 1979), Improved Descriptions of Hazardous Materials for Emergency Response.

This consolidated publication of final regulations pertaining to the subjects covered by the dockets identified above was requested by many commenters responding to the different proposals. MTB agrees that all the referenced proposals should be acted upon in one body of final regulations so that persons affected by these new and revised regulations may plan their future business activities relative to training, development and acquisition of shipping documents, the marking of packages, and the development of procedures to comply with the revised incident reporting and newly adopted identification requirements. However, MTB is not able to be fully responsive to those commenters who requested that all of the amendments covered by this action be made effective on the same date (in several comments, the date suggested was two to three years from the date of publication of final regulations). With the exception of regulations pertaining to hazardous wastes, hazardous substances, empty packagings, and certain organic peroxides, more than one year is being provided for the implementation of procedures to comply with the requirements adopted in this action; in fact approximately three years is being provided for compliance with the packaging marking requirements. Instead of specifying a set of lengthy and complicated effective dates in this preamble, the effective date for compliance with each regulation that is effective after November 20, 1980, is set forth in a specific regulation associated with each new or revised requirement. Sections containing compliance dates after November 20, 1980, are § 172.101 (j) and (k); § 172.200(c); § 172.203(k); § 172.300(c)(3); § 172.324(b); § 172.336(c) (6) and (7); and § 172.402(a)(10). The principal requirements that become effective on November 20, 1980 (with certain exceptions) pertain to the transportation of hazardous wastes, hazardous substances, certain forbidden materials (organic peroxides), and empty packagings.

Also bearing on the matter of effective dates, is the requirement for compliance by MTB with the Federal Reports Act of 1942 and procedures administered thereunder by the Office of Management and Budget (OMB) relating to prior clearance of recordkeeping requirements imposed by Federal regulatory action. Prior OMB clearance is required with respect to the provisions adopted herein which impose recordkeeping or report preparation requirements.

MTB will inform the public through notification in the **Federal Register** when OMB clearance of these requirements has been received. It is anticipated that this clearance process will be completed prior to November 20, 1980, the earliest of the effective dates prescribed herein.

It should be noted that most of the materials that this rule indicates by name to be "Forbidden" materials in column 3 of the Table in § 172.101 are and have been "Forbidden" materials in the past under general prohibitions. The listing of these materials by name, and the effective dates specified for these amendments, does not change the present "Forbidden" status of these materials if they were not authorized to be offered for transportation prior to this publication.

Concerning special requirements pertaining to hazardous wastes and hazardous substances, it is important to note that those requirements do not apply unless a material is a hazardous waste or a hazardous substance (or both) according to the definitions in § 171.8. This determination is separate

from determining if a material is otherwise a hazardous material.

This preamble is structured to provide a discussion of the comments received and MTB's action relative to significant matters pertaining to the individual rulemaking proposals under captions identifying each docket. The termination of Docket HM–118 is covered by the discussion of Docket HM–159 relating to forbidden materials. The Review by Sections also contains discussions of many comments received in response to the various proposals.

Docket HM–126A—Display of Hazardous Materials Identification Numbers

The amendments under this Docket require the display of identification numbers on shipping papers and packages in association with proper shipping names and the display of identification numbers on orange panels or placards affixed to portable tanks, cargo tanks, and tank cars. The numbering system is based on the system adopted for worldwide use by the United Nations Committee of Experts on the Transport of Dangerous Goods. The purpose of these amendments is to improve the capability of emergency personnel to quickly identify hazardous materials and ensure the accurate transmission of information to and from the scenes of accidents involving hazardous materials. The identification numbers will also enable emergency response personnel to gain quick access to immediate response information in a guidebook that will be widely distributed by the Department in the near future.

MTB received more than 250 comments in response to the proposal, a majority of which expressed complete support for the proposal. Approximately 50 comments supported the use of the identification numbering system generally, but did not agree with the proposed extent to which the display would be required. There were 12 comments received supporting other types of systems: the Standard Transportation Commodity Codes, Chemical Abstract Service (CAS) numbers, the National Fire Protection Association 704 system, and the HAZCHEM system which is used in the United Kingdom. With the exception of the CAS numbers, each of the alternative systems suggested was discussed in the preamble to the Notice. The CAS registry system, while not discussed in the Notice, was given consideration by MTB and discussed in the regulatory evaluation for the Notice as follows:

The Chemical Abstract Service (CAS) registry system for chemicals was given consideration. This system is presently in use at the Environmental Protection Agency (EPA) pursuant to EPA Order 2800.2 dated June 30, 1975. Each chemical substance is assigned a unique, multi-digit identifying number. There are an estimated 4,500,000 chemical registrations presently on file at CAS and there are an estimated 375,000 entries being added to the registry annually.

Examination of this system raises several significant problems relative to its being employed as the basis for an emergency response program. A principal concern would be the use of numbers having up to nine digits to convey emergency response information to and from the scene of a hazardous materials transportation accident. The use of more than four digits to convey specific identification information would not be suitable for such a purpose, and considering the variable number of digits under such a system, it would likely be counterproductive. There is no need for such a large number of specific identifications of chemicals to accomplish an appropriate emergency response program. With such a large number, it would be impractical to publish a manual [for on-scene use] indexing the shipping name of each material. . . . Also, the shipping community would be faced with a tremendous burden and expense in stocking identification mechanisms for display on vehicles, making appropriate entries on shipping papers and packages, and determining the assignment of appropriate numbers to mixtures and solutions of the materials.

The distinction between this system and the UN number assignment system previously discussed is the fact that the UN assigns numbers to recognize under separate identifications those materials that are shipped in large volumes, such as nitric acid, or to separately identify materials having certain properties that would call for their being specifically identified without regard to the volume of such materials being transported. An example in the latter category is the specific identification of all organic peroxides that are commercially produced and shipped. It is recognized that it would be of benefit to all concerned with the regulation and transportation of chemicals if a common code were promulgated for all purposes, including toxic substances control and emergency response actions. This is one of the rationale[s] behind a forthcoming recommendation of the Toxic Substances Strategy Committee to the President, which states: "All the research and regulatory agencies concerned with toxic substances control should be required to use the CAS Registry Numbers as a uniform chemical identification system in all their files and proceedings." While the CAS registry system may be appropriate as a mechanism for the identification and control of the introduction of toxic substances into commerce, it would not be appropriate for emergency response purposes and would be detrimental to the proper implementation of such a program.

As stated in the Notice, the HAZCHEM and NFPA 704 systems would require a preassigned before-shipment numbering technique to provide specific action information or an indication of the level of hazard. One commenter, responding to MTB's statement that no criteria have been established for the (NFPA 704) health and reactivity presentations, stated: "In fact, over a thousand chemicals have been already rated and assigned and can be used as a basis for rating similar materials. NFPA #704 is designed for user development of qualitative criteria. Further, if quantitative criteria need to be developed, it can be done using existing procedures." In the Notice, MTB indicated its concern over the qualitative approach by illustrating the application of the same health hazard number to materials such as liquid oxygen and hydrogen sulfide, etc., and believes that this kind of assignment would not provide a sound basis for the communication of emergency response information nor for the assessment of risk at a transportation accident. Concerning the development of quantitative criteria, MTB agrees this could be accomplished. However, more than three basic fields of display and more than four levels of hazard would be required. Considering the millions of variables presented by hazardous materials in transportation, MTB believes that such a system would be severely impeded by the difficulties that would be encountered in seeking its effective implementation.

Several commenters took exception to the views expressed by MTB relative to use of Standard Transportation Commodity Code (STCC) numbers for the identification of hazardous materials. They indicated their intent to continue use of STCC numbers for their own purposes, including emergency response activities, and saw no reason why MTB could not implement requirements for the identification of hazardous materials based on this existing system. MTB stated its reasons

in the Notice for not proposing the use of STCC numbers and understands fully the desire of the railroad industry to use the STCC system. MTB views that were expressed in the Notice (44 FR 32976) concerning the STCC system remain unchanged relative to the appropriate implementation of an identification numbering system for hazardous materials.

A commenter stated: "Our final concern is that only one identification system be adopted nationally and internationally. In the US, the railroads already have their STCC code for identification of hazardous materials. Will the DOT proposal eliminate this requirement? If not, shipping papers and containers will have two sets of numbers—the DOT's and the railroad's." MTB does not intend to take any action prohibiting use of the STCC system, nor any other economic/statistical system, such as the Brussels Nomenclature. These systems were designed for purposes other than identification of hazardous materials. While the 49 series STCC numbers are separately assigned to hazardous materials, the railroad industry has adopted a "bridge" for 49 series numbers to the basic STCC system in order that correct rates and statistics can be generated according to different basic freight classifications. MTB is not aware of any requirement that shippers provide STCC numbers on bills of lading or display of STCC numbers on packages, as suggested by the commenter. A railroad waybill generally contains a special block which appears above the space provided for the description of articles or commodities. This block would contain identifying STCC numbers, not only for hazardous materials, but also for machinery, lumber, and other nonhazardous commodities. The identification number required by DOT will be displayed as part of the basic hazardous material description and MTB sees no potential for conflict between the two systems.

Five commenters expressed the view that no change to the present hazardous materials identification system is necessary. One commenter suggested that MTB continue to work to improve the emergency response capabilities of its hazard information system, based on existing regulations, through increased activity in the training of emergency response personnel. Further, the commenter placed great emphasis on the potential for mistakes in the display of identification numbers. MTB acknowledges that there may be some errors in entering identification numbers on shipping documents. It is for this reason that the suggestion of another commenter that the requirement for proper shipping names on the shipping papers be dropped is not adopted, and is one of several reasons for MTB's adoption of the requirement that identification numbers be displayed on packagings of 110-gallon capacity or less, as well as larger packagings. The Notice mentioned the value of an identification number in verifying the shipping information displayed on documents with the information displayed on packages. The proper display of shipping names will assist in verification of an identification number when doubt exists. Further, the Emergency Response Guidebook has been revised during its development by MTB to include a complete alphabetical index in addition to the numerical index for hazardous materials. However, in a study performed for MTB, using members of the Baltimore Police Department as test subjects, the number identification approach to accessing the response information in the draft Emergency Response Guidebook produced a lower error rate than did the use of the shipping name identification approach (2% vs 10% errors). Also, accessing the response information through use of identification numbers was twice as fast as accessing through use of shipping names. While the potential for clerical error in transferring identification numbers to carrier documents is real, this potential is outweighed by the potential for miscommunication of many complicated names of different hazardous materials shipped in commerce. Therefore, MTB is adopting the identification numbering system basically as proposed in the Notice. MTB agrees that there should be increased activity in the training of emergency response personnel. However, it is also obligated to implement adequate regulatory requirements leading to the quick and accurate communication of hazardous material information, which cannot be accomplished, as suggested by these commenters, through use of the system in existence up to the time of this rule.

MTB stated in the Notice that the adoption of the identification numbering system it proposed will ". . . provide the basis for an improved emergency response capability that is not presently available through direct use of technical names; e.g., hexadecyltrichlorosilane (UN 1781), to identify hazardous materials and accurately and quickly communicate information about them." The basic UN numbering system, and associated North American (NA) identification numbers for materials not appropriately covered by the UN, was selected by MTB as the basis for an improved emergency response information system because (1) the numbers are assigned by governmental authorities and easily incorporated by the Department in its regulations; (2) all of the identification numbers preceded by the letters "UN" will have the same meaning throughout worldwide commerce; (3) identification numbers have been assigned specifically to identify hazardous materials and have no other intended meaning or use; (4) their formulation and application are not dictated or driven by economic considerations for freight classification, rate-making, or statistical purposes; (5) they are assigned, for the most part, to materials requiring separate recognition that are shipped in commercial quantities, thereby precluding the need for more than four digits; and (6) the identification numbers are assigned on the basis of the next open number without regard to the particular chemical properties or end-use of a material, thereby avoiding any problems in the validity of numbers for future assignments.

Further, MTB stated that use of identification numbers for hazardous materials will (1) serve to verify descriptions of chemicals; (2) provide for rapid identification of materials when it might be inappropriate or confusing to require the display of lengthy chemical names on vehicles; (3) aid in speeding communication of information on materials from accident scenes and in the receipt of more accurate emergency response information; and (4) provide a means for quick access to immediate emergency response information in the Emergency Response Guidebook (manual) that will be distributed by MTB.

Several commenters objected to the proposal that identification numbers be displayed on packages in association with required shipping names. One commenter stated that his organization does not recommend that emergency services personnel enter vehicles to determine the identification number for hazardous materials and that reliance should be placed on identification numbers displayed on shipping papers. MTB agrees that emergency services personnel should not place themselves unnecessarily in jeopardy by entering vehicles for the purpose of identifying hazardous materials if they can identify the materials by other means. However, there are circumstances which require entry into vehicles during or following emergencies. In the Notice, MTB stated the following (44 FR 32976):

Concerning the marking of identification numbers on packages, two major factors were considered. First, freight personnel often become the first contact "emergency" personnel when spills and leaks occur. The MTB visualizes that they will be able to make use of the manual in the same manner as emergency response personnel. Sole dependence on complex chemical names without reference to an identification number may lead to an erroneous response. This same view applies to emergency response personnel coming into contact with packages directly in vehicles, on freight docks, or elsewhere. The second factor is the value of the identification number in verifying the shipping information displayed on documents with the information displayed on packages to preclude error.

While this quoted language clearly makes reference to the possibility that emergency personnel could come into contact with packages directly in vehicles, this factor was given undue emphasis by the commenter. Other factors support MTB's action. For example, according to the incident reports on file at MTB, a large percentage of the total of hazardous materials incidents occurs during freight handling operations and not in vehicles. MTB believes that identification numbers on packages will be of significant use in mitigating the consequences of spills occurring during freight handling operations when shipping papers are not always immediately available.

A commenter questioned the benefit that could be derived from the use of identification numbers by the public. He stated: "To expect the general public to notice, or be knowledgeable of, the numerical system is beyond realism." The prime objective of the proposals and the adopted rule is improved emergency response information. MTB has a continuing program to educate industry and emergency response personnel. It is also hoped that the new system will be given much publicity by industry and the emergency services organizations. The present placarding system serves as a hazard alerting system for the benefit of the general public and emergency services. With the added display of identification numbers on tanks, MTB visualizes that there may be many instances where members of the general public, even if not generally knowledgeable of the system, would be able to convey to the emergency services by telephone the identification numbers they see on orange panels or placards.

One commenter, a trade association of chemical manufacturers, expressed support for the display of identification numbers on shipping papers and stated its conclusion "* * * that [identification] numbers on portable tanks, cargo tanks and tank cars can contribute to the safe evaluation and initial handling of an emergency." However, the commenter recommended "* * * the modification of existing hazardous materials placards to incorporate the four-digit number in the center section of placards." In support of this recommendation, the commenter stated:

A dual placarding system is unnecessary in that the present placard format can be modified to incorporate the four-digit numbers in the center section of the placards in a size and display that meets the visibility objectives of the MTB and emergency response services. In training personnel to comply with operating procedures, the more simplistic a procedure, the higher the degree of compliance. Thus a one step procedure, keeping it simple, will receive a higher degree of correct implementation than a two step procedure.

The proposed application of ID panels on portable tanks, cargo tanks and tank cars establishes a double process to select, match and apply a set of placards and a set of ID panels. Training personnel to meet present placarding requirements is difficult enough because of turnover, absenteeism and multiplicity of products at a loading station. The more complex an operation—the more confused employees are apt to become. We are convinced a dual placarding requirement would cause a sharp rise in placarding errors, thereby reducing the increase in safety sought by this docket. Such errors would create an added threat to emergency response personnel. . . .

In our view the concept of applying adhesive backed ID panels to vehicles and tanks is not practical. CMA member companies have had less than desirable experience with adhesive placards in that under certain weather conditions they are next to impossible to apply and removal after use is often extremely difficult and costly. Therefore, it is likely that if transport vehicles are required to display ID panels, as proposed in the docket, the vehicles would need to be equipped with ID panel holders. Costs to install ID panels and costs on labor for dual placarding is an unwarranted and unnecessary expense, and is inflationary and wasteful.

The integration of ID numbers into the placards provides two other significant advantages. It directly associates product identity for emergency response with the other hazard precautions communicated on the container, i.e. the placard. The display of the placard in a holder assures that the identification numbers have not fallen off the vehicle and avoids confusion that would set in if the ID number on the vehicle was different than the placard required for the ID panel. CMA's proposal permits use of existing vehicle placard holders.

The MTB in HM Docket No. 126 dated June 25, 1975, stated—"It is the Board's position that any alpha/numeric/symbolic hazard information system adopted in the future be compatible with and adaptable to the placards it adopts under Docket HM-103." CMA's proposal is consistent with this MTB objective, and conversely the ID panel is not. CMA has developed a reasonable one-step process that will accomplish the objectives of MTB in the docket with no lowering of the level of visibility.

The commenter also proposed the use of plain placards for display of identification numbers addressing materials that are not otherwise subject to the placarding requirements (e.g., hazardous substances to be covered by 9000 series identification numbers).

Except for the special consideration that must be given to Class A poison gases and radioactive materials and their associated placards, POISON GAS and RADIOACTIVE, MTB agrees with many of the points raised by the commenter and has modified the rule to allow the display of identification numbers on placards as an alternative to their display on orange panels. Even though a number of commenters supported the display of identification numbers on placards as the only means of display, there may be circumstances when it would be appropriate to display identification numbers on orange panels (e.g., for international shipments or the identification of hazardous substances), as was proposed in the Notice.

Included in the same comments were suggested alternative methods for the display of "class" words on placards. Of necessity, there would be a substantial reduction in the size of the letters in the words, thereby lessening the benefit of their display on placards. The commenter suggested the words be placde immediately above the identification numbers (letters approximately ¾" high), or in the bottom triangle below the identification numbers (letters ranging in size from approximately ¾" to 1¾" high). In addressing this matter, MTB was faced with one of its most difficult decisions relative to the rulemaking actions covered by this publication.

In deciding to allow display of identification numbers on placards, as an alternative to their display on orange panels, MTB decided to address not only the potential problem raised by a reduction in the size of "class" words, but also the need for words on placards and future problems relative to their display in a single language. MTB has received inquiries concerning bilingual displays in English/Spanish (for example, Puerto Rico is declared by law to be a State for the purposes of these regulations) and English/French (for example, it is anticipated that there will be increasing interest in bilingual requirements relative to commerce between the U.S. and Canada).

MTB has concluded that "class" words having substantially reduced letter size, will be of little benefit to emergency services in recognizing the kinds of hazards they may be dealing with that also has concluded that, with two exceptions, the removal of "class" words from placards will not significantly affect the ability of emergency services personnel to recognize hazards based solely on the hazard alerting presentation and format of a placard; i.e., size, shape, color, and pictograph.

One exception is the distinction between liquids and gases. The loss of this distinction, which would result from the removal of "class" words, is counterbalanced by the requirements that gases be identified by name on tanks and that the international class number (2 for gases) be displayed at the bottom of placards.

A second exception involves the fact that there are operational considerations relative to placement of cars in trains based on the type of placard displayed. The car placement rules in Subpart D of Part 174 specify restrictions on the location of cars containing Class A poison gases and radioactive materials in a train solely on the basis of the placard type displayed; i.e., POISON GAS or RADIOACTIVE. There are also references to COMBUSTIBLE placards in Part 174 that provide exceptions to the car placement rules when combustible liquids, rather than flammable liquids or gases, are being carried. (However, an error in recognizing a placard bearing identification numbers identifying a combustible liquid would not cause a violation of the car placement rules.)

After considering these problems, MTB is promulgating a final rule that removes the requirement that "class" words be displayed on placards, except when a POISON GAS or RADIOACTIVE placard is required. In those two instances, the "class" words must be on a placard in the same manner as presently required. This will necessitate that identification numbers in those two instances be displayed using orange panels without the option of placing the numbers on the placards. Also, in recognition of the fact that combustible liquids are subject to fewer constraints than flammable liquids and gases (e.g., car placement requirements by rail and use of tunnels by highway), this rule specifies that the bottom of placards for combustible liquids, when identification numbers are placed thereon, shall be white rather than red. This distinction will facilitate the identification of combustible liquids in tanks.

MTB is adopting a requirement that, as a condition relative to the display of identification numbers on placards, the international class designation for hazardous materials be displayed at the bottom of a placard. This kind of display will overcome the lack of distinction between gases and liquids, since a number "2" will be required on the bottom of a placard for a gas. Admittedly, it will take some time for the emergency services to become fully familiar with this type of designation. As a step to improve familiarity, a description of each of the international class numerical designations is contained in the Emergency Response Guidebook. Also, a special display has been added to the Guidebook to illustrate a placard bearing identification numbers with a number "2" in the bottom triangle. The caption reads: "A number 2 at the bottom of a placard without any name means that the material in the tank is a gas. See the next page for the meaning of other numbers at the bottom of placards." However, this is not an initial step, since MTB has been distributing placard and label charts to emergency service personnel and other interested persons for more than 7 years (more than 1½ million copies to date). These charts show the international class designations on labels and placards.

Denial of Petition. By petition dated March 6, 1979, the Association of American Railroads (AAR) requested "* * * that the MTB broaden the scope of HM–145A and HM–145B * * * by proposing the adoption of a requirement that shippers include on the shipping papers the code numbers for 'hazardous materials,' 'hazardous substances,' and 'hazardous wastes' through use of the 49-Series of the Standard Transportation Commodity Code Tariff." The petition pointed out the need for the code numbers to give shippers and carriers the ability to make precise commodity information known to emergency personnel.

MTB agrees with the AAR concerning the need for a numerical coding system to assure the communication of precise commodity information; however, for the reasons stated in Notice 79–9 (44 FR 32972) under Docket HM–126A and earlier in this preamble, and following full consideration of all comments received on its proposal, MTB has decided that a numbering system based on the United Nations' system will be used. Therefore, the AAR petition, to the extent that it request MTB to propose use of the 49 Series of the Standard Transportation Commodity Code Tariff, is hereby denied.

HM–126A—Descriptions for Organic Peroxides

An additional proposal under Docket HM–126A contained a listing of each organic peroxide (with identification number) that may be shipped in commerce in order that the different kinds of risks presented by these materials may be recognized during implementation of emergency response procedures. These differing risks include (1) thermal sensitivity; (2) violence of thermal decomposition; (3) susceptibility to ignition by friction; (4) flammability; and (5) corrosivity. Approximately 135 organic peroxide entries were proposed to be added to the Hazardous Materials Table (Table).

One commenter requested that di-n-propyl peroxydicarbonate 87% maximum, di-sec-butyl peroxydicarbonate 77% maximum, and di-(2-ethylhexyl) peroxydicarbonate 77% maximum be added to the Table. These materials were proposed (and adopted) to be in the Table as technical by pure materials, and, therefore, these entries would adequately cover those peroxides in the concentrations requested by the commenter.

One commenter objected to the proposed requirement that the technical names of the organic peroxides be used as proper shipping names. The reasons given were that such complicated names do not assist emergency personnel in recognizing a hazard quickly, misspellings and errors are more likely on shipping papers and the required use of these names would place a burden on domestic producers of organic peroxides that would be out of proportion to the volume of organic peroxides imported or exported. MTB does not agree with these objections. The use of the technical names of organic peroxides has been required for many years by the International Maritime Dangerous Goods Code and by § 172.203(i)(2) for water shipments without the difficulties noted by the commenter. No other commenters objected to the use of the technical names as the proper shipping names.

Another commenter said that in some instances the hazard of the material in which an organic peroxide was dissolved might completely overshadow the hazard of the peroxide. MTB agrees with this comment and has changed the wording in § 173.151a(a)(3) to authorize organic peroxide solutions to be classed as other than an organic peroxide.

Two commenters pointed out that the adoption of the United Nations (UN) nomenclature for organic peroxides

would automatically bring some peroxide formulations under regulation which have previously not been subject to regulation in the United States. This situation can be handled under the provisions of § 173.151a(a)(4) which provides for data to be submitted to MTB indicating that a particular peroxide formulation does not present a hazard in transportation and, based on the data submitted, that product may be shipped as not subject to the regulations.

One commenter suggested that a listing of the peroxides be deferred until complete packaging and shipping requirements have been developed. The reason given was that the cross-referencing to a general entry can lead to errors and inconsistencies. MTB believes that it is necessary to publish the technical names of the peroxides at this time due to the development of the Emergency Response Guidebook. MTB acknowledges that there were some errors in the listings and cross references that appeared in the Notice of Proposed Rulemaking, and these errors have been corrected in this final rule.

A commenter noted that the proposed list of organic peroxides contained several entries in which the concentrations of peroxide solutions were lower than those presented in the UN recommendations. It was urged that the U.S. had representatives at the UN meetings when the international concentrations were agreed upon and took no exception to them following detailed review and consideration of data presented. MTB agrees with this commenter and has changed the concentrations of those peroxides in question to agree with the concentrations proposed in the UN recommendations.

One commenter noted that the organic peroxide, n.o.s. entries and two specific peroxides listed by the UN did not appear in the Notice. The listing of proposed entries in the Notice was in addition to the entries already appearing in the Table. The entries cited by this commenter already appear in the Table and, therefore, were not included in the Notice.

A commenter suggested that the organic peroxide nomenclature be brought into conformance with the latest proposals by the UN Editorial Committee. MTB agrees with this suggestion and the entries in this final rule have been modified to reflect the latest UN accepted nomenclature.

A commenter suggested that, since there are two Organic peroxide, liquid or solution, n.o.s. entries—one classed as an Organic peroxide and the other as a Flammable liquid— § 172.100 should be amended to identify this difference. MTB does not agree that this difference needs to be specifically addressed. These entries presently appear in the Hazardous Materials Table and no specific explanation of these entries is provided. It remains the responsibility of the shipper to determine the proper class of the hazardous material being shipped, to determine a proper shipping name in accordance with that class and then ship that material in compliance with the applicable regulations. This final rule does not alter this responsibility.

A commenter referenced his Docket HM–126A comments to the comments he made in response to Docket HM–159 in regard to a 9% active oxygen content for certain organic peroxides. MTB's response to this commenter is contained in that portion of this preamble addressing Docket HM–159.

Several commenters noted that neither the UN nor North America (NA) indicator was placed before the identification numbers for the organic peroxides in the proposal. This final rule places either a UN or NA indicator, as appropriate, before the identification numbers for organic peroxide entries in the Table.

Docket HM–126B—Improved Descriptions of Hazardous Materials for Emergency Response

The amendments under this Docket require more specific identification of certain hazardous materials, mainly in four areas, as follows:

1. New generic descriptions for pesticides are being added to the Table in § 172.101. These descriptions identify and describe pesticides by chemical groups based on their chemical structures. Each of the 15 groups is divided into liquids and solids. The liquids are further divided to distinguish between materials that are classed as Flammable liquids and those classed as Poison B.

2. If the technical name of the principal poisonous constituent of a material is not identified in a shipping name, it must be identified in association with the basic description on a shipping paper.

3. If a shipping name or class name for a poisonous material does not indicate the material is a poison, the word "Poison" must be shown on the shipping paper. Also, for water reactive materials (other than Water reactive solid, n.o.s.), the words Dangerous When Wet must be shown.

4. Nine n.o.s. descriptions addressing multiple hazards are added to the Table.

Certain other amendments under the Docket are addressed in the Review by Sections.

MTB received many comments expressing support for the proposals it made under this Docket, with one major exception—the display of technical names after n.o.s. descriptions. The principal arguments against this proposal were that (1) many of the technical names that would be required would be lengthy and complex; (2) such information would be of little or no value in an emergency; (3) the four-digit identification number, tied to emergency response information in a manual or provided by CHEMTREC, would be sufficient for emergency response purposes; (4) the purpose of the additional information stated in the preamble of the Notice for this Docket was in conflict with statements referencing lengthy technical names in the preamble to Docket HM–126A; and (5) such a requirement would require the disclosure of proprietary information.

Upon completion of its review of the comments on its proposal pertaining to technical names, MTB was compelled to fully reconsider the proposal. At the outset, MTB acknowledges that it erred in not explaining the proposal in sufficient detail in the Notice and that one sentence in the preamble did not sufficiently discuss the distinction between the benefits of the proposed additional descriptive information and the benefits from using identification numbers. The sentence which read, in part, "MTB agrees that safety would be enhanced by such a requirement since more specific information would be immediately available for use in emergency response actions," should more accurately have stated, "MTB agrees that safety would be enhanced by such a requirement since more specific information would be available for first-aid and clean-up actions immediately following the initial phases of an emergency."

Upon further consideration, MTB concludes that the requirement for more specific information should relate only to poisonous materials. If some form of technical identification is not provided in the shipping name for a material that is poisonous, neither a manual nor an emergency response information center can overcome this shortcoming when it comes to providing appropriate first-aid measures beyond initial actions. For example, if a shipping paper contains only the description "Poison B liquid", no specific response information can be provided as to appropriate antidotal procedures within a sufficient time interval. Even if a response center were

able to reach the shipper of the material, considerable time would be lost in attempting to ascertain the specific identification of the poisonous material in the vehicle involved in the accident of concern, unless the shipper introduces only products of the same chemical group into commerce.

MTB has concluded that this kind of immediate information would be of less importance for materials such as flammable liquids and corrosives. Also, MTB believes that it has become necessary to distinguish materials that cause death by systemic poisoning from those that result in death due to corrosive destruction of tissue. While this distinction is not made for consumer products, MTB believes it should be made in regard to the transportation of hazardous materials.

MTB has dropped proposed § 172.203(j) and has merged the requirement for the identification of poisons into paragraph (k), entitled "Poisonous materials." A provision has been added to exclude consumer commodities and chemical groups identified in shipping names. The "technical" identification would not be required for limited quantities because of difficulties that may be encountered in shipping untested samples for laboratory examination. A major feature is a provision allowing use of names contained in the National Institute for Occupational Safety and Health [NIOSH] Registry of Toxic Effects of Chemical Substances or more commonly, NIOSH Registry. The NIOSH Registry contains many short and specific names which are cross-referenced to technical names. The NIOSH Registry will be kept on file at CHEMTREC. Shippers desiring the addition of their materials to the NIOSH Registry should contact The Editor, Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, 4676 Columbia Parkway, Cincinnati, Ohio 45226, Telephone: (513) 684–8317. By allowing alternative use of names in the NIOSH Registry or identification by chemical groups, MTB believes the claimed problem with potential disclosure of proprietary information has been alleviated.

The proposed requirement that the technical names of all n.o.s. described materials be marked on packages has not been adopted. While MTB agrees that many product labels, in particular those for pesticides, contain this information, this is not the case for all poisonous materials. However, MTB is aware of labeling proposals presently under development by the EPA and the Occupational Safety and Health Administration (OSHA), which are much more extensive than those proposed by MTB under Docket HM–126B. For this reason, MTB believes it appropriate to drop the marking portion of its proposal in light of the contemplated actions of EPA and OSHA in order to avoid any conflicts or unnecessary duplication of requirements.

Many commenters supported the proposed and adopted requirement that the word Poison be added to shipping descriptions when not included in a shipping name or class description for a material meeting the DOT poison criteria. Also, most commenters supported the required display of information for water reactive materials, except they recommended Dangerous When Wet rather than Water Reactive as being more appropriate in communicating the risk. MTB agrees and the requirement has been adopted accordingly.

A commenter correctly pointed out that MTB failed to include Oxidizer, poisonous liquid or solid in the Notice. This is contained in § 172.402(a)(3). As noted earlier, appropriate entries have been included in the amendment. Also, commenters pointed out MTB's failure to address labeling for multiple hazards in § 172.402 in addition to the proposed dual labeling specified for the eight generic n.o.s. entries in the Table. One commenter suggested that dual labeling not be required if the identification numbering system is adopted. MTB does not agree. MTB views the DOT required labels to be a hazard-alerting portion of the hazard information system and, in terms of incident prevention and immediate knowledge of risk, an essential element of the system. In adopting the dual labeling requirements for the generic entries, MTB agrees that similar treatment should be given to other materials having the same hazards. Therefore, a change is being made to § 172.402 accordingly.

Docket HM–145A—Transportation of Hazardous Waste Materials

The amendments under this Docket provide for the proper identification of hazardous waste materials for transportation and to ensure that such wastes ultimately are delivered to predetermined designated facilities through implementation of certain record-handling requirements. The requirements apply to hazardous waste carried in either interstate or intrastate (with one exception) transportation. The hazardous waste regulations have been coordinated with the Environmental Protection Agency's (EPA) development of a national hazardous waste regulatory program as mandated by § 3003 of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6923).

MTB's Office of Hazardous Materials Operations published a Notice of Proposed Rulemaking regarding the transportation of hazardous wastes under Docket HM–145A on May 25, 1978 (43 FR 22626; Notice 78–6). The preamble to the Notice provided an extensive explanation of the proposed regulations from the standpoint of what is expected in implementing RCRA requirements; the differences in the jurisdiction of EPA and DOT; and the overall objective of the proposed requirements. Rather than repeating that discussion here, interested readers are referred to the earlier document.

As a part of this rulemaking proceeding, six EPA–DOT joint public hearings were held in various parts of the United States. Virtually all the comments made at the hearings were addressed to EPA proposals, except that many commenters expressed the view that MTB should issue the regulations pertaining to the transportation of hazardous wastes. MTB agrees with those views insofar as the requirements pertain to carrier activities. Further, MTB is adopting a limited number of requirements that apply to generators (shippers) of hazardous wastes in addition to existing applicable hazardous materials regulations. EPA has recently published regulations, to be codified at 40 CFR Part 262 (45 FR 12722, February 26, 1980), applicable to generators of wastes. The EPA regulations are extensive in scope and apply to a generator's nontransportation activities as well as to the offering of wastes for transportation. MTB believes that it will be necessary for shippers to be fully cognizant of EPA's regulations, which include requirements relating to record-handling, storage limitations, and special package markings, since many of these requirements are inappropriate for MTB to adopt under the Hazardous Materials Transportation Act (HMTA) (49 U.S.C. 1801–1812).

EPA also has published regulations, to be codified at 40 CFR Part 263 (45 FR 12737, February 26, 1980), applicable to transporters (carriers) of hazardous wastes (hereinafter referred to as wastes). With two exceptions, however, the EPA has acknowledged (at 40 CFR 263.10) that a carrier complying with DOT requirements, as amended by this rule, applicable to transportation of wastes, will be considered in compliance with corresponding EPA requirements even though those requirements may be stated differently.

One exception is EPA's requirement for carrier identification numbers, which must be obtained as a one-time requirement; the second exception is EPA's requirements for the cleanup of spills or discharges. For the convenience of carriers, the former exception is cited and the latter quoted in notes to § 171.3 of this rule.

Throughout this rulemaking proceeding, MTB worked closely with EPA in the joint development of appropriate transportation requirements. This rule is being promulgated under the HMTA to address the carriage of hazardous wastes, which may pose an unreasonable risk to health and safety or property when transported in commerce. Consistent with the regulations adopted by EPA, MTB is adopting requirements primarily to ensure that hazardous wastes are properly identified to carriers and that they are delivered to predetermined designated facilities. Proper identification of wastes is essential in order to implement the transportation aspects of a "cradle to grave" hazardous waste tracking system.

One commenter, referring to proposed § 171.3(e)(3) (which is § 171.3(c)(3) of this final rule), stated that the proposal "[does] not uphold the preemption of inconsistent state or local requirements with regard to additional requirements on shipping papers" and, therefore, stands in opposition to Section 112 of the HMTA and the preemption procedures in 49 CFR Part 107, Subpart C. Another commenter was concerned about possible regulation by the State or locality to which a waste shipment is destined and claimed that the specific preemption language in the proposal did not go as far as Section 112 of the HMTA would allow.

Both comments misconstrue the proposal. The term "inconsistent" as used in the HMTA describes the type of state and local transportation safety regulation that is preempted by requirements under the HMTA. Section 171.3(c) lists and classifies as "inconsistent" certain areas of possible State and local regulatory actions pertaining to hazardous wastes which MTB believes would be disruptive of the national uniformity required in the identification of hazardous materials (including wastes) in transportation. Section 171.3(c) does not list all the conditions under which it might view a State or local law as "inconsistent," nor does it apply to non-transportation requirements that may be imposed by State or local law. The final rule says that MTB considers that State and local requirements pertaining to certain aspects of the transportation of wastes are inconsistent with DOT requirements if they apply differently from or in addition to them. Section 171.3(c) is a declaration of intent that State and local requirements in this safety area be uniform to encourage compliance by shippers and carriers of hazardous wastes and to avoid unnecessary regulatory impediments to the reliable transportation and delivery of these materials.

In a related matter, a recently issued MTB inconsistency ruling (IR–2) (44 FR 75566, December 20, 1979) expresses a view of HMTA preemption in other regulatory areas similar to that expressed in this final rule. While preemption is customarily a judicial matter, the statement in § 171.3(c) may reduce the need for subsequent dispute resolution.

In the final rule, the reference to additional requirements for shipping papers (including hazardous waste manifests) by states and localities to which a shipment is consigned has been dropped. When a hazardous waste manifest is being carried, as required by this rule, it is considered a shipping paper, and the language in § 171.3(c) applies. Any agency of a state which requires waste disposal facilities to obtain information in addition to or differing from that required by EPA and DOT to be contained in manifests must specify some means other than shipping papers (including hazardous waste manifests) for those waste facilities to obtain that additional or different information from generators. MTB believes that a nationwide standard for manifests is an important factor in accomplishing the safe and effective delivery of wastes to designated facilities without delays due to the manner of documentation.

After the comment period on this docket had closed, representatives of environmental protection departments of several Northeastern States, most notably New Jersey, expressed concern to Departmental representatives that the final rule might contain language preempting certain aspects of in-place State hazardous waste management programs. They were especially concerned about State requirements for information about individual waste shipments that may be in addition to that required by DOT's shipping paper requirements.

The language of the final rule does not preclude State requirements for such additional information with regard to wastes generated or disposed of within that State. However, as mentioned earlier, § 171.3(c) does not state all the conditions under which a State or local law might be preempted. State or local requirements applicable to hazardous waste transportation that are not addressed by § 171.3(c) may nonetheless be found preempted under administrative procedures found at 49 CFR Part 107, Subpart C.

Several commenters discussed the proposed changes to § 173.28 which addresses the reuse of containers (packagings). One commenter suggested that proposed paragraph (n) be revised to make it consistent with existing § 173.28(i) and to make it clear that NRC (nonreusable container) marked specification packagings may be used to transport the indicated hazardous materials. MTB agrees and has modified the rule accordingly. Another commenter suggested that STC (single trip container) marking requirements be removed from the regulation. While this suggestion may have merit, it would require action that is considerably beyond the scope of this rulemaking since each packaging specification in Part 178 that references such a marking would have to be modified.

One commenter expressed strong objection to proposed § 173.28(p) which proposed to permit the reuse of NRC-and-STC-marked packagings for shipments of wastes under specified conditions. The same commenter concurred subsequently in the submission of another commenter who recommended that the requirement be restated to allow the reuse of NRC and STC marked packagings for wastes if they are "reconditioned * * * in accordance with this part." Since there are no reconditioning requirements for NRC-marked packagings, these commenters may be suggesting allowing their reuse for wastes, as proposed in the Notice, while the more substantial STC-marked drums would have to be reconditioned before use for waste shipments. MTB does not agree with this point of view. It is more likely, however, that the commenters oppose allowing NRC- and STC-marked packagings to be used for waste shipments unless they are reconditioned. For the on-time use authorized by this final rule, MTB does not believe reconditioning to be necessary for either STC- or NRC-marked packagings.

The same commenter pointed out the important contribution of the drum reconditioning industry to the saving of national resources and energy. MTB acknowledges the significant contribution of the drum reconditioning industry to savings in energy and resources. However, NRC-marked packagings are not presently covered by reconditioning requirements, and MTB

believes they should be put to appropriate use in waste disposal activities under limited circumstances and that there is no logical reason to exclude STC-marked drums from similar use. Shipments of hazardous wastes in reused STC- and NRC-marked drums are subject to special requirements: (1) they must be moved under manifests; (2) discharges must be reported and cleaned up; (3) deliveries are restricted to designated facilities; (4) the adopted rule limits transportation to highway; (5) packages must be held 24 hours after filling for inspection (a requirement that does not apply to reconditioned drums); (6) and packages may not be loaded or unloaded by common carrier personnel, who would not normally be as familiar or trained to deal with a waste material as would the employees of private and contract carriers. This last fact is relevant to the objection of another commenter who suggested common carriers should not be treated differently. On a number of occasions, MTB has recognized the distinction between private (and at times contract) carriers and common carriers in the application of regulations and the issuance of exemptions (see, for example, § 173.29 in this rule and § 173.316(a)(2)(vi)) and believes such a distinction is appropriate in this case. MTB considers that the adoption of this rule will contribute to saving energy and national resources since many packagings that are used to bring materials into industrial concerns may now be reused for wastes and it will be unnecessary for new or reconditioned drums to be used in their place.

Several commenters addressed MTB's proposed revision of § 173.29 dealing with empty packagings. One commenter challenged MTB's statement in the Notice preamble which indicated that "it is essential to deal with the subject of so-called 'empty packagings' containing the residues of hazardous materials" (43 FR 22629). The commenter suggested that MTB did not have data to justify this action. By a separate and subsequent submission, this commenter petitioned for rulemaking to delete § 173.29(e) as it pertains to required removal, obliteration, or covering of labels when packagings are transported in open-top or flat bed vehicles. Another commenter considered the proposal to be outside the scope of this proceeding and suggested that it should only be addressed to wastes. MTB is in substantial disagreement with these comments. However, MTB does agree that the rulemaking petition has merit since the deletion of § 173.29(e) was proposed in the Notice and is adopted here.

The revision to § 173.29 addresses all so-called empty packagings having a capacity of 110 gallons or less—not only drums. The residues in a packaging may pose an unreasonable risk to health and safety or property regardless of whether or not the packaging is being transported for recovery of residue, reconditioning, refilling, or disposal. Even small quantities of certain poisonous residues can be lethal upon contact with the skin. Residues of corrosives can cause severe burns. Residues of some flammable liquids can generate vapors that can be explosive when mixed in certain volumes with air. The commenter is correct in suggesting that MTB does not have accident data to support this requirement, for the simple reason that so-called empty containers have never been subject to the reporting requirement of § 171.15 or § 171.16. MTB believes it is appropriate to take action based on the fact that hazardous materials currently are subject to regulation as such when in smaller quantities than are often contained in so-called empty packagings. One commenter suggested that a drum "having less than 1% of the marked capacity of the container, should be deemed 'empty'." This would mean that in excess of two quarts of residue could remain in a 55-gallon drum and be excepted from the rule. Furthermore, the commenter did not suggest how the 1% or less would be determined. MTB does not agree with this suggestion because of the hazards these quantities may pose. Concerning the same commenter's petition to allow prescribed hazardous materials labels to remain on a packaging containing the residues of hazardous materials, MTB agrees and has adopted the requirement as proposed in the Notice. Labels, as required for filled packagings, must remain on so-called empty packagings unless the packagings have been cleaned and purged of all residues.

MTB does not consider the adoption of rules for all so-called empty packagings, and not just those being discarded as waste, to be outside the scope of this rulemaking action. MTB's intention to do this was expressed and thoroughly discussed in the Notice. Obviously, the status of packagings containing the residues of hazardous materials is often subject to change. While it may have been originally intended that they be transported for recovery or reuse, it could be decided at any point in the cycle that they be discarded. MTB is unable to perceive any rational approach that would call for a distinction in how a hazard is communicated (i.e., through labels, markings, and shipping papers) merely due to a difference in destination. Therefore, it was essential that the entire matter be dealt with in this rulemaking action (the first action addressing the subject since it was removed from Docket HM–112 in 1976), to assure uniform application of the requirement to all so-called empty packagings.

The hazardous waste regulations being issued under Docket HM–145A constitute a significant regulation under the terms of Executive Order 12044 and DOT implementing procedures (44 FR 11034; February 26, 1979). In accordance with regulation evaluation requirements contained in those documents, MTB invites public comments, responses and reactions to this rule during the first year of its implementation. Comments should be titled "Hazardous Waste Rules" and addressed to: Dockets Branch, Materials Transportation Bureau, U.S. Department of Transportation, Washington, D.C. 20590. It is requested that five copies of any comments be submitted. Comments received prior to November 20, 1981, will be considered.

At the conclusion of the comment period, MTB will reexamine the rule based on the comments received. Subsequently, MTB will publish a notice in the **Federal Register** indicating what, if any, action it is taking or proposing to take based on its reexamination.

HM–145B—Transportation of Hazardous Substances

This rule provides for the identification of hazardous substances when a "reportable quantity" is contained in a package. The identification will be accomplished by requiring that the name of the hazardous substance and the letters "RQ" be placed on shipping papers and displayed on packages in association with the descriptions for hazardous substances. Also adopted is a new § 171.17 specifying the reporting requirements for discharges of hazardous substances into or upon the navigable waters or adjoining shorelines.

The Notice proposed to identify a hazardous substance as any material that is subject to the EPA regulations found in 40 CFR Parts 116 and 117, and to require the identification of hazardous substances when loaded in reportable quantities at any one loading location, considering all packages loaded at that site. If final rules were adopted as proposed, there would have been no qualification or exception

relative to the aggregation of packages in vehicles other than limiting their application to aggregate quantities loaded at one loading location. Also, there would have been no qualification or exception for small quantities of these materials in mixtures or solutions. The Notice also proposed the entry of a statement on each shipping document specifying a notification requirement, including a telephone number to be called in the event of a discharge. The notification requirement set forth in proposed § 171.17 specified that a report would be required when any amount of a hazardous substance was discharged during transportation, if a reportable quantity of a hazardous substance was present in a vehicle, as indicated by the identification statement on the shipping paper. The proposal also would have required special markings on portable tanks, cargo tanks, and tank cars for the identification of hazardous substances. Significant changes have been made to the proposal.

Several commenters stated that the DOT would exceed its authority under the Hazardous Materials Transportation Act (HMTA) 49 U.S.C. 1801–1812) by adding the ORM–E hazard class to cover hazardous substances which, they stated, are not hazardous materials that meet the definition of any existing hazard class. Other commenters stated that MTB holds no authority to promulgate regulations pertaining to materials identified as hazardous substances by another Government agency because Section 104 of the HMTA requires the Secretary of Transportation or his delegate, per 49 CFR 1.53(b)(1) and paragraph 5 of Appendix A to Part 1, to make a finding that "a particular quantity and form of material in commerce may pose an unreasonable risk to health and safety or property * * *" while in the past MTB has primarily dealt with materials that may pose acute hazards to persons or property, addressing materials that may pose chronic hazards to health through the environment is well within DOT's authority under the HMTA. The pertinent language in Section 311 of the Clean Water Act (33 U.S.C. 1321), EPA's authority for designating hazardous substances, is contained in paragraph (b)(4), which provides for determination of "those quantities of * * * any hazardous substances the discharge of which may be harmful to the public health or welfare * * *." Clearly, many of the risks involved from the transportation of hazardous materials relate to the possibility of unintentional release, and such releases may involve discharges into the navigable waters of the United States. To the extent that EPA has designated certain substances in specified quantities as potentially harmful, it is appropriate for MTB to designate those quantities of those materials as hazardous materials under the HMTA. Moreover, should MTB not take this action, it would be left to EPA to fill the void covering the transportation of those hazardous substances not reached by DOT regulations. Such a split in regulatory coverage would be inefficient and a hinderance to all concerned.

Several commenters suggested that the definition of a hazardous substances and a reportable quantity should be redefined to agree with EPA and that Part 117 of EPA's regultions pertaining to hazardous substances should be incorporated into the DOT regulations as an appendix. MTB agrees that there is a need to redefine hazardous substances. However, in recognition of the distinction between transportation operations and fixed facilities, MTB believes it should adopt a definition for hazardous substances under the HMTA that recognizes the unique features of our transportation system while sufficiently accomplishing the purposes and intent of § 311 of the Clean Water Act. Therefore, MTB has revised its definition of a hazardous substance by addition of two major features that were not included in the Notice. The first feature is a limitation of the application of DOT's regulations to reportable quantities of a hazardous substance contained in one package (see the definition of a package in § 171.8); in fact, the concept of a reportable quantity in a single package is now contained in the definition of "hazardous substance" in § 171.8. The second feature is a limitation of the application of DOT's regulations with regard to mixtures and solutions containing materials identified by the letter "E" in § 172.101. Certain concentrations of these materials will be excluded from the applicability of DOT's regulations pertaining to hazardous substances. This is being accomplished by the inclusion of a table in the definition. For example, if the reportable quantity for a certain hazardous substance is 1,000 pounds, less than a 2 percent concentration by weight of that material in a mixture or solution will *not* be subject to DOT's regulations as a hazardous substance. Further, the 2 percent or greater concentration (by weight) of that material must result in a reportable quantity being contained in one package to be subject to DOT's regulations as a hazardous substance. Concerning discharge notifications, MTB has modified the requirement consistent with the suggestions of many commenters who stated that MTB was proposing a rule that was considerably beyond the scope of the purpose and intent of § 311 of the Clean Water Act. MTB proposed the rule in that fashion because it anticipated considerable difficulty on the part of transport workers in establishing when reportable quantities were discharged. MTB erred in overstating the proposed reporting requirement for that purpose and agrees that the discharge reporting requirement should be closely aligned with the statutory reporting requirement.

A number of commenters stated that transportation employees would not always be able to make notifications of discharges directly and that many communications would of necessity be through carrier personnel other than the operators of vehicles. MTB has modified the rule to recognize such a situation by stating that the person in charge of the transport vehicle, etc., shall make the notification directly or indirectly through the carrier. The prime responsibility still rests with the person in charge, however, the final rule grants flexibility in the method of notification. MTB believes this is consistent with the intent of § 311 of the Clean Water Act. A new paragraph (e) has been added to § 171.17 to require the carrier to make a notification if the person in charge of a vehicle is incapacitated or otherwise unable to make a notification. For instance, there may be a situation when the driver of a motor vehicle is severely injured in an accident and would not be able to make the required notification. In such a case, an official of the carrier operating the vehicle would be required to make the notification as soon as he has knowledge that a hazardous substance (i.e. a reportable quantity) has been discharged.

Many commenters objected to the proposed requirement for a notification statement on shipping papers, stating that such a statement was not necessary to accomplish the purposes of the proposed rulemaking. Several commenters stated a simple identification of hazardous substances in a shipment would be sufficient to implement the reporting requirements and that carrier employees could be educated to know and understand the meaning of the identification. MTB agrees with these commenters and has decided that the letters "RQ", entered on shipping papers and packages (other than portable tanks, (cargo tanks and tank cars), in association with required descriptions, will be sufficient to implement the identification of

hazardous substances. This decision also addresses the concern expressed by several commenters concerning the unique display of the letter "E" as was proposed in the Notice.

Many commenters discussed the significant impact of the proposed regulations on consumer commodities expressing the view that, if adopted, the effective use of the ORM–D hazard class would be essentially negated and that the concept of limited quantities would be destroyed. MTB believes that this concern has been overcome by the manner in which it has defined hazardous substances for purposes of application of the hazardous materials regulations.

While the regulations for hazardous substances adopted by DOT in these amendments are closely related to those of the EPA found in 40 CFR Part 117, they are not identical in their applicability. EPA's regulations require, without qualification, notification of discharges of reportable quantities of hazardous substances under conditions specified in § 311(b)(5) of the Clean Water Act and, as specified in the notice, provisions of 40 CFR 117.21. The DOT regulations require notification when a reportable quantity is discharged from a package (e.g., a drum, cargo tank motor vehicle or tank car) that is marked or documented as containing a reportable quantity.

Persons who do not have knowledge that a reportable quantity of a hazardous substance has been discharged are not required by EPA to make notifications. MTB has been advised by EPA that it will not bring civil or criminal suit for failure to make notification when such notification is not required by DOT's regulations, unless it can be shown that there was actual knowledge that a reportable quantity was discharged.

Shippers and carriers must also bear in mind that compliance with the provisions of this rule do not relieve them from possible civil liability under § 311 resulting from discharges of reportable quantities. This liability relates to the discharge itself and removal costs and is addressed in regulations promulgated by the EPA and the U.S. Coast Guard.

HM–159 (HM–118)—Forbidden materials

This rule adds the names of materials to the Hazardous Materials Table that MTB considers to be too hazardous to be permitted in commercial transportation. Also, the rule adds N-methy-N'-nitro-N-nitrosoguanidine as a flammable solid and adds a new § 173.179 prescribing packaging requirements for this material. Changes have been made to §§ 173.21 and 173.51 pertaining to forbidden materials and packaging.

A total of 28 comments were received in response to the Notice. All commenters were in general agreement with the proposal to add certain materials considered to be too hazardous for commercial transportation to the Table. A commenter presented data indicating that 2,6-dichloro-4-nitrophenol is not a forbidden material. MTB agrees with the data presented and this material has been removed from the list. The same commenter also stated that some iodoso compounds might be considered forbidden, but that others would not be in this category. Pending further detailed investigation of these substances, the proposed entry of iodoso and iodoxy compounds (dry) has been removed from the list of named forbidden materials.

A comment from a manufacturer of organic peroxides suggested that the term "active oxygen" would be better than "available oxygen" for those entries in the Table containing such limitations. MTB agrees with the commenter and the term "active oxygen" has been substituted for the term "available oxygen."

Two air carrier associations concurred in the proposed § 172.100(d) and suggested that the idea contained in that section be applied to all commodities in the Table. Based on these comments, MTB has reviewed the entire use and meaning of the asterisk in the Table and has decided to eliminate the asterisk, thus allowing a shipper to determine if a specific material should be regulated under the hazard class identified in the Table. However, in conjunction with this change, it is necessary for MTB to introduce a new symbol into the table in order to identify those materials which have been designated as hazardous materials of a particular class, whether or not they meet the definition for the hazard class in which they have been designated. If a shipper wishes to ship a formulation of a material identified by the plus (+) symbol as non-regulated, or in a class other than that specified in the Table, he must supply the Associate Director, Office of Hazardous Materials Regulation, MTB with data which establishes that it does not present a hazard in transportation, or presents a different hazard than that which is listed in the Table.

Another commenter objected to the limiting of peroxyacetic acid to 40% by weight instead of the 43% authorized in the UN Recommendations and the IMCO regulations. There are several current organic peroxide entries which have different concentration limits in the UN Recommendations and the DOT Hazardous Materials Regulations. Since the concentration limits in the UN Recommendations were agreed to by the U.S. delegations to the UN meetings, MTB has revised the limits in the Table to agree with those in the UN Recommendations.

Several commenters objected to all or parts of the proposed revision of § 173.21. Some organic peroxide manufacturers objected to the use of 130°F. in paragraph (a)(2) because their interpretation was that this temperature is the minimum decomposition temperature for which refrigeration would be required. They argued that they have shipped certain organic peroxides with decomposition temperatures of 120°F. without refrigeration for years and, also, that the UN Recommendations use 122°F. as the decomposition or polymerization temperature below which refrigeration is required for the most active organic peroxides. MTB considers 130°F. the maximum temperature that could be expected during transportation, and there are many sections in the regulations which reference 130°F. The fact that an organic peroxide, or any other material, decomposes below 130°F. does not necessarily mean that it must be stabilized or refrigerated. The paragraph states in part "with an evolution of a dangerous quantity of heat or gas . . . ." If the decomposition or polymerization does not create a hazard in transportation, the provisions of the paragraph do not apply regardless of the decomposition temperature of the material. Therefore, the temperature reference of 130°F. has been maintained in the final rule.

Several commenters objected to the fact that § 173.21(a)(2) did not contain a statement concerning the time a material would have to be exposed to the 130°F. temperature in order to be considered forbidden from transportation. MTB agrees that this is a weakness in the proposed wording and has altered the wording of the rule to reference two test methods. The test methods are: ASTM E–487 "Standard Method of Test for Constant Temperature Stability of Chemical Materials" and the Organic Perioxide Producers' Safety Division (OPPSD) "Self Accelerating Decomposition Test (SADT)." Several commenters expressed concern that this paragraph does not make it clear that approvals issued by the Bureau of Explosives would be continued in effect until an orderly transition to approval by the

Associate Director for Operations and Enforcement, MTB could be accomplished. MTB acknowledges the validity of the objection and has included a clarification statement in the rule which references § 171.19.

Several commenters stated that proposed § 173.21(a)(3) was too vague and it was suggested that a phrase be added such as ". . .e.g., the release of flammable vapor in such quantities that an explosive mixture would be created within the transport vehicle." MTB agrees with this objection, and wording to the effect of that suggested has been included in the rule.

On July 9, 1974, the Hazardous Materials Regulations Board, the predecessor of MTB, published a Notice a Proposed Rulemaking under Docket No. HM–118 proposing to list and classify polystyrene resin, expandable, containing a flammable liquid or gas, as a flammable solid. No final action was taken on this rulemaking proposal. Section 173.21(a)(3) of this rule will forbid the offering for transportation of packages which evolve a dangerous quantity of flammable gas or vapor from a material not otherwise subject to the regulations. MTB believes this prohibition is sufficient to preclude the type of potential hazard which was the concern addressed by the Hazardous Materials Regulations Board in its proposal under Docket No. HM–118. Therefore, the proposals under Docket No. HM–118 are hereby terminated.

Several commenters said that § 173.21(a)(4) needed clarification. The objections were based on the fact that there was no definition of detonation and that there is no recognized test method for determining whether detonation has occurred in a package as a result of a thermal stimulus. In response to the first objection, MTB has included a definition of detonation in the final rule. The second objection is not correct. There are three tests specified in the regulations for determining whether a packaged material detonates as a result of a thermal stimulus. One of these is described in § 173.88(g), Note 2. Another method is found in DOD TB 700–2 (May 19, 1967) which is referenced in §§ 173.86(b) (2) and (3). Both of these test methods have been in the DOT regulations for many years and have been used extensively on both military and commercial materials to determine whether a detonation will occur in a package exposed to a thermal stimulus. While both test methods were designed for testing propellants, they can be and have been used to test other hazardous materials. The third test method is described in § 173.114a(b)(6) and may be used in evaluating whether a detonation has occurred. MTB has considered it inadvisable to reference these methods in this rule because such a reference could suggest that a chemical manufacturer who is not familiar with testing explosives should attempt to perform these tests. This type of testing should be done only by personnel who are well versed in the testing of explosives and this fact has been stated in the rule.

Docket HM–171—Use of United Nations Shipping Descriptions

The amendments under this Docket authorize the use of United Nations shipping descriptions and identification numbers for certain hazardous materials in place of the descriptions required by existing DOT regulations. These amendments are intended to facilitate the international transportation of hazardous materials and to minimize the economic burdens imposed on shippers by the multiplicity of package markings and shipping paper descriptions now required for compliance with both domestic and international requirements. In addition, the amendments provide optional stowage locations for hazardous materials when transported by vessel. The optional stowage locations authorized are those provided for the particular hazardous materials in the International Maritime Dangerous Goods (IMDG) Code published by the Inter-Governmental Maritime Consultative Organization (IMCO).

A number of comments were received which expressed complete support for the proposal. In general, the supporting commenters endorsed the proposal since it would eliminate costly redundancy in shipping paper descriptions and packaging markings. One supporting comment is quoted since it provides some quantification of the importance of the international transportation of chemicals to our economy:

> Shipments of chemicals and allied products were valued at $126.5 billion in 1978. The export activity continued to be strong in 1978 with the value of all chemical exports totaling $12.62 billion, an increase of 16.7 percent over 1977. While the imports of chemicals also increased, the favorable balance of trade in the chemical area increased from $5.84 billion in 1977 to $6.19 billion in 1978, a gain of 6 percent. In the future, these shipments are expected to increase and will be affected by international regulations to a greater degree.

Several comments were received expressing opposition to the proposal. It should first be noted that many of the issues raised concerned the use of IMCO classifications and labeling for certain hazardous materials. Although limited to import and export shipments in the present regulations, this authorization has been a provision of the DOT regulations since adoption of amendments under Docket No. HM–112 in 1976. For this reason, MTB believes it is reasonable to assume that shipper and carrier personnel should, in the execution of their responsibilities in the preparation and acceptance of shipments, already have gained a basic familiarity regarding the use of IMCO classifications and labels as an alternative to the class and labels prescribed for certain hazardous materials in § 172.101.

The fundamental argument raised in opposition to the proposed amendments is that the existence of an optional hazardous materials list will, in the words of one commenter, have a "chaotic effect" on the regulated industries, particularly on the rail and motor carrier industries, because it would complicate the regulations. MTB agrees that the provision of options to various requirements increases the volume of regulations and, to a certain degree, their complexity. In spite of this fact, experience has shown that such regulatory provisions are essential if the regulations are to be effective without unnecessarily burdening industry. For example, it could be argued that the hazardous materials placarding requirements could be vastly simplified by eliminating the "DANGEROUS" placard and certain exceptions to the placarding requirements, and simply requiring that appropriate placards be displayed for each hazardous materials transported regardless of quantity. Such simplification is obviously not in the best interests of the regulated industries and would undoubtedly be declared totally unacceptable by the very commenters who oppose the amendments under Docket HM–171. MTB believes that these amendments will do much to enhance safety by minimizing redundant, conflicting and confusing shipping paper and package marking requirements. Under the current practice of incorporation of IMCO classification and labeling provisions by reference, it is difficult for rail or motor carrier personnel to determine compliance with these provisions. The optional list will eliminate confusion and errors on the part of carrier personnel by making this information readily available to them in § 172.102.

A number of objections to the proposed amendments were raised on the basis of placarding implications. One commenter expressed concern that rail carrier personnel would be unable

to replace missing placards with placards conforming to IMCO labels. The proposal did not address the use of placards conforming to IMCO specifications either in place of, or in addition to, DOT placards. This same commenter also incorrectly interpreted the existing § 171.12(b) as allowing freight containers to which IMCO enlarged labels have been affixed in place of DOT specification placards, to be transported by railway, motor vehicle or aircraft in the United States.

Several commenters suggested that use of the optional list will make it impossible for carrier personnel to verify the correctness of placarding and various operational measures such as segregation. Still other commenters requested clarification of the relationship between offering a material under its classification in § 172.102, and the DOT placarding requirements. Both placarding and segregation, as well as other operational considerations such as car placement, are dictated by the classification of the particular hazardous material. It is for this reason that, when a material is offered under its IMCO class, the name of the DOT class which most closely corresponds to that IMCO class must be shown as part of the description on shipping papers. This indication is currently required by § 171.12(b) and was subsequently proposed for inclusion in § 172.102. When a shipper offers a hazardous material under the class provided in § 172.102, it is that class which governs all applicable transportation requirements regardless of what the classification of the material might be under § 172.101. Since the DOT class name corresponding to that IMCO class will be written out in the basic description, carrier personnel need only verify that the class shown on the shipping papers is, in fact, the class shown for that description in § 172.102, and that placarding, segregation, etc., have been accomplished as required for the class under which the material is offered.

A commenter noted that the classification of certain hazardous materials was different in § 172.101 and § 172.102. It was precisely this observation which prompted the authorization currently contained in § 171.12(b) which accommodates these classification differences so that it is not necessary for shippers to relable their export shipments.

The same commenter observed that the proper shipping name, marking, labeling and placarding may be different for different shipments of the same material from the same shipper. This is a valid observation that could also be made regarding existing authorizations contained in § 171.12(b). In the period since § 171.12(b) was adopted in 1976, MTB has not been informed that this potential difference in description, classification and labeling provisions for the same material offered by a particular shipper has created any difficulties. In addition, MTB believes that by extending the authorization to use optional descriptions, labeling and classification to domestic as well as international transportation, individual shippers will tend to use one of the two options for all shipments of a particular material rather than prepare some shipments according to § 172.101 and other shipments according to § 172.102.

One commenter, who represents a large group of motor carriers, maintained that "* * * to allow a second type of shipping description to be utilized by shippers in the U.S., in place of those specified in existing rules which have been in place only 2-½ [sic] years is wrong" because it invites non-compliance and results in expensive retraining of personnel, and summarized the proposal as "* * * another case of the international shipment tail-wagging the domestic dog." MTB questions the implication that expensive and extensive retraining of carrier personnel will be necessitated by the adoption of Docket HM-171. In general, carrier personnel will have to be informed that, should they not find in § 172.101 a hazardous materials description which appears on a shipping paper, they should check to see if it appears in § 172.102. If it does not, the shipment is in non-compliance. If it does appear, they may then proceed to verify the correctness of the classification, labeling, placarding, etc. For this reason, MTB does not believe this change will result in a necessity for extensive retraining of personnel.

This same commenter offered a National Transportation Safety Board (NTSB) report on non-compliance with the hazardous materials regulations in support of this argument that adoption of the optional list would further complicate the regulations and detract from transportation safety. MTB does not accept this argument for reasons previously stated and would draw the attention of this commenter to the fact that NTSB has supported this proposal as being "* * * responsive, in part, to the Safety Board's Recommendation I-78-71 dated January 17, 1978, in that it provides for the use and cross-reference of IMCO shipping descriptions."

One commenter suggested that the need for an optional hazardous materials list could be eliminated for import/export shipments by retaining existing § 171.12(b) and by allowing the IMCO description for a material to appear on shipping papers and requiring that the description and class of the material appearing in § 172.101 must precede the IMCO proper shipping name and class on the shipping papers. Adoption of this suggestion would be more restrictive than current regulations in that, in addition to a requirement to always show the proper shipping name from § 172.101, the class prescribed for the materials in § 172.101 would also have to be indicated. Under the existing regulations, the IMCO classification may be used in place of the DOT class for import/export shipments of certain hazardous materials. For this reason, and because this suggestion would do nothing to eliminate redundant shipping paper description and package marking requirements, the suggestion is not adopted. This commenter also maintained that authorization to use IMCO descriptions for purely domestic transportation was "totally unacceptable" at this time because the IMCO system is obscure to carrier and emergency response personnel. MTB notes that water carrier personnel have been successfuly using the IMCO system for several years and that, as indicated in numerous comments, this segment of the carrier industry does not agree with the statement made by this commenter. Furthermore, as previously stated, one of the benefits of the optional list, as opposed to the existing practice of incorporation of IMCO by reference, is that it removes the "obscurity" of the IMCO system by placing the necessary information in the hands of all carrier personnel. MTB assumes also that carrier personnel have been properly trained to deal with the current authorization for use of IMCO descriptions, classes and labels for import/export shipments. With the provision of this information in § 172.102 readily available for use by all carrier personnel, MTB can see no valid reason why the option should not be extended to domestic as well as import/export shipments.

A commenter noted that certain materials have different identification numbers assigned under § 172.101 and § 172.102, and that this difference could thwart emergency response efforts. These differences result from the fact that IMCO lags several years behind the UN in adoption of UN Recommendations. The identification numbers assigned in § 172.101 have been based on the most recent UN Recommendations while those indicated

in § 172.102 are those identification numbers assigned to materials in the current edition of the IMCO Code. It is essential that § 172.102 be maintained consistent with the IMCO Code to prevent frustration of international shipments. These occasional number differences should not affect response actions since the Emergency Response Guidebook has been designed to function with identification numbers contained in either list.

A request was received to include in the regulations a list of countries who have adopted the IMCO Code. MTB does not believe it appropriate to include such a list in the regulations. This information, is, however, available from MTB upon request.

The Emergency Response Guidebook

Notice 79-9, under Docket HM-126A (44 FR 32972), included a discussion of MTB's proposed distribution of a manual. This document is now entitled "Emergency Response Guidebook" (ERG). Its development is completed and it is expected that its production will begin within forty-five days after publication of these amendments. The format of the ERG is essentially the same as was discussed in the Notice.

The MTB is completing its planning for distribution of the ERG, without charge, to emergency response entities throughout the United States. MTB has been advised by two firms that they plan to make commercial distribution of the ERG.

Since the ERG contains materials closely associated with the regulations published herein, it bears a copyright provision authorizing its reproduction, without modification, without further permission from DOT.

The MTB expresses its appreciation to the many individuals, organizations and businesses that assisted in the development of the ERG. The many exchanges of ideas and information resulted in the development of a much improved document. MTB recognizes that further improvement will be suggested and may be warranted; therefore, it contemplates that the ERG will be republished in approximately two years.

Corrections

MTB anticipates that a limited number of errors will be discovered upon review of the amendments in this publication; e.g., a printing error in the pound or kilogram entries for "E" identified materials in the Table to § 172.101. MTB plans to handle corrections in one Federal Register publication before September 1, 1980. Any person discovering an error may contact the individuals named earlier in this preamble, directly by telephone or by letter. A distinction should be made between discovery of errors and taking exception (disagreeing) with MTB's decisions concerning substantive matters in the amendments. Substantive matters will be handled in accordance with 49 CFR 106.35 and 106.37.

Review by Sections

Section 171.1. Section 171.1 is revised from its proposed scope in Dockets HM-145A and HM-145B to specify the applicablity of the Hazardous Materials Regulations with regard to the transportation of hazardous wastes and hazardous substances by intrastate motor carriers. No such distinction is considered necessary relative to transportation by rail car, aircraft or vessel since the nature of such modes makes their operations subject to DOT's regulations without regard to the intrastate or interstate nature of individual shipments. The revision of this section was not proposed in the Notice. However, this does not constitute a substantive change since the new § 171.1 language merely includes hazardous waste and restates the jurisdictional scope originally proposed in §171.3, which was discussed in the Notice to Docket HM-145A preamble. In anticipation of applications to EPA for interim authorizations to manage State hazardous waste programs pursuant to procedures specified in 49 CFR Part 123, MTB has excluded intrastate hazardous waste motor carriers from the application of the regulations in States holding interim authorizations (See Section 3006 of the RCRA).

Section 171.2. Two minor amendments are made to this section to reduce the references to § 171.12 and to add a reference to § 176.11. The provisions of current § 171.12(b) are transferred to the new § 172.102. These changes were proposed in Docket HM-171.

Section 171.3. Section 171.3 contains the basic requirements pertaining to the offering, transportation, and delivery of hazardous wastes, generally as proposed in Docket HM-145A. It should be noted that the applicability of specific hazardous waste requirements is based on a determination that a hazardous waste manifest is required according to EPA's regulations in 40 CFR Part 262. Under paragraph (b), a motor carrier may not transport a hazardous waste for which a manifest is required unless the carrier is identified on the vehicle in the manner prescribed by 49 CFR 397.21, one of the Federal Highway Administration's Federal Motor Carrier Safety Regulations, or 49 CFR 1058.2, a regulation of the Interstate Commerce Commission. This requirement applies when a manifest is required, regardless of the quantity of wastes transported. Paragraph (b)(2) requires compliance with the manifest requirements, and paragraph (b)(3) specifies the limitations on the delivery of wastes. A note is added following paragraph (b) emphasizing the fact that penalties exist for discharging hazardous waste at other than designated facilities. Paragraph (c) (§ 171.3(e) of the Notice) addresses those actions of a state, or its political subdivision, considered inconsistent with DOT's Hazardous Materials Regulations. A change has been made to proposed § 171.3(c)(3) that was not contained in the Docket HM-145A Notice to clarify the fact that hazardous waste manifests are considered to be shipping papers when they are being carried aboard transport vehicles. Paragraph (d) specifies the conditions under which an official may authorize the removal of a waste without the preparation of a manifest when a discharge occurs during transportation. Note 1 to this section provides advisory information to shippers and carriers that they are required by EPA's regulations to obtain identification numbers. Note 2 quotes EPA's regulation pertaining to the clean up of hazardous wastes discharged during transportation. With the addition of these two notes, and the amendments to the regulations set forth in this action, EPA has stated in its rules (see 40 CFR 263.10; 45 FR 12743, February 26, 1980) that carriers (transporters) of hazardous wastes will know of the hazardous waste transportation requirements applicable to their operations by reading DOT's Hazardous Materials Regulations (and Note 2 to § 171.3) without the necessity of reading EPA's corresponding regulations.

As published, § 171.3 differs from the version shown in the Notice. Most of the textual change eliminates unnecessary duplication of requirements proposed and adopted elsewhere in the rule. The reference to 49 CFR 397.21 has been adjusted to reflect the necessity of displaying the required vehicle markings regardless of whether or not placarding is necessary, a fact to which the scope of § 397.21 otherwise keys. Proposed, but not adopted, was a lengthy reference to an exception for certain shipments not subject to EPA hazardous waste manifest requirements. This exception has been broadened to include all shipments not subject to EPA manifest requirements and therefore not incorporated into the DOT definition of

"Hazardous waste" in § 171.8 of this rule.

To preclude anticipated problems, MTB has provided for the substitution of equivalent specification drums for hazardous wastes that may be impractical to package in the authorized specification drums.

Section 171.7. In § 171.7 paragraphs (c)(27), (c)(28), (d)(5)(ix), (d)(20), (d)(21) and (d)(22) are added. Paragraph (d)(20) is added to recognize the latest edition of the NIOSH Registry of Toxic Effects of Chemical Substances as an acceptable source of common names, chemical names and trade names that may be used in place of a technical name to meet the requirements of § 172.203(k). Paragraph (d)(21) is added to provide proper reference to the UN Recommendations on the Transport of Dangerous Goods which had been cited in § 172.519 in Docket HM–103. The other additions to this section provide citations to obtain test methods used to determine thermal stability (as addressed in § 173.21). An explanation of the addition of these test references can be found in the portion of the preamble of this document addressing Docket HM–159.

Section 171.8. Section 171.8 contains definitions related to hazardous wastes and hazardous substances, revised somewhat from those proposed in Dockets HM–145A and HM–145B. Note that the definition of "Hazardous waste" is limited to materials that are subject to EPA hazardous waste manifest requirements specified in 40 CFR Part 262. Added to the definition is a qualification concerning manifests so that carriage of hazardous wastes in States holding interim authorizations from EPA, in accordance with 40 CFR Part 123, is not excluded from the application of DOT's Hazardous Materials Regulations (other than carriage by intrastate motor carriers—See Section 171.1(a)(3)). As stated earlier, MTB believes that a nationwide standard for manifests is an important factor in accomplishing the safe and effective delivery of wastes to designated facilities. This factor is particularly important relative to the operations of carriers transporting materials in interstate commerce. Note also that for the purposes of the DOT regulations, a material is a hazardous substance based on certain conditions that are set forth in the definition. Any hazardous material that may also be a hazardous substance under DOT regulations is identified in the Table by the letter "E" along with the reportable quantity for that material. When a material identified by the letter "E" is in a mixture or solution, the material is evaluated against the percentage concentration by weight in paragraph (d) to determine whether it falls within the definition. If a pure material is involved, or a mixture or solution with letter "E" materials which equal or exceed the paragraph (d) concentrations, the final step is to determine if it is a hazardous substance. For the purposes of DOT regulations, a material identified by the letter "E" becomes a hazardous substance when a reportable quantity (indicated in pounds and kilograms following the proper name) is contained within one package, or if not packaged, within one transport vehicle. For a mixture, each material must be separately evaluated since a hazardous substance determination must be made for each letter "E" material in a mixture. Thus, a package with a net weight of 20 pounds and containing a mixture of material "A" having an RQ of 10 pounds and "B" having an RQ of 100 pounds could, depending on the concentration, contain a hazardous substance with regard to "A", but not "B." Different percentages of an RQ for each substance in a mixture would *not* be aggregated. Note well that letter "E" materials that are not classed as ORM–E's, are hazardous materials even if they are not hazardous substances.

Section 171.12. Paragraph (b) of this section is no longer necessary since its provisions are contained in § 172.102 as proposed in Docket HM–171. Therefore, this paragraph is replaced by an appropriate cross reference to § 172.102.

Sections 171.15 and 171.16. It was proposed, in Dockets HM–145A and HM–145B, to set forth the hazardous waste and hazardous substance discharge reporting requirements in a new § 171.17. However, EPA has proceeded to align its hazardous waste discharge reporting requirements closely with those presently set forth in DOT's Hazardous Materials Regulations. Therefore, a new provision is not necessary and § 171.15 is modified to make it clear that hazardous wastes are covered by the reporting requirements, and § 171.16 is modified to require that a copy of the hazardous waste manifest (or other document used in place of the manifest) be attached to the report, thereby ensuring the availability of information such as generator and carrier identification numbers. The only other change to the present DOT reporting requirement is the required entry of an estimate of the amount of waste removed from the site of a discharge, the name and address of the facility to which it was taken, and the manner of disposition of any unremoved waste. This information is to be entered in the "Remarks" portion of the presently required report. MTB added the toll call telephone number to §§ 171.15 and 171.17 for reporting hazardous waste and hazardous substance discharges from locations where toll free 800 numbers do not apply, such as Hawaii, Alaska and Puerto Rico.

Section 171.17. Section 171.17 provides a reporting requirement for the discharge of a hazardous substance that is closely aligned with the notification requirement of § 311 of the Clean Water Act. The final rule requires notification when the carrier determines that a hazardous substance in transportation has been discharged into the navigable water or adjacent shorelines. This is a lesser reporting requirement than was contained in notice to Docket HM–145B in which it was proposed that each discharge of a letter "E" material be required to be reported, regardless of the location of the discharge and whether it was a sufficient quantity to constitute a hazardous substance.

Section 172.101. Present §§ 172.100 and 172.101 are combined into a revised and amended § 172.101 in order that the Hazardous Materials Table and the language introducing the Table may be contained in one section of the regulations. Indications of changes are to the language presently appearing at § 172.100, which as a result of this rule will appear at § 172.101. Paragraph (a) has been revised to accommodate this change.

The introductory text to pargraph (b) is revised to eliminate the asterisk (*), add the plus (+), and to include the letter "E."

Paragraph (b)(1) is revised to acknowledge the new plus symbol (+) in column 1 for material in column 2. The plus (+) was added to this section to identify materials for which the hazard class is fixed, without regard to whether the material meets the definition of the hazard class assigned. The asterisk (*) is no longer referenced in this paragraph or in column 1 of the Table. Justification for the removal of the asterisk, is discussed in this preamble text dealing with HM–159. An alternate shipping name and hazard class for materials may be authorized by the Office of Hazardous Materials Regulation, MTB upon submission of data justifying such reclassification and description changes.

Paragraphs (b)(2) and (b)(3) are modified to exclude from any limitation of requirements to single mode applicability those materials which are hazardous wastes or hazardous

substances, both of which are subject to certain regulations regardless of the mode of transportation involved. Paragraph (b)(4) is added to include the meaning of the letter "E" used in column 1 of the Table. The letter "E" identifies materials named in column 2 that may be hazardous substances depending on quantity contained in a single package, in which case they are subject to applicable regulations regardless of the transporting mode. It is important to note that although a hazardous material may be reclassed according to its hazard(s), if a hazardous substance does not meet the definition of any other hazard class, it must be reclassed as such (ORM–E) and shipped in accordance with the applicable regulations for hazardous substances.

The introductory text to paragraph (c) is revised editorily to reflect the authorized modification of a proper shipping name as specified in paragraphs (b)(4), (c)(10), (c)(11), (c)(12) and (c)(13).

Paragraph (c)(4) has been amended by adding a recommendatory sentence indicating that the sequence of each entry as shown in column 2 of the Table is the preferred sequence for marking and shipping paper requirements. The use of the preferred sequence will better enable emergency response personnel to locate the material when using the Emergency Response Guidebook since it is this sequence which appears in the Guidebook. Paragraph (c)(5) is revised, as proposed in Docket HM–126A, to require the technical name to be used as the proper shipping name for all "see" references for Organic peroxides. This is discussed in the Docket HM–126A preamble.

Paragraph (c)(6) contains a provision to limit the application of the DOT Hazardous Materials Regulations concerning hazardous materials identified as poisons. Under this limitation, a hazardous material having the word poison or poisonous in the proper shipping name must be considered to be a poison only if tests indicate death resulted from systemic poisoning rather than by corrosive destruction of tissue. MTB believes this limitation is appropriate and will provide adequately for emergency response information.

Paragraph (c)(9) is added, as proposed in Docket HM–145B, to explain the addition of the reportable quantity to the Table as an italicized entry in parentheses following the proper shipping name of potentially hazardous substances in § 172.101. This makes the reportable quantity for each of these materials readily available for reference so a determination can be made as to whether a hazardous substance is being offered for transportation.

Paragraph (c)(10) is added, as proposed in Docket HM–145A as § 172.101(c)(8), to specify that a proper shipping name include the word "waste" when the material described is a hazardous waste subject to EPA's requirements in 40 CFR Part 262. Use of this method to appropriately prescribe the proper shipping name for a hazardous waste alleviates the necessity for the addition of hundreds of proper shipping name entries to the Table. Only one new shipping name "Hazardous waste, liquid or solid, n.o.s." is added to the Table for hazardous waste.

Paragraph (c)(11) is added to aid in improving the identification of hazardous materials for emergency response personnel. To reduce the use of n.o.s. entries, MTB is authorizing the use of the name of the hazardous material in certain solutions and mixtures as part of the proper shipping name. This new procedure provides a partial answer to questions such as "What is Acetone under DOT regulations?" by allowing a mixture of a hazardous material and non-hazardous materials to be identified by the proper shipping name of the hazardous material, providing the hazard class remains unchanged. Thus, an Acetone, water and mineral oil solution that is a Flammable liquid may be identified as Acetone solution, Flammable liquid instead of Flammable liquid, n.o.s.

Paragraph (c)(12) is added to provide a means for identifying hazardous substances when they are not identified in a proper shipping name. This could occur through the use of the proper shipping name Hazardous substance, liquid *or* solid (as appropriate), n.o.s., which was requested by commenters for mixtures or solutions of hazardous substances. MTB was provided with an example of a mixture of Toxaphene and Xylene with a flash point above 200°F. consisting of a hazardous substance (i.e., any letter "E" material that has equalled or exceeded a reportable quantity in one package). Therefore, the entry would be Hazardous substance, liquid, n.o.s. This would be followed by the hazard class, ORM–E, the identification number for Hazardous substance, liquid, n.o.s., which is NA9188, and the identifier, RQ. In association with the basic description, the name of the hazardous substance that equals or exceeds a reportable quantity in one package must be identified.

Paragraph (c)(13) contains a provision that was proposed in Docket HM–145B in paragraph (b)(1)(iii) and that has been revised by MTB for clarity. It also contains a requirement for consideration of forbidden materials and those materials identified with the plus (+) symbol when determining a hazard class for a material that no longer meets the defining criteria for the class shown for the material in the Table. For example, Xylene is identified with the letter E and is classed as a Flammable liquid. However, in certain mixtures, the flash point could be raised to between 100° and 200° F. and, if shipped in a cargo tank or tank car, could equal or exceed Xylene's 1,000 pound reportable quantity. In this case, it would meet the definition of a hazardous substance in § 171.8 and its proper shipping name would be Combustible liquid, n.o.s. It may not be shipped as Xylene under the paragraph (c)(11) rule because its hazard class has changed.

It is important to note that although a hazardous substance may be reclassed according to its hazard(s), if it does not meet the definition of any other hazard (and since by definition it is a reportable quantity), it must be reclassed as an ORM–E.

Paragraph (d) is revised as proposed in Docket HM–159 to clarify the intent of the term "Forbidden" as it appears in column 3 of the Table. The prohibition as "Forbidden" does not apply if the materials are diluted, stabilized or incorporated in devices and are classed in accordance with the definitions of hazardous materials contained in Part 173.

New paragraph (e) describes the addition of column 3(a) containing the identification numbers as proposed in Docket HM–126A. Present paragraphs (f), (g), (h), and (i) were formerly paragraphs (e), (f), (g), and (h) and contain no revisions.

MTB added paragraph (j) to establish a general grandfather provision for shipping paper entries and package markings for materials packaged before the effective date of an amendment to the Table that changes a proper shipping name or hazard class of a material in the Table.

Except for hazardous wastes and hazardous substances, if the proper shipping names or hazard classes of materials are changed by this rule, such changes are not manditory prior to July 1, 1981, as stated in paragraph (k) of this section.

Hazardous Materials Table: The Hazardous Materials Table is amended to identify potentially environmentally hazardous materials through the use of the letter "E." These letter "E" materials include hazardous substances designated by the EPA under 40 CFR Part 117 and not presently subject to the

DOT regulations (classed as OMR–E), as well as presently regulated hazardous materials that have been designated by the EPA as hazardous substances. These latter materials are in two major categories. One is materials that are now listed by name in § 172.101, and the other is materials not now identified by name but which are now regulated under the n.o.s. listings in § 172.101. A total of 368 entries in the Hazardous Materials Table are identified as potentially hazardous substances. A total of 369 had been proposed, but EPA dropped Calcium oxide and Calcium hydroxide from their hazardous substance list and MTB did likewise. MTB added Aluminum sulfate, solid, to the ORM–E list. Aluminum sulfate, solution, remains as an ORM–B. Guthion is changed to a "see" entry referenced to the entry Azinphos methyl because Guthion is a registered trade name.

Fourteen potential hazardous substances are identified as ORM–A. This is based on the chemical, physical and other comparable properties of the compounds. The properties of these compounds are such that each compound can cause extreme annoyance or discomfort to passengers and crew in the event of leakage during transportation. Based on data provided by commenters, Xylenol was transferred from the ORM–E list to the ORM–A list and the following five ORM–A's were transferred to the ORM–E list:

2,4-Dichlorophenoxyacetic acid ester
2,4,5-Trichlorophenoxyacetic acid amine
2,4,5-Trichlorophenoxyacetic acid ester
2,4,5-Trichlorophenoxyacetic acid salt
2,4,5-Trichlorophenoxypropionic acid ester

Ninety-nine materials are classed as ORM–E. This is based on the EPA designation of certain materials as hazardous substances on March 13, 1978 (42 FR 10494), and the fact that according to MTB's evaluation they do not meet the defining criteria of any other hazard class. In addition to the five materials transferred from ORM–A to ORM–E as discussed above, Aluminum sulfate, solid, was added to the ORM–E's and Heptachlor and Vanadium pentoxide were reclassed from Poison B to ORM–E based on data provided by commenters. Also, the following changes in class assignments were made by MTB based on data submitted by commenters: Xylenol was reclassed from an ORM–E to ORM–A; Dodecylbenzenesulfonic acid was reclassed from an ORM–E to a Corrosive material; Ethylenediamine was reclassed from a Flammable liquid to a Corrosive material; and Sodium hydrosulfide, solid, was reclassed from a Flammable solid to a Corrosive material.

Although there appears to be a discrepancy between the number of newly identified materials in this proposal and the number of materials in the EPA list of hazardous substances, the materials in this proposal are those covered in the EPA list. The difference in the number of materials results from the necessity of identifying in § 172.101 the different forms, mixtures or solutions of a material for proper regulation. For example, "Aldrin" appears once in the EPA list and six times in § 172.101. Two materials, Calcium oxide and Calcium hydroxide, were dropped from the hazardous substance list by EPA. Therefore, neither is identified in the Table as a potentially hazardous substance; however, Calcium oxide remains as an ORM–B as it was before the EPA hazardous substance list was developed.

In addition to the changes to the Table to accommodate the potential hazardous substances, MTB made changes to improve packaging or to more accurately describe a hazardous material based on data provided by commenters. One commenter was concerned that MTB did not include a generic description for a flammable liquid that is also toxic. Dual hazards presented by some materials were addressed subsequently in HM–126B. Among others, the proper shipping name Flammable liquid, poisonous, n.o.s. with identification number UN 1992 was proposed. With this addition to the Table, both toxic and non-toxic flammable liquids are now covered by generic descriptions.

The discrepancy between identification numbers for Uranium Hexafluoride, fissile and Uranium Hexafluoride, low specific activity appearing in proposed HM–126A (NA9173 and NA9174, respectively) and the draft Emergency Response Guidebook (UN2926 and UN2927, respectively) has been corrected. The correct identification numbers are NA9173 and NA9174.

One commenter petitioned that morpholine, a flammable liquid, should be added by name to the Table. Morpholine appears by name in the UN Recommendations on the Transport of Dangerous Goods (UN2054), but not in the DOT Regulations. Since Morpholine is not in the Table by name, it must presently be described as Flammable liquid, n.o.s. MTB agrees and is adding the proper shipping name Morpholine to the Table, classed as Flammable liquid and assigned identification number UN2054.

One commenter was concerned that Pine oil was assigned identification number UN1272. Pine oil is listed by name in the Table and classed as a Combustible liquid. The UN Recommendations on the Transport of Dangerous Goods also lists Pine oil by name but classes this material as Flammable liquid. Since the upper flash point limit for the UN flammable liquid hazard class overlaps with the lower flash point limit for DOT's combustible liquid hazard class, and the emergency response for most flammable liquids and combustible liquids is identical, MTB believes that the appropriate identification number for Pine oil is UN1272.

One commenter suggested that the wrong identification number had been assigned to several proper shipping names and that the "UN" or "NA" prefix assigned to some identification numbers was wrong. The commenter submitted recommendations to correct these errors. Upon review, MTB has changed certain identification numbers and prefixes.

Another commenter stated that Hydrofluoric acid, anhydrous (UN1052) and Hydrogen fluoride (NA1790) are the same material and should be assigned the same identification number. MTB agrees with the commenter that UN 1052 is the correct identification number for both materials and has changed the Table accordingly.

Another commenter was concerned that the prefixes in the identification numbers assigned to certain cross referenced proper shipping names do not agree. For example, identification number NA1133 was assigned to Cement, liquid, n.o.s. but identification number UN1133 was assigned to Adhesive, n.o.s. which is cross referenced to Cement, liquid, n.o.s. In order to resolve the difficulty of assigning identification numbers to cross referenced proper shipping names, MTB is deleting identification numbers from certain proper shipping names that are cross referenced to another shipping description. This does not apply to organic peroxides because both entries are pertinent.

Various commenters reported that the Table has been affected by other final rules that have been published recently. MTB is well aware of this and has made necessary changes in the Table to keep it up to date.

Several commenters reported that certain potentially hazardous substances were classed incorrectly and submitted data to support their position. Additionally, these and other commenters stated that requirements and/or limitations for certain of these

materials were wrong or inconsistent with those for materials having similar properties. Based on the comments and MTB's evaluation, changes that affect hazard class, packaging, quantity in one package, etc., have been made.

At the request of a commenter, the proper shipping name Metal alkyl solution, n.o.s., classed as Flammable liquid, has been added to the Table. Addition of this entry, provides a better description for nonpyrophoric solutions of metal alkyls in flammable solvents than Flammable liquid, n.o.s. which is currently used. Also, the commenter stated that the emergency response for an accident involving metal alkyls in flammable solvents differs somewhat from that for a flammable liquid. Technical adjustments have been made to the descriptions for formaldehyde so the proper shipping name correctly describes the material as Formaldehyde solution. The hazard class depends on the size of the packaging, and the identification number assigned depends on the flash point of the formaldehyde solution. An alternate shipping name is Formalin, not Formalin solution. The section for specific packaging requirements for Nicotine, liquid referenced in the Table has been changed from § 173.358 to relect the correct reference, § 173.346.

MTB added Gasohol to the Table to reflect the increasing use of the gasoline-ethyl alcohol mixtures as a vehicle fuel and to permit an emergency response reference for it.

MTB has revised the entry for Aluminum sulfate, based on commenter recommendation, to include both the solid form and solutions. Aluminum sulfate, solid is classed as ORM–E, whereas Aluminum sulfate solution is classed as ORM–B.

One commenter expressed concern that Zinc phosphide had been incorrectly classed as a Flammable solid. Data submitted by the commenter indicated that Zinc phosphide meets the definition of a Poison B material and, although Zinc phosphide reacts with water, its reaction rate is so slow that liberated gases are dissipated before a hazard develops. MTB agrees and has reclassed Zinc phosphide as a Poison B.

One commenter took exception to the classification of Heptachlor as Poison B. Data he submitted included oral toxicity for analytical reference standard grade (99.8%) and technical grade (74%) heptachlor, and inhalation and skin absorption toxicity for technical grade heptachlor. Also, skin corrosion data was submitted. MTB agrees with the commenter that the data does not support classification of heptachlor as a poison B or corrosive material. Hence, Heptachlor has been reclassed as ORM–E.

One commenter pointed out that Dichlorvos is a Poison B liquid. However, the applicable sections for packaging referenced in column 5 of the Table (i.e., § 173.364 and § 173.365) are for a Poison B solid. The packaging references for Dichlorvos, therefore, are corrected to § 173.345 and §173.346, respectively.

Two commenters stated that they ship Dodecylbenzenesulfonic acid as a corrosive liquid. The properties are similar to an alkanesulfonic acid, which is listed by name in the Table and classed as a corrosive material. MTB agrees with these commenters and has reclassed Dodecylbenzenesulfonic acid as Corrosive material from ORM–E based on the data provided.

One commenter from a company that manufactures agricultural chemicals objected to the inclusion of Guthion as a proper shipping name. Guthion is the trade name for one of the company's registered pesticides. The commenter stated that azinphos methyl is the common name and should be the proper shipping name. As a compromise, MTB has added Azinphos methyl as an alternate name for Guthion.

A commenter stated that Zinc hydrosulfite does not meet the definition for a Flammable solid and that the material is not hazardous in transportation. The UN Recommendations on the Transport of Dangerous Goods lists Zinc hydrosulfite in Class 9—Miscellaneous dangerous goods. Goods listed in this class are not considered to be dangerous when transported by rail or motor vehicle. Thus, MTB has reclassed Zinc hydrosulfide as an ORM–A.

One commenter stated that Vanadium pentoxide had been improperly proposed to be classed as Poison B. Data he submitted indicate that the oral toxicity (LD_{50}) of Vanadium pentoxide is greater than 50 mg/kg. MTB review supports this conclusion, therefore, Vanadium pentoxide has been reclassed as an ORM–E.

Sodium hydrosulfide, solid, is reclassed as a Corrosive material. MTB had classed this material as a Flammable solid in the proposal based on information obtained from the United Nations Recommendations on the Transport of Dangerous Goods. However, data submitted by a commenter was sufficient for MTB to conclude that Sodium hydrosulfide, solid, is not a Flammable solid but is corrosive to skin.

Several commenters stated that pesticides identified and described by chemical groups based on their chemical structures provide sufficient information to specify appropriate action to be taken in event of an accident involving spillage or leakage. The 45 new descriptions for 15 pesticide groups identify the type of pesticide and enable first aid and medical advice to be linked to these pesticides. MTB agrees with the commenters that the n.o.s. modifier should be deleted from these descriptions. Coupled with other action taken in this rulemaking, this eliminates the proposed requirement to provide the technical name of the pesticide when a proper shipping name includes the chemical element or group. MTB now estimates that these descriptions cover at least 95 percent of the pesticides transported. Pesticides not described by technical names or family groups in the Table can be described by general or generic descriptions such as Insecticide, liquid, n.o.s.; Compound, tree *or* weed killing, liquid; Flammable liquid, poisonous, n.o.s. The use of a generic name or general description to describe a pesticide requires that the technical name of the pesticide be included as part of the shipping description. These commenters argued that the Table already contains descriptions for organic phosphates and the addition of three new descriptions for organophosphorus pesticides is not necessary. MTB believes that these new descriptions provide vital information on both the chemical structure and end use of the material. Many organophosphorus materials in commerce are not pesticides. Thus, the new organophosphorus pesticide descriptions do not apply to these materials. However, the descriptions for organic phosphates may apply.

A pesticide in the 15 chemical groups that does not meet the defining criteria for a flammable liquid and/or poison, may meet the definition of another hazard class and have to be described by a shipping name appropriate to that class. For example, an organotin pesticide in a liquid formulation that does not meet the definition of a flammable liquid or poison, may be a corrosive liquid. In this case, the proper shipping name for that organotin pesticide would be Corrosive liquid, n.o.s.

Nitrogen trifluoride was proposed to be listed in the Table as Forbidden in the notice to Docket HM–126B. MTB has made the necessary corrections based on commenter suggestions. Nitrogen trifluoride is classed as Nonflammable gas with identification number UN2451.

Two commenters objected to the proposed addition of Pinene to the Table

classed as Flammable liquid without an asterisk in column 1, since an asterisk denotes that a material may or may not be regulated under the class shown depending on whether or not the commodity meets the definition of the class listed for that entry. One commenter stated that tests conducted indicate that pinene has a closed cup flash point range between 99° and 100° F. With a flash point below 100° F., a material meets the definition of a Flammable liquid. With a flash point at or above 100° F. and below 200° F., a material meets the definition of a Combustible liquid. According to MTB data, pinene has two isomers. Alpha-pinene has a flash point of 91° F. Beta-pinene has a flash point of 117° F. The flash point of pinene containing an isomeric mixture falls between 91° and 177° F. and depends on the percentage of each isomer present. Since this rulemaking deletes all asterisks from the Table, pinene, when classed as a Flammable liquid, would be described as Pinene. When classed as a Combustible liquid, pinene would be described as Combustible liquid, n.o.s.

A commenter pointed out that "Alcoholic beverages", classed as Flammable liquid, in containers having a rated capacity of one gallon or less, are not subject to the hazardous materials regulations per § 173.118(c). Thus, the proposed one quart net quantity per package limitation for passenger carrying aircraft is wrong. MTB agrees and column 6(a) in the Table has been changed to read "See § 173.118(c)." This commenter also pointed out that the correct identification number is UN1170 and not NA1987.

Since the proper shipping name Engine, internal combustion has been proposed, one commenter recommended that Motor, internal combustion be deleted from the Table stating: "The motor receives its power from an outside source. The engine develops power internally." MTB does not dispute the commenter's argument, however, the description has been retained. The terms "motor" and "engine" have become synonymous in the automobile industry. MTB seriously doubts that motor companies in this industry would consider changing their names to engine companies.

A commenter objected to the proposed requirement to label hydrogen peroxide solutions (up to and including 52% peroxide) with a corrosive label to identify the secondary hazard. This commenter stated that "the non-corrosiveness for less than 52% is an industry fact." Based on the data presented, MTB has deleted the requirement for a CORROSIVE label on hydrogen peroxide solutions containing not more than 52% peroxide.

Comments were received concerning the new entry and requirements for Calcium hypochlorite, hydrated. The description has been revised to include in italicized print "(minimum 5.5% but not more than 10% water, and more than 39% available chlorine)". The material is a potential hazardous substance and has been so designated by an "E" in column 1 of the Table. The associated RQ is 100/45.4. Specific packaging requirements are referenced to § 173.217. This section contains packaging requirements for similar type compounds. The statement "keep cool and dry" has been added in column 7(c) of § 172.101.

Stowage requirements have been changed to authorize both "on deck" and "below deck" locations on board cargo vessels and passenger vessels for certain potential hazardous substances. The proposed regulation in Docket HM-145B authorized only "below deck" locations which were unduly restrictive.

EPA has changed the reportable quantity (RQ) for Calcium hypochlorite from RQ-10/4.54 to RQ-100/45/4. This change has been incorporated into the entry for Calcium hypochlorite mixture in the Table.

Several hazardous materials that contain one or more potential hazardous substances were not properly identified in the HM-145 proposal. The materials are identified now by an "E" in column 1. The RQ assigned to these materials is based on the RQ of the potential hazardous substance. If two or more potential hazardous substances are present, the lower/lowest RQ value is listed. For example, Nitrating acid (RQ-1000/454) is a mixture containing Nitric acid (RQ-1000/454) and Sulfuric acid (RQ-5000/2270). The other materials in this category that are identified in the Table as potential hazardous substances are Chlorosulfonic acid-sulfur trioxide mixture (RQ-1000/454); Hypochlorite solution (RQ-100/45.4); Methyl bromide and ethylene dibromide mixture, liquid (RQ-1000/454); Nitrating acid (RQ-1000/454); Nitrating acid, spent (RQ-1000/454); Nitrohydrochloric acid (RQ-1000/454); Nitrohydrochloric acid, spent (1000/454); Sodium nitrite mixed with potassium nitrate (RQ-100/45.4); Soduim nitrite mixture (RQ-100/454), and White acid (RQ-5000/2270).

Section 172.102. A new §172.102 is added as proposed in Docket HM-171. This section contains the Optional Table as well as the text necessary to explain the table and implement its use.

Paragraph (a) of this section sets forth the basic purpose of the Optional Table which provides hazardous materials descriptions, classification, labeling and vessel stowage requirements which may be used for certain hazardous materials as an alternative to the corresponding requirements provided in § 172.101. However, materials subject to the DOT regulations that are not considered dangerous under IMCO recommendations must be transported in accordance with the applicable DOT regulations. This exclusion has been included to insure that it is clearly understood that materials such as a combustible liquid with a flash point greater than 141° F. and less than 200° F. (in packagings with a capacity exceeding 110 gallons), which are not considered dangerous according to IMCO definitions are subject to all applicable DOT requirements.

A statement is also included in this paragraph to clarify the fact that many of the materials shown in the Optional Table are not subject to the DOT regulations and that their inclusion in the Optional Table does not constitute a designation of the material as a hazardous material. Only materials (1) designated as hazardous materials in § 172.101, including hazardous wastes and hazardous substances; (2) identified as forbidden in § 172.101; or (3) covered by the prohibition specified in § 173.21 or § 173.51, are subject to the DOT regulations. Entries for materials not designated as hazardous in § 172.101 are retained in the Optional Table to alert persons who may be engaged in importing or exporting such materials that the materials may be considered hazardous under widely applied international standards and to provide basic guidance relative to the classification and labeling of these materials in international transport.

One commenter suggested that proposed § 172.102 should be amended to recognize the fact that materials not regulated by DOT may be described on shipping papers by the IMCO proper shipping name and hazard class, and the package marked and labeled as provided in IMCO. MTB believes this change is unnecessary. Section 172.401, concerning prohibited labeling, specifically authorizes labels prescribed by IMCO to be applied to packages even though the material may not be considered hazardous under the DOT regulations. Regarding shipping paper descriptions and package markings, the DOT regulations do not prohibit description and marking as prescribed by IMCO in the case of materials not regulated by DOT. It is, however, suggested that in such cases the shipping papers bear a notation

indicating that the particular material is not subject to regulation under the DOT Hazardous Materials Regulations. The same commenter suggested that the proposed § 172.102 be revised to include a specific authorization to allow IMCO placards to be affixed to portable tanks and freight containers in addition to any placards required by the DOT regulations. MTB believes this comment has merit and it will be addressed in a future rulemaking.

Paragraph (b) of § 172.102 specifies conditions under which the description, class or label(s) provided in the Optional Table may be used rather than the DOT description, class or label(s), respectively. Class A and B explosives and radioactive materials are excluded from application of the provisions of § 172.102. Therefore, in order for a shipper to determine if he may use the Optional Table he must first establish the hazard class of the hazardous material under consideration in accordance with all applicable requirements of the DOT regulations. This is particularly important in the case of explosives where the hazard class may not necessarily be established solely by the shipper. Once the shipper has classed the hazardous material as provided in the DOT regulations, has determined that the material is not a Class A or B explosive or a radioactive material, and is not a forbidden material, he may then proceed to use the Optional Hazardous Materials Table if he so desires.

One commenter suggested that a symbol be introduced in Column (1) of the Optional Table to indicate to a shipper that a particular material listed is not subject to the DOT Hazardous Materials Regulations. Another commenter suggested that a symbol be introduced in Column (1) to indicate to a shipper that a particular material is considered a hazardous substance under the Hazardous Materials Regulations. MTB believes that neither of these amendments is necessary and that adoption of these amendments could result in improper use of the Optional Table. As stated in § 172.102(a), designations of materials as hazardous materials are made only in § 172.101. Therefore, it is always necessary to determine whether a material is regulated, and, if regulated, the appropriate description and class for the material provided in § 172.101, before using the Optional Table.

Several commenters suggested future inclusion of Explosives A and B entries in the Optional Table. Although MTB is not prepared to recognize IMCO description, classification, and labeling provisions for these materials for transportation in the United States at this time, this information has been included in § 172.102 with the letter "N" indicated in Column (1) adjacent to each entry.

The conditions in the existing § 171.12(b) under which the IMCO class and label(s) may be used when a hazardous material is transported by air, highway, or rail have been retained in § 172.202, with the exception of the condition that limited the application of that paragraph to import, export or transiting shipments. The IMCO shipping name may be used only when the material conforms to all additional defining or limiting conditions prescribed for the description in the appropriate schedule in the IMCO Code. Individual IMCO Code schedules often contain criteria or additional information which limit the applicability of a particular description, and MTB believes that these additional provisions must be observed in selecting an IMCO shipping description from § 172.102. The use of an IMCO shipping name is also made conditional upon inclusion of the UN number shown for the entry (if any) in the Optional Table immediately after the required class entry in the shipping papers. This is required not only to insure consistency with the United Nations standards for transport documentation, but also to enhance emergency response capabilities.

Paragraph (e) of § 172.102 requires that the description for a material designated as a potential hazardous substance in § 172.101 and offered for transportation as a hazardous substance (i.e., a reportable quantity in a single package) must be augmented by the technical name of the substance if that name does not appear in the optional shipping description. This is to insure that hazardous substances do not lose their basic identity when a shipper chooses to use a shipping description from the Optional Table in place of the name that would be otherwise required by § 172.101.

One request for clarification of the intent of paragraph (e) was received. The provisions of this paragraph would only apply to a material that is transported as a hazardous substance under § 172.101, but is offered for transportation under a description in the Optional Table. Materials designated as potential hazardous substances are identified by the letter "E" in Column (1) of the Hazardous Materials Table in § 172.101.

One commenter proposed that entries be inserted in the Optional Table in connection with IMCO's provisions for limited quantity shipments. MTB considers the addition of these entries inappropriate in that they are not considered proper shipping names under the IMCO Code.

Paragraphs (f) through (l) explain the content of Columns 1 through 7, respectively, of the Optional Table. Column 1 contains the letter "N" adjacent to certain entries. This indicates, as explained in paragraph (f), that the particular shipping description, class and label(s) shown in § 172.102 are not acceptable alternatives to the applicable DOT requirements in § 172.101 and, therefore, may not be used. This prohibition is imposed only when MTB believes the IMCO description and/or classification appearing in § 172.102 will not adequately communicate the hazard(s) of the material in all modes of transport.

Column 2 of the Optional Table lists the proper shipping names contained in the IMCO Code. The basic format of entries and methods of selection and presentation of proper shipping names on shipping documents and packages are identical to those in § 172.101. As previously discussed, entries that are contained in the IMCO Code which describe materials that could only be classified as Class A or B explosives or Radioactive materials under DOT regulations are proceeded by the letter "N." Also omitted from the Optional Table are a limited number of entries from the IMCO Code which:

(1) Are not included in the UN Recommendations and have no UN number assigned;

(2) Are not "n.o.s." entries that require addition of the technical name of the hazardous material; and,

(3) In the opinion of MTB, are not sufficiently explicit to permit appropriate response measures to be initiated in the event of an incident.

Examples of such entries are the IMCO shipping names "Acaricides" and "Nematocides." Hazardous materials falling within such descriptions will, therefore, be transported under the next most appropriate description in § 172.102 (such as Poisonous liquid, n.o.s., in the case of the above examples), or under the appropriate description in § 172.101.

Column 3 of the Optional Table sets forth the IMCO hazard class or division for the material as appropriate. Paragraph (h) of § 172.102 includes a brief definition of each of the IMCO hazard classes and divisions and refers the user to the IMCO Code for more detailed definitions.

A comment was received which proposed that a table be included in this section providing the name of the DOT class which most closely corresponds to

each IMCO class or division. MTB believes this information would be helpful and, rather than include this information in tabular format, has revised the proposed paragraph (f) of § 172.102, which is now paragraph (h), to include the name of the DOT class(es) most closely corresponding to each IMCO class or division in parentheses following the name of that class or division. MTB believes that this addition should satisfy the concerns of another commenter who proposed that a column be added to the Optional Table to provide this information for each entry.

Column 4 of the Table indicates the United Nations number assigned to the material, if any. In certain cases where no UN number has been assigned to a particular material, MTB has inserted in Column 4 the UN number of the appropriate generic, or "n.o.s.," entry under which the material would be included. In such cases, the UN number listed has been shown in parentheses and is the required identification number if the optional description is used.

Column 5 specifies the labels to be applied to a package containing the hazardous material. Specifications for the labels may be either as provided in the DOT regulations or in the IMCO Code. The label described as "St. Andrew's Cross" in this column refers to the label specified for Division 6.1, Packaging Group III materials in the UN and IMCO recommendations.

Column 6, which is for informational purposes only, provides the packaging group assigned to the material in the IMCO Code. An explanation of the meaning and purpose of this grouping system, as well as the grouping criteria developed for certain hazard classes, is presented in the recommendations prepared by the United Nations Committee of Experts on the Transport of Dangerous Goods. These recommendations, entitled "Transport of Dangerous Goods," may be obtained from the United Nations bookstores in New York or Geneva, Switzerland. MTB believes that a number of individuals involved in the international transportation of hazardous materials have gained sufficient working knowledge of the grouping system to merit the inclusion of packaging groups in the Optional Table.

A number of comments were received which concerned the implications of these amendments relative to packaging. As indicated in the Notice of Proposed Rulemaking, these amendments do not in any way affect the packaging currently required for hazardous materials under the DOT regulations and the Packaging Group column was included primarily for informational purposes. It should be noted, however, that the packaging group of a material is necessary information under IMCO labeling recommendations in determining the appropriate label to be applied to materials of Division 6.1. For this reason, the packaging group column in the optional list has been retained notwithstanding one comment which suggested deletion of the column. One commenter proposed that this column be expanded to include the IMCO Code page number for the particular material to provide further packaging guidance. This proposal was not adopted since, as previously indicated, this portion of the rules is not intended to address specific packaging provisions, and because there is a possibility that the four digit IMCO Code page number could be confused with the identification number. Several commenters expressed the opinon that MTB should explore means of addressing differences between IMCO and DOT packaging requirements. This comment is not within the scope of this rulemaking and will have to be addressed in a future rulemaking.

Column 7 sets forth the vessel stowage requirements for the hazardous materials as provided in the IMCO Code. Although § 172.101 was revised with the publication of Docket HM–103/112 to inlcude IMCO stowage requirements to the maximum extent possible, the differences between shipping descriptions for certain hazardous materials in the DOT regulations and the IMCO Code made it impossible to include the IMCO stowage requirements for all hazardous materials. MTB believes that consistency between the DOT and IMCO stowage requirements is necessary to insure that vessels loaded in United States ports will not be in violation of the stowage requirements in force in those nations that have incorporated the IMCO Code into their national regulations, and so that vessels of those nations will not be in violation of U.S. requirements. Inclusion of the majority of the IMCO shipping descriptions in the Optional Table will make it possible to authorize the use of IMCO stowage when hazardous materials are transported under an appropriate IMCO description. The meanings of numbers used to designate acceptable stowage locations are explained in paragraph (k). The numbers used in § 172.102 retain the same meaning assigned to them in § 172.101; however, the explanations of the meanings of these numbers have been revised in an effort to provide greater clarity.

One commenter suggested that the maximum transport temperature specified for organic peroxides in Column 7(c) of the Optional Table should be replaced with the appropriate emergency and control temperatures recently adopted by the UN. In order to maintain consistency with existing IMCO vessel stowage requirements, these revisions have not been made. It is envisioned that these changes will be made to § 172.102 when IMCO adopts amendments to the Code to replace maximum transport temperature with control temperature and emergency temperature.

Several requests were received to include various hazardous materials in the Optional Table which have been assigned UN numbers but have not yet been included by IMCO in the Code. MTB believes it would be premature to include such entries in the Optional Table at this time since they are not yet authorized by IMCO for use in international transportation. It is anticipated that many of these entries will be adopted by IMCO in the near future and that, thereupon, the entries will be added to the Optional Table.

A number of commenters took issue with the classification or labeling provided for certain materials in the IMCO Code and requested either that the Optional Table be modified or that appropriate amendment proposals be submitted to the UN or IMCO. No such changes have been incorporated in the Optional Table since this would result in inconsistencies with IMCO recommendations. MTB believes such action would be contrary to the intent of this rulemaking. However, the issues raised by these commenters will be considered and amendment proposals may be submitted to the UN or IMCO, if appropriate.

A number of modifications have been made to the Optional Table. Through a careful editorial review and as a result of several comments received, errors in a number of entries were identified. These errors have been corrected to insure that entries in the Optional Table are consistent with the corresponding entry in the IMCO Code. In addition, IMCO Code Amendment 16–78, which became effective March 1, 1980, has been incorporated into the Optional Table to assure that it reflects the latest IMCO Code provisions. MTB envisions that the Optional Table will be amended upon publication of each IMCO Code amendment so that it will always contain the most up-to-date information.

One commenter suggested that the stowage locations specified for Alkaline corrosive liquids, n.o.s.; Corrosive liquids, n.o.s.; and Corrosive solids,

n.o.s. be revised to agree with those provided for the same entries in § 172.101. Since the IMCO Code allows stowage of these materials as specified by the competent authority, MTB agrees that the proposed change is entirely appropriate and has revised the stowage location designations accordingly.

An objection was raised to the identification numbers indicated for the entries Sodium fluoride, solution and Silicofluorides, solid, n.o.s. on the basis that neither the IMCO Code nor the UN Recommendations specifies an identification number for those entries. Numbers for these materials were, however, adopted by the UN Committee at its Tenth Session (December 1978) and will appear in the next edition of the UN Recommendations. The numbers contained in the proposal have, therefore, been retained. The same commenter suggested that the letter "N" be inserted before the entry "Hydrazine, anhydrous and solutions containing less than 36% water by weight" because the class and labels provided for these hydrazine solutions in the Optional Table disagree with the DOT class and labels for these materials and because he considered the DOT classification to be adequate. MTB believes that use of the IMCO class and labels for these solutions will not result in a derogation of safety in transportation. The insertion of the letter "N" before entries solely because the class and label(s) under IMCO may be different from those provided in § 172.101 is contrary to the purpose and intent of adopting the Optional Table. The suggestion has, therefore, not been incorporated into the Optional Table.

A number of requests were received to add certain shipping descriptions to the Optional Table which appear as proper shipping names in § 172.101 and are also acceptable alternate descriptions for the materials in the IMCO Code. Such descriptions have been included in Roman type in the Optional Table with a cross reference to the entry which appears as the primary description for the material in the IMCO Code. Other comments requested the addition to the Optional Table of certain shipping descriptions which appear in § 172.101 but not in the IMCO Code. MTB does not consider it appropriate to add such entries because they are not recognized by IMCO for international shipments.

One commenter noted several discrepancies between the entries for "Fishmeal" or "Fishscrap" in the Optional Table and those in the IMCO Code. The entries in the Optional Table have been revised to agree with those in the IMCO Code.

Section 172.200. Section 172.200(b) is revised as proposed in Dockets HM–145A and HM–145B, to remove the ORM exceptions to the shipping paper requirements when a material being offered or transported is a hazardous waste or a hazardous substance. The wording of the proposal has been simplified in the final rule, without changed effect. The proposed entry for ORM–E materials has been deleted since the exception proposed in the Notice is unnecessary under the final rules.

Section 172.201. Paragraphs (a)(1)(ii), (a)(1)(iii), and (a)(4)(i) of § 172.201 are revised by MTB to accommodate the revision to § 172.202(a)(3) which requires the identification number preceded by "UN" or "NA", as appropriate, to be entered as the third element of the basic description, as proposed in Docket HM–126A. Also, MTB added a provision to paragraph (a)(1)(iii) to authorize the entry of "RQ" in the "HM" column in place of the "X" to identify the entry as representing a hazardous substance. This was recommended by several commenters, and MTB concurs. As proposed in Docket HM–171, paragraph (a)(4)(i) is amended to allow the optional insertion of the entries "IMCO" or "IMCO Class" in the hazardous materials description on the shipping papers. MTB believes that certain shippers may desire to include these entries to clarify the fact that a hazardous material is being offered under the IMCO hazard class, particularly when this hazard class differs from that provided for the material in § 172.101. A proposal that the entry "IMCO" be allowed to appear immediately before the proper shipping name has not been adopted since it is MTB's belief that the proper shipping name should appear first in the basic hazardous materials description.

Section 172.202. Paragraphs (a)(1) and (a)(2) are revised by MTB to clarify the fact that the entries in § 172.102 are optional. Also, paragraph (a)(2) is revised to reduce some of the shipping paper entries. Whenever entries from the Optional Table are used for domestic shipments, § 171.102 applies. A number of commenters expressed concern that the proposal would allow unrestricted mixing of DOT and IMCO shipping descriptions, classification and labeling which could result in confusion and suggested that this paragraph be amended to prevent such unrestricted mixing. MTB agrees with these comments and has amended § 172.202 to require that the proper shipping name, class and identification number for a material appearing on the shipping paper must be taken either entirely from § 172.101 or entirely from § 172.102, and has amended § 172.400 to insure that the package labeling is consistent with the proper shipping name market on the package.

Various methods were suggested by commenters for insuring that some indication is included in the shipping paper description when an entry from § 172.102 is being utilized. MTB believes that such an indication is already provided, since the class of a material is always expressed numerically in Column (3) of the Optional Table and, therefore, would have to be indicated in the same manner on the shipping papers. This means that a numerical indication of the class on the shipping papers will serve as a direct indication that the entry under which the material is offered is taken from § 172.102.

Paragraph (b) is revised for clarity and to provide an example since the rule change to paragraph (a)(2)(ii) made the previous example, Corrosive liquid, n.o.s., incorrect. It should be noted, as paragraph (b) now indicates, that the basic description now consists of three elements: the proper shipping name, the hazard class, and the identification number. However, technical names may be required to be entered after the proper shipping name. These requirements were proposed in Dockets HM–126A and HM–145B.

Some shipping paper entries are required to be made "in association with" the basic description. The term "in association with" means that the additional entry may follow the complete description for a hazardous material in any reasonable format, as long as it is clearly part of the entry.

The requirement to enter the basic description in a prescribed sequence, with certain exceptions specified, does not preclude the use of a shipping paper format with columns. However, the basic description sequence must be maintained, with authorized exceptions.

Paragraph (b) is revised to show the addition of the identification number to the basic description.

One commenter suggested that a provision be added which would require the indication of flashpoint on shipping papers in order to assist water carriers in planning vessel stowage. MTB believes that, in general, the indication of the appropriate IMCO division number for flammable liquids sufficiently specifies flashpoint for stowage purposes, and that the relatively few instances where the stowage of hazardous materials of other classes is dependent on flashpoint

would not justify a requirement to show flashpoint in all cases. However, as authorized by § 172.201(a)(4), such an entry may be added after the basic description.

Section 172.203. The deletion of paragraph (i)(2), the redesignation of paragraph (i)(3) as (i)(2), and the addition of paragraphs (j), (k), and (l) were proposed in HM–126B. However, paragraph (i)(2) has been revised and not deleted. General shipping paper requirements for hazardous substances are consolidated in paragraph (c). Paragraph (e) is revised to include required hazardous substance shipping papers entries for "empty" packagings. MTB revised paragraph (d)(1)(ii) to authorize the entry of a generic chemical description for the chemical form of a Radioactive material. This provision was not proposed, but is included by MTB as part of this final rulemaking. It is a relaxation of present rules.

Paragraph (i)(2) is revised to provide for the identification of at least two hazardous components of certain mixtures and solutions for shipping paper entries for export shipments by vessel. Based on a considerable number of comments, the general requirement for such an identification of components for all n.o.s. entries as was proposed in § 172.203(j) of Docket HM–126B has been deleted. Paragraph (i)(2) also contains two significant exceptions from the two component requirement: First, for an n.o.s. material, other than a mixture that meets the definition of more than one hazard class, if the description identifies the name of the chemical element or group that is primarily responsible for the material being classed as it is, no additional component needs to be identified. Second, for an n.o.s. material which is a mixture of materials of different hazard classes and meets the definition of more than one hazard class, if the description contains the name of the chemical element or group responsible for one of the hazard classes, only the technical name of the components(s) not identified must be entered in parentheses.

Paragraph (j) is added to require the "Dangerous When Wet" entry on shipping papers for material labeled "DANGEROUS WHEN WET." In Docket HM–126B, it was proposed that "Water Reactive" be entered on the shipping paper, but commenters pointed out that the hazard should be identified, and MTB agrees.

Several commenters stated that a blanket requirement for entering the technical name for all n.o.s. entries, as was proposed in § 172.203(j) of Docket HM–126B, would contribute little to safety and yet be a fairly costly requirement. MTB agrees and as a final rule in paragraph (k) of § 172.203 the requirement has been limited to materials that are poisonous, but are not identified as such by their basic description. The compliance date for the identification of poisons on the shipping paper is July 1, 1981, but such entries may be made voluntarily after July 1, 1980.

It was proposed in Docket HM–145A to require the EPA name for the waste to be included in parentheses whenever the DOT shipping name did not include the technical name of the material. Since publication of that Notice, EPA has decided to use DOT shipping nomenclature. Consequently, there are no additional EPA names and this provision has been eliminated from the final rule.

Section 172.204. Paragraph (b)(1) is revised to exclude hazardous waste from the exceptions from certification. This revision is necessary for consistency with EPA's requirement for certification of hazardous waste shipments. This provision was overlooked in DOT's May 25, 1978, Notice and has been added to the final rule. Based on a petition, MTB is authorizing a permissive revision to the certification so it will read "This is to certify that the herein-named materials. . . ." This will permit a shipper to place the certification beside or above the hazardous materials entries if desired. This authorization is contained in a new note following the certification. The previous note was deleted by MTB because it was no longer pertinent.

Section 172.205. A new § 172.205 is added as proposed in Docket HM–145A concerning the carriage and disposition of hazardous waste manifests which are required by EPA in 40 CFR Part 262. It is important to note that no hazardous waste subject to the manifest requirement may be offered, transported, transferred or delivered without a manifest with signatures and dates for receipt of the waste. The wording in this section of the final rule differs from that proposed in the Notice to more clearly state the requirements and to reduce the potential compliance costs to persons affected. There are specific requirements pertaining to the hazardous waste manifest relative to acceptance for transportation, delivery to a designated facility or a place outside the United States, and the retention of copies by the shipper and carrier(s) for three years from the date of receipt by the initial carrier. The format of a manifest is not specified in referenced EPA regulations; therefore, any document that contains all the required entries, signatures and dates is acceptable. A manifest that contains all the information required on a shipping paper by § 172.202 and § 172.203 may be used as a shipping paper. Paragraph (h) allows use of the present railroad waybill system to document the delivery of hazardous wastes. However, a representative of the railroad receiving a waste shipment from a generator or a motor carrier must date and sign a copy of the manifest. The person delivering the hazardous waste to the initial rail carrier must send a copy of the dated and signed manifest to a representative of the designated facility. This provision does not apply to an intermodal transfer following transportation by a rail carrier.

Section 172.300. Section 172.300 has been revised by MTB to reflect the package marking requirements resulting from the proposals in Dockets HM–126A and HM–126B, and to reflect suggestions from commenters. Marking requirements proposed in this section in Docket HM–145A for waste have been dropped since they are adequately covered elsewhere in this rule. The proposed HM–145A package marking requirement is now covered by EPA marking and certification requirements, and the proposed additional § 172.306 requirement in Docket HM–145A was deleted by MTB since a companion proposal was dropped by EPA.

Several commenters suggested that clarification should be provided relative to the applicability of the provisions of § 172.102 to the marking of packagings with the name of contents. It is the intent of MTB that the proper shipping name in § 172.102 may be marked on packagings. To eliminate any confusion in this regard, § 172.300 has been amended to include a specific reference to § 172.102. One petitioner recommended § 172.300 be revised to include an exclusion from the identification number marking requirements for Limited Quantity packages. MTB agrees and has included such a provision. The compliance date for displaying identification numbers on packages is July 1, 1983. Voluntary compliance may begin after June 30, 1980, and is encouraged.

Section 172.316. Section 172.316 is amended as proposed in Dockets HM–145A and HM–145B, to include ORM–E materials in the package marking requirements for ORM's.

Section 172.324. The requirement to enter the letters RQ in association with the proper shipping name on certain packages is a slight modification from the requirement proposed in Docket

HM–145B, as a result of commenters' suggestions.

The compliance date for marking RQ on packages of hazardous substances is July 1, 1983. Voluntary compliance may begin after June 30, 1980, and is encouraged.

Section 172.326. Based on commenters' suggestions, MTB has revised for clarity the wording from that proposed in HM–126A for the portable tank marking requirement, and has added paragraph (e) to provide for portable tanks that are "empty" of previously contained hazardous materials. This later provision was omitted from the HM–126A proposal, however, it incorporates "empty" packaging concepts previously addressed elsewhere, but more appropriately contained in this section. A basic provision for "empty" packagings is contained in § 173.29 as presented in this final rulemaking.

Commenters recommended that consideration be given to revising the portable tank marking requirements by differentiating between those tanks having a capacity of 1000 gallons or more and those having a capacity of less than 1000 gallons. MTB agrees and has made separate provisions in paragraph (a) for the two sizes indicated. Paragraph (d) requires a motor vehicle or rail car transporting portable tanks to display identification markings if those markings on the portable tank are not visible. This change to § 172.326 was not proposed, but it is necessary to carry out the basic intent of the indentification marking requirements.

Section 172.328. Several comments were received describing the difficulties that would be encountered in complying with the identification number marking requirement with a separate orange panel for each material being transported in a portable tank, cargo tank or tank car, as proposed in Docket HM–126A. MTB has revised the proposed requirements in this final rule by accepting a suggestion to permit application of an identification number on an appropriate square-on-point vehicle placard as as alternative to the orange panel. This is provided for in §§ 172.332 to 172.338.

Section 172.330. Changes were proposed to § 172.330 in Docket HM–126A to provide for displaying identification numbers on cargo tanks transporting hazardous materials. Based on commenter suggestions, MTB has made minor editorial revisions to clarify the provisions for rail cars and for multi-unit tank car tanks, with no change in scope. Also, based on commenter suggestions, MTB has added a provision which clarifies the marking requirements for empty tank cars and multi-unit tank car tanks.

The required compliance date for displaying the appropriate identification number on tank cars and multi-unit tank car tanks is July 1, 1983. On a voluntary basis, compliance may begin after June 30, 1980, and is encouraged.

Section 172.332. Identification number marking specifications were proposed in Docket HM–126A. However, MTB has reduced the overall physical dimensions slightly to eliminate unneeded area. Based on numerous comments, MTB has revised the requirements somewhat, and in § 172.336 has limited their application with regard to: (1) cargo tanks transporting fuel oils or distillate fuels; (2) multi-compartmented cargo tanks and tank cars; and (3) multi-unit tank car tanks. Also, based on comments, an alternative method for displaying the identification number on a hazard warning placard is authorized in § 172.334. Paragraphs (a) and (d) of § 172.332 contain the basic description of the orange panel and paragraph (b) prescribes the type of material required for its fabrication. Because metal or plastic was not prescribed for placards, the question has frequently been asked as to whether such material could be used. The answer with regard to placards is also appropriate with regard to these panels: Any material may be used as long as it is at least as durable as the tag board specified in the rule. Based on suggestions from commenters, MTB authorized, in paragraph (c), the name and hazard class of the material transported to be shown on the orange panel in letters no larger than 18 point type.

The intent of the requirement in paragraph (e) that the identification number on an orange panel be displayed in proximity to any required placard(s) was questioned by some commenters. If placards are required, any required orange panels with the identification number must be located in proximity to the placards, so they may be readily visible to emergency response personnel. Some hazardous materials do not require placarding, but an identification number may be required, for example on materials classed as ORM–E.

Section 172.334. This section provides an alternative method for displaying identification numbers. Basically, it provides for 3½ inch black number on a white background to be displayed near the center of the placard. This display must be on the appropriate placard for the material, and it will necessarily replace or essentially cover the words on the placard. The name and hazard class of the material may be shown in the top outer border of the space bearing the identification number in letters no larger than 18 point type when an identification number is displayed on a placard.

Paragraph (b) contains a black and white illustration, in miniature, of the identification number for Acetone displayed on a FLAMMABLE placard. As illustrated, the hazard class number 3 is in reverse print. If this alternative method for displaying the identification number is used and the identification number block is affixed over or in place of the hazard word on the placard, in this case FLAMMABLE, the hazard class number in the lower corner may be a black number on a white background, if not already present as a 1¾ inch numeral in reverse print.

Section 172.336. Sections 172.336 and 172.338 were not in the proposal, but MTB separated the identification number marking requirements into compatible areas and renumbered the sections accordingly. Paragraph (a) provides for permissive identification number marking on full load shipments by transport vehicles and freight containers. This is expected to enhance safety and emergency response effort and may be desired by some shippers. Paragraph (b) establishes a specification for a white square-on-point configuration background for displaying an identification number under the alternative provision (alternative to the orange panel) for materials that are not authorized or required to be placarded. It is important to note that *this white display background containing an identification number is not a placard.* Paragraph (c) contains exceptions to the identification number display requirements. These exceptions vary from total exception, under certain circumstances, for nurse tanks, to partial exception, as for the forward end of cargo tank trucks and cargo tank semi-trailers. Limited exceptions are also provided for multi-compartmented cargo tanks and tank cars as well as certain cargo tanks transporting distillate fuels such as fuel oil. Several commenters pointed out the problems created with multi-compartmented cargo tanks and tank cars and a partial exception is provided. MTB believes that with this exception the basic intent of identifying the materials adequately for emergency response is accomplished and, at the same time, certain burdens are relieved and possible confusion avoided. This is true as well in the other instances where exceptions are provided.

Paragraph (c) contains the July 1, 1981, compliance date for displaying the identification number on portable tanks,

cargo tanks, and tank cars. For multi-unit tank car tanks the compliance date is July 1, 1983. On a voluntary basis, the identification number may be displayed on these tanks any time after the July 1, 1980, effective date.

Section 172.338. The proposal did not contain a provision for replacement of lost or missing identification numbers, however, several commenters identified this as a potential problem area needing resolution. This section provides for this occurrence.

Section 172.400. Paragraph (b)(3) is revised to add the words "freight container load" in the sequence of "carload or truckload shipments." This change updates a regulation that was published before freight containers were a common form of transportation and allows MTB to eliminate an exemption (under 49 CFR Part 107, Subpart B). As requested by several commenters, a new paragraph (d) is added to this section and paragraph (a) is revised to insure that packages marked only with a proper shipping name from the Optional Table also will be labeled in accordance with that Table. This reflects the requirement in § 172.202 that the entire basic description and the label requirement must be taken from either the § 172.101 Table or the § 172.102 Optional Table.

Section 172.402. Paragraphs (a)(5) through (a)(9) are added to reflect additional multiple labeling requirements that are established as proposed in Docket HM–126B. Initially, it was considered adequate to have the multiple labling reflected in Column (4) of the Table, but commenters recommended that, for consistency, it be entered in this section. MTB agrees and has so provided. The compliance date of July 1, 1983, is contained in paragraph (a)(10). Voluntary compliance may begin any time after the July 1, 1980, effective date.

Section 172.407. Paragraph (h) is amended for consistency with § 172.102(h) as it was proposed in Docket HM–171. This rule authorizes IMCO specification labels in all cases except Explosives A and Explosives B. This change clarifies that, except for the specifications for color tolerance which must meet DOT requirements, labels may meet either DOT or IMCO specifications, except that a foreign language text alone is authorized only on import shipments. In addition, to eliminate an exemption issued to the Department of Defense to authorize additional text on labels as required by the country of destination, MTB is adding a provision to paragraph (h) of this section authorizing such an addition.

Section 172.503. Section 172.503 is added to provide a reference from the placarding rules to the identification number marking alternative authorized in § 172.334.

Section 172.504. Table 2 in paragraph (a) is revised to provide for using the DANGEROUS placard for Class C explosives. This has been authorized under exemption DOT–E 7902 which was issued after the applicant pointed out that in case of fire involving Class C explosives, emergency response personnel could be injured when taking routine actions applicable to the FLAMMABLE placard without checking to determine what was involved in the fire. A normal precaution for emergency response personnel when observing the DANGEROUS placard is to try to determine the materials involved by obtaining shipping papers or through other available means. Also, changes are made to Table 2 to eliminate the requirement for affixing the DANGEROUS placard for Class C explosives, the BLASTING AGENTS placard for Blasting agents or the OXIDIZER placard for Nitrocarbonitrate, if the freight container or transport vehicle is transporting Class A or B explosives and is appropriately placarded for Class A or Class B explosives. Further provisions are made for affixing only the FLAMMABLE GAS placard when a motor vehicle is transporting Nonflammable gas and Flammable gas. Although these placarding changes had not been proposed, they provide relief from some of the existing rules, eliminate an outstanding exemption and at the same time provide adequate warning for the materials involved. Also, a new paragraph (d) is added to exclude certain packagings containing only the residue of hazardous materials from consideration in determining the applicability of the placarding requirements.

Section 172.519. Paragraph (d) is revised as suggested by commenters to increase the size of the UN hazard class number display on placards. Where such a display had been permissive, it now becomes mandatory in certain situations when required by this subchapter, such as under § 172.334. Paragraph (f) is added to authorize a variance in the placard specification so the alternative identification number marking requirement can be accomplished. The alternative, provided by § 172.334, authorizes the display of identification numbers on the appropriate placard for the hazardous material being transported.

Section 173.2. Paragraph (a)(16) is added to include ORM–E in its proper order of hazard.

Section 173.21. The title is revised and the text is amended as proposed in HM–159 to provide better guidance on materials or packaging conditions that are not acceptable in transportaion. The term "Forbidden materials" in the context of this section is new and clarification of the application of the term is provided. Section 173.21 applies to any material considered to be forbidden and is not limited to materials falling within established hazard classes. Included in the revision of this section is a prohibition against the offering of packages that evolve a dangerous quantity of flammable gas or vapor released from a material not otherwise subject to the regulations, e.g. the release of flammable blowing agent vapors from a manufactured product in such quantities that an explosive mixture would be created within the transport vehicle. Under this final rule, each refrigeration method, when used as a means of stabilization, must be approved by the Associate Director for Operations and Enforcement. This change is in accord with the approval authority withdrawals from the Bureau of Explosives presently being handled by amendments published under Docket HM–163. Several commenters objected to the fact that proposed paragraph (a)(2) did not contain any statement concerning the time a material would have to be exposed to the 130°F. temperature in order to be considered forbidden from transportation. MTB agrees that it is a weakness in the proposed wording and has altered the wording to reference two test methods. The test methods are: ASTM E–487 "Standard Method of Test for Consent Temperature Stability of Chemical Materials" and the Organic Peroxide Producers' Safety Division (OPPSD) "Self Accelerating Decomposition Test (SADT)." Several commenters expressed concern that this paragraph does not make it clear that approvals issued by the Bureau of Explosives would be continued in effect until an orderly transition to approval by the Associate Director for Operations and Enforcement could be accomplished. MTB acknowledges this objection and has included a clarification statement in the rule referencing § 171.19.

Section 173.28. Section 173.28 is amended to consolidate three paragraphs that contain restrictions pertaining to containers marked NRC or STC. Paragraph (n) is amended to include a reference to ORM–E materials regarding reuse of STC-marked

packagings and a new paragraph (p) is added to permit the reuse of NRC or STC specification packagings for one-time shipments of hazardous wastes under certain specified conditions. Note the first condition stipulates that the material must be packaged "in accordance with this Part". For example, a Flammable liquid, n.o.s., must be packaged in accordance with § 173.119. This reuse authorization for hazardous wastes does not permit any deviation from the packaging requirements of Part 173 except as specifically stated. This final rule differs from the Docket HM-145A proposal to reflect input from commenters.

Section 173.29. Section 173.29 is amended, as proposed in Docket HM-145A, to require, with certain exceptions, a packaging that contains the residue of a hazardous material to be offered for transportation in the same manner as required when it previously contained a greater quantity of a hazardous material. However, there are significant exceptions in paragraph (a) concerning marking, placarding, shipping papers, and stowage.

Paragraph (a)(3)(ii) excepts from shipping paper requirements the transportation by contract or private carrier of certain "empty" packagings containing a hazardous materials residue when the purpose of the transportation is to reuse or recondition the packaging. This was not proposed in the Notice but was requested by several commenters. The exception recognizes the fact that private and contract carriers who perform this transportation are familiar with the hazards and packagings involved in the transportation of these materials.

Section 173.51. Section 173.51 is revised as proposed in the notice to Docket HM-159 to make provisions for additional coverage of forbidden materials.

Section 173.118a. Section 173.118a is amended to exclude a combustible liquid from the 110 gallons or less exception when it is a hazardous waste subject to 40 CFR Part 262. Thus, a combustible liquid that is a hazardous waste and is offered for transportation in a packaging having a capacity of 110 gallons or less must be shipped as a waste combustible liquid and all regulations pertaining to the transportation of waste materials apply. This was not proposed, but is added by MTB based on a comment that pointed out the omission. Paragraph (b)(1) is amended to include a reference to hazardous waste manifests. Paragraph (b)(2) is revised by MTB to eliminate a conflict between the identification number marking requirements for portable tanks, cargo tanks and tank cars in the Docket HM-126A proposal and the exception authorization in paragraph (b). Paragraph (b)(5) is revised to include the hazardous substance discharge reporting requirements of § 171.17.

Section 173.151a. As proposed in Docket HM-126B, paragraph (a)(13) is revised to permit continued classification of a hazardous material according to its predominant hazard when it contains an organic peroxide without having to place a plus before each organic peroxide entry. It is possible that when certain stabilizing dilutents are added to certain organic peroxides the predominant hazard is that of the dilutent rather than the organic peroxide.

Section 173.154. Based on a petition, MTB is adding "Calcium hypochlorite, hydrated" to the Hazardous Materials Table as a proper shipping name with specification packaging referencing § 173.217. In order to eliminate confusion, the reference in § 173.154(a)(20) to hydrated calcium hypochlorite is deleted.

Section 173.179. As proposed in Docket HM-159, § 173.179 is added to prescribe packaging for N-methyl-N'-nitro-N-nitrosoguanidine, which is added to the Table as a Flammable solid.

Section 173.182. The introductory text to paragraphs (a) and (b) are amended as proposed in Docket HM-145B to provide appropriate packaging for the following materials that have been identified by EPA as hazardous substances: Beryllium nitrate, Cupric nitrate, Ferric nitrate, Mercuric nitrate, Nickel nitrate, and Zirconium nitrate.

Section 173.217. Section 173.217 is amended based on a petition for rulemaking requesting that "calcium hypochlorite hydrated" be added to the Table, with a packaging reference to § 173.217. MTB is in agreement with the data presented in the petition and has added the entry.

Section 173.352. The heading and paragraph (a) are revised to include Cyanide solutions, n.o.s. classed as a Poison B, UN 1935, which is added to the Table as proposed in Docket HM-126B. MTB believes the packagings authorized by § 173.352 for sodium cyanide or potassium cyanide are more appropriate for Cyanide solutions, n.o.s. than the general packagings that would otherwise be authorized for this material under § 173.346 for a poisonous liquid, n.o.s.

Section 173.364. Paragraph (a) is revised to provide certain exceptions for Poisonous solid Limited Quantities that are similar to those authorized for Poisonous liquid Limited Quantities. This was an apparent omission from the Docket HM-112 rulemaking and provides relief from certain regulations for shipments of these materials.

Section 173.389. Section 173.389 is amended as proposed in Docket HM-145A to restate the definition of radioactive materials to clarify the fact that the definition applies only for purposes of the Hazardous Materials Regulations. This clarification is necessary since EPA regulations address materials having lower levels of radiation.

Section 173.500. Section 173.500 is amended to clarify the definition of ORM materials. This clarification is essential to implementation of the ORM-E class which is included in new paragraph (b)(5). Note that the ORM-E definition includes hazardous wastes subject to the regulations of the EPA in 40 CFR Part 262, and hazardous substances as defined in § 171.8. Except for the amendment of Note 1, which resulted from a comment about the apparent conflict between the hazardous waste requirements and the exception for combustible liquids in certain packagings, the final rule is as was proposed in Dockets HM-145A and HM-145B.

Section 173.505. Paragraph (a) is revised to acknowledge a restriction on the ORM exceptions in that § 173.21 applies to any hazardous material offered for transportation. As adopted, the provision differs from the HM-145A proposal in format, but the content remains the same.

Section 173.510. Section 173.510 is amended to exclude the basic packaging requirements from the exceptions specified in § 173.505, and a new paragraph (a)(5) is added requiring that transport vehicles used to transport ORM materials must have discharge openings securely closed. This is a significant change from the HM-145A proposal which would have precluded the use of open-top vehicles. Numerous comments were received describing procedures for effectively using tarps to cover dump trucks and other open-top vehicles. MTB believes that many of the comments have merit and has revised the requirement accordingly. MTB added a note in paragraph (a)(1) to inform shippers that EPA has prescribed packaging for certain PCB's for storage for disposal.

Section 173.1300. A new Subpart O is added to Part 173 to address ORM-E materials, and a new § 173.1300 is added to address Hazardous waste, liquid or solid, n.o.s., and Hazardous substance, liquid or solid, n.o.s. These two entries resulted from Dockets HM-145A and

HM–145B. No specific packaging requirements are specified in this rule for such materials other than a reference to the basic requirements for ORM's in § 173.510. For example, if a hazardous waste is to be offered for transportation by air, the additional requirements of § 173.6 in Subpart A apply. It may be necessary in the future to add specific packaging requirements for certain hazardous wastes or hazardous substances if problems relative to the safe transportation of materials in this class (ORM–E) are identified.

Section 174.24. This section is amended to exclude hazardous substances and hazardous wastes from the exceptions specified for ORM materials.

Section 174.25. Paragraph (b)(6) is added to require that the letters "RQ" be entered on the shipping paper either before or after the basic description for hazardous substances. Although a similar requirement was proposed in Docket HM–145B in § 172.203, it was not proposed for this section. Several suggestions were made during a joint EPA/MTB hearing on hazardous waste that the identifier be entered after the basic description and that it contain the reportable quantity for the material. MTB agrees in part and has authorized the placement of the identifier "RQ" to be entered either before or after the basic description. Thus, under § 172.201(a)(4), if it is placed after the basic description, the shipper may enter the designated reportable quantity. MTB agrees with commenters who suggested provisions be added to require identification on a shipping paper of a hazardous substance residue in a tank car and has added such a provision to the end of paragraph (c).

Section 174.45, 175.45, 176.48 and 177.807. As proposed in Dockets HM–145A and HM–145B, §§ 174.45, 176.48 and 177.807 are revised to provide for the reporting of the discharges of hazardous wastes and hazardous substances. As a result of a change in the EPA reporting requirements for hazardous waste, reporting can be accommodated through a slight revision to §§ 171.15 and 171.16. However, § 171.17, modified somewhat from the Docket HM–145B proposal, is in the final rule for the reporting of the discharge of a hazardous substance. Based on several comments that suggested hazardous substance discharge reports be limited to reportable quantity discharges (incorporated in the definition of hazardous substance) into or upon navigable waters, MTB deleted the § 175.45 proposal because it appears unlikely that such a discharge would occur from an aircraft.

Section 176.11. This section is amended to exclude hazardous substances and hazardous wastes from the exceptions specified for ORM materials.

Section 177.823. In Docket HM–145A MTB had proposed a marking requirement for motor vehicles used for transporting hazardous waste. However, since the requirement appears to duplicate a requirement in § 171.3, the § 177.823 requirement is dropped.

In consideration of the foregoing, Parts 171, 172, 173, 174, 176, and 177 of Title 49 Code of Federal Regulations are amended as follows:

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

1. Section 171.1 is revised to read as follows:

§ 171.1 Purpose and scope.

This subchapter prescribes the requirements of the Department of Transportation governing—

(a) The transportation of hazardous materials by, and their offering to—

(1) Carriers by rail car, aircraft and vessel (except as delegated at § 1.46(t) of this title);

(2) Interstate and foreign carriers by motor vehicle; and

(3) Intrastate carriers by motor vehicle so far as this subchapter relates to—

(i) Hazardous waste, except in a state operating a hazardous waste program under interim authorization in accordance with 40 CFR Part 123, Subpart F.

(ii) Hazardous substances.

(b) The manufacture, fabrication, marking, maintenance, reconditioning, repairing, or testing of a packaging or container which is represented, marked, certified, or sold for use in such transportation as specified in paragraph (a) of this section.

2. In § 171.2 paragraphs (a) and (b) are revised to read as follows:

§ 171.2 General transportation requirements.

(a) No person may offer or accept a hazardous material for transportation in commerce within the United States unless that material is properly classed, described, packaged, marked, labeled, and in the condition for shipment as required or authorized by this subchapter including §§ 171.12 and 176.11.

(b) No person may transport a hazardous material in commerce within the United States unless that material is handled and transported in accordance with this subchapter.

* * * * *

3. Section 171.3 is added to read as follows:

§ 171.3 Hazardous waste.

(a) No person may offer for transportation or transport a hazardous waste (as defined in § 171.8 of this subchapter) in interstate or intrastate commerce except in accordance with the requirements of this subchapter.

(b) No person may accept for transportation, transport, or deliver a hazardous waste for which a manifest is required unless that person—

(1) Has marked each motor vehicle used to transport hazardous waste in accordance with § 397.21 or § 1058.2 of this title even though placards may not be required;

(2) Complies with the requirements for manifests set forth in § 172.205 of this subchapter; and

(3) Delivers, as designated on the manifest by the generator, the entire quantity of the waste received from the generator or a transporter to—

(i) The designated facility or, if not possible, to the designated alternate facility;

(ii) The designated subsequent carrier; or

(iii) A designated place outside the United States.

Note.—Federal law specifies penalties up to $25,000 fine and 5 years imprisonment for the willful discharge of hazardous waste at other than designated facilities. 49 U.S.C. 1809.

(c) With regard to hazardous waste subject to this subchapter, any requirement of a state or its political subdivision is inconsistent with this subchapter if it applies because that material is a waste material and applies differently from or in addition to the requirements of this subchapter concerning—

(1) Packaging, marking, labeling, or placarding;

(2) Format or contents of discharge reports (except immediate reports for emergency response); and

(3) Format or contents of shipping papers, including hazardous waste manifests.

Note.—Paragraph (c)(3) does not apply to any requirements of a state relative to additional information that must be provided by a generator to the operator of a designated facility at or prior to the time of delivery of, or with the shipment of, a hazardous waste to that facility.

(d) If a discharge of hazardous waste occurs during transportation, and an official of a State or local government or

a Federal agency, acting within the scope of his official responsibilities, determines that immediate removal of the waste is necessary to prevent further consequence, that official may authorize the removal of the waste without the preparation of a manifest. [NOTE: In such cases, EPA does not require carriers to have EPA identification numbers.]

(e) If a hazardous material that is a hazardous waste is required by this subchapter to be shipped in a closed head DOT specification drum, and the hazardous waste contains solids or semisolids that would make its placement in a closed head drum impracticable (e.g., a drum with a 2.3 inch bung opening), an equivalent specification open head drum (except for closure) may be used for such a waste.

Note.—1—EPA requires shippers (generators) and carriers (transporters) of hazardous wastes to have identification numbers which must be displayed on hazardous waste manifests. See 40 CFR 262.21 and 263.11. (Identification number application forms (EPA Form 8700–12) may be obtained from EPA Regional Offices.)

Note.—2—The following EPA regulation is set forth in 40 CFR Part 263:

§ *263.31 Discharge clean up*

A transporter must clean up any hazardous waste discharge that occurs during transportation or take such action as may be required or approved by Federal, State, or local officials so that the hazardous waste discharge no longer presents a hazard to human health or the environment.

4. Paragraphs (c)(27), (c)(28), (d)(5)(ix), (d)(20), (d)(21) and (d)(22) are added to § 171.7 to read as follows:

§ 171.7 Matter incorporated by reference.

* * * * *

(c) * * *

(27) UN: United Nations: United Nations Sales Section, New York, New York 10017.

(28) OPPSD: Organic Peroxide Producers' Safety Division, Society of the Plastic Industries, Inc., 250 Park Avenue, New York, N.Y. 10017.

(d) * * *

(5) * * *

(ix) ASTM E487–74 is titled, "Standard Test Method for Constant-Temperature Stability of Chemical Materials," 1974 edition.

* * * * *

(20) NIOSH Registry is titled, "Registry of Toxic Effects of Chemical Substances," 1978 edition, available from the Superintendent of Documents.

(21) United Nations Recommendations (UN Recommendations) is titled, "Transport of Dangerous Goods (1977)."

(22) SADT is titled, "Self Accelerating Decomposition Temperature Test," published by the OPPSD.

5. Section 171.8 is amended to add the following definitions in their proper alphabetical sequence:

§ 171.8 Definitions and abbreviations.

* * * * *

"Designated facility" means a hazardous waste treatment, storage, or disposal facility that has been designated on the manifest by the generator.

* * * * *

"EPA" means U.S. Environmental Protection Agency.

* * * * *

"Hazardous substance", for the purposes of this subchapter, means a quantity of a material offered for transportation in one package, or transport vehicle when the material is not packaged, that—

(a) Equals or exceeds the reportable quantity (RQ) specified for the material in EPA regulations at 40 CFR Parts 116 and 117;

(b) is identified by the letter "E" in column 1 of § 172.101; and

(c) When in a mixture or solution in any package offered for transportation is in a concentration which equals or exceeds the following (based on the RQ weight quantities specified in § 172.101):

RQ pounds	RQ kilograms	Concentration by weight	
		Percent	PPM
5000	2270	10	100,000
1000	454	2	20,000
100	45.4	0.2	2,000
10	4.54	0.02	200
1	0.45	0.002	20

"Hazardous waste", for the purposes of this subchapter, means any material that is subject to the hazardous waste manifest requirements of the EPA specified in 40 CFR Part 262 or would be subject to these requirements absent an interim authorization to a state under 40 CFR Part 123, Subpart F.

"Navigable waters" means, for the purposes of this subchapter, waters of the United States, including the territorial seas.

* * * * *

6. Section 171.12 paragraph (b) is revised to read as follows:

§ 171.12 Import and export shipments.

* * * * *

(b) Provisions under which certain hazardous materials may be transported when classed, labeled and described in accordance with the IMCO Code are set forth in § 172.102 of this subchapter.

* * * * *

§ 171.15 [Amended]

7. In § 171.15(a), "(including hazardous wastes)" is added after "hazardous materials" in the third line; in paragraph (b), the period at the end of the first sentence is deleted and the following is added to the end of the first sentence, "or (toll call) on 202–426–2675."

8. In § 171.16, the period at the end of paragraph (a) is deleted and the following is added:

§ 171.16 Detailed hazardous materials incident reports.

(a) * * * or any quantity of hazardous waste has been discharged during transportation. If a report pertains to a hazardous waste discharge—

(1) A copy of the hazardous waste manifest for the waste must be attached to the report, and

(2) An estimate of the quantity of the waste removed from the scene, the name and address of the facility to which it was taken, and the manner of disposition of any unremoved waste, must be entered in Part H of the report (Form F 5800.1).

* * * * *

9. Section 171.17 is added to read as follows:

§ 171.17 Hazardous substance discharge notification.

(a) When a hazardous substance is discharged (accidentally or intentionally) into or upon the navigable waters or adjoining shorelines, the person in charge of the aircraft, vessel, transport vehicle or facility shall, as soon as that person has knowledge of such discharge, notify directly, or indirectly through the carrier, the U.S. Coast Guard National Response Center at (toll free) 800–424–8802, or (toll call) 202–426–2675, and furnish the official to whom the discharge notification is made—

(1) The information required by § 171.15,

(2) The name of the shipper of the hazardous substance, and

(3) The quantity of the hazardous substance discharged, if known.

(b) If the person in charge of the aircraft, vessel, transport vehicle or facility is incapacitated or otherwise unable to make the notification required by this section, the carrier shall make the notification.

(c) An estimate of the quantity of the hazardous substance removed from the scene and the manner of disposition of any removed hazardous substance shall be entered in Part H of the report required by § 171.16 of this Part.

PART 172—HAZARDOUS MATERIALS TABLES AND HAZARDOUS MATERIALS COMMUNICATIONS REGULATIONS

10. The title of Part 172 is amended by replacing the word "TABLE" with the word "TABLES."

11. The title of Subpart B is amended by replacing the word "TABLE" with the word "TABLES."

12. Section 172.100 is deleted. A new § 172.101 in association with a revised Hazardous Material Table is adopted as follows:

§ 172.101 Purpose and use of hazardous materials table.

(a) The Hazardous Materials Table (Table) in this section designates the materials listed therein as hazardous materials for the purpose of transportation of those materials in commerce. The Table identifies the class of each listed material, and specifies or references requirements in this subchapter pertaining to its packaging, labeling, and transportation.

(b) Column 1 contains the four symbols as appropriate: Plus (+) and the letters "A", "W", and "E".

(1) The plus (+) fixes the proper shipping name and the hazard class for that entry without regard to whether the material (including its mixtures and solutions) meets the definition of that class. An alternate proper shipping name and hazard class may be authorized by the Associate Director, Office of Hazardous Materials Regulation, MTB.

(2) A letter "A" restricts the application of this subchapter to materials being transported by aircraft, but a letter "A" has no significance or effect when—

(i) A letter "E" also appears with it and the material is a hazardous substance; or

(ii) The material is a hazardous waste.

(3) A letter "W" restricts the application of this subchapter to materials being transported by vessel, but a letter, "W" has no significance or effect when—

(i) A letter "E" also appears with it and the material is a hazardous substance; or

(ii) The material is a hazardous waste.

(4) A letter "E" identifies materials which are subject to the requirements of this subchapter, regardless of the mode of transportation or hazard class, if it is a hazardous substance (as defined in § 171.8 of this subchapter). A hazardous substance which does not meet the defining criteria for another hazard class remains subject to certain requirements of this subchapter as an ORM–E.

(c) Column 2 lists the proper shipping name of materials designated as hazardous materials. Modification of a proper shipping name may otherwise be required or authorized by this section (see Paragraphs (b)(4), (c)(10), (c)(11), (c)(12) and (c)(13) of this section). Proper shipping names are limited to those shown in Roman type (not italics).

(1) Shipping names may be used in the singular or plural and in either capital or lower case letters.

(2) The words in italics are not part of the proper shipping name but may be used in addition to the proper shipping name. The word "or" in italics indicates that any terms in the sequence may be used as the proper shipping name as appropriate.

(3) The abbreviation "n.o.i.", which means "not otherwise indexed", or "n.o.i.b.n.", which means "not otherwise indexed by name", may be used interchangeably with "n.o.s.".

(4) Except for hazardous wastes, when qualifying words are used as part of proper shipping name, their sequence on the package markings and shipping paper descriptions is optional. However, the entry in the Table reflects the preferred sequence.

(5) Except for organic peroxides, when one entry references another entry by use of the word *"see"*, if both names are in Roman type, either name may be used as the proper shipping name (e.g., Carbolic acid. *See* Phenol). For an organic peroxide, the technical name shall be used as the proper shipping name.

(6) The words "poison" or "poisonous" in this column refer to materials that would cause death by systemic poisoning rather than by corrosive destruction of tissue.

(7) When a shipping name includes a concentration range as part of the shipping description, the actual concentration being shipped, if it is within the range stated, may be used in place of the concentration range. For example, a hydrogen peroxide solution containing 30% peroxide may be shipped as either "Hydrogen peroxide solution (8% to 40% peroxide)" or "Hydrogen peroxide solution, 30% peroxide".

(8) The use of the prefix "mono" is optional in any shipping name when appropriate. Thus, Monoethanolamine may be used interghangeably with Ethanolamine. In "Difluoromonochloroethane" the term "mono" is considered to be a prefix to the term "chloroethane" and may be deleted.

(9) The numbers in italics following a proper shipping name of a material identified by the letter "E" in column 1 specify, in pounds and kilograms, the minimum quantity of the material that constitutes a reportable quantity. For example: Sodium arsenate *(RQ–1000/454)* means that the reportable quantity is 1,000 pounds or 454 kilograms.

(10) If not included in a proper shipping name in the Table, the proper shipping name for a hazardous material that is a hazardous waste must include the word "Waste" preceding the name of the material. For example: Waste acetone.

(11) A mixture or solution comprised of a hazardous material identified in the Table by technical name and a non-hazardous material may be described using the proper shipping name of the hazardous material, if—

(i) The mixture or solution is not specifically identified in the Table;

(ii) The hazard class of the mixture or solution is the same as that of the hazardous material, and

(iii) The qualifying word "mixture" or "solution", as appropriate, is added as part of the proper shipping name. For example, a solution of Acetone, mineral oil, and water, meeting the defintion of a flammable liquid, may be described under this optional provision as "Acetone solution, Flammable liquid, UN 1090."

(12) If the proper shipping name for a mixture or solution that is a hazardous substance does not include the name of the hazardous substance or substances, each hazardous substance must be identified in association with the basic description.

(13) Except for proper shipping names in the Table that are preceded by a plus (+)—

(i) If it is specifically determined that a material meets the definition of a hazard class other than the class shown in association with the proper shipping name, the material must be described by an appropriate shipping name listed in association with the correct class for the material or—

(ii) If an appropriate technical name is not shown in the Table, selection of a proper shipping name must be made from the general descriptions or n.o.s. entries corresponding to the specific hazard class of the material being shipped. The name that most appropriately describes the material must be used e.g., an alcohol not listed by name in the Table must be shipped as "Alcohol, n.o.s." rather than "Flammable liquid, n.o.s." Some mixtures may be more appropriately described according to their application, such as "Compound, cleaning, liquid" or "Compound rust removing," rather than by an n.o.s. entry, such as "Corrosive liquid, n.o.s."

(iii) If a material meets the definition of more than one hazard class, and is not specifically identified in the Table, the hazard class of the material must be determined by using the precedence specified in § 173.2 of this subchapter, and an appropriate shipping description must be selected as described in paragraph (c)(13)(ii) of this section.

(iv) If it is specifically determined that a material is not a forbidden material and does not meet the definition of any hazard class, the material is not a hazardous material.

(d) Column 3 contains a designation of the hazard class corresponding to each proper shipping name, or the word "Forbidden".

(1) A material for which the entry in this column is "Forbidden" is prohibited from being offered or accepted for transportation. This prohibition does not apply if these materials are diluted, stabilized, or incorporated in devices and they are classed in accordance with the definitions of hazardous materials contained in Part 173 of this subchapter.

(2) When re-evaluation of test data or new data indicates a need to modify the "Forbidden" designation or the hazard class specified for a material specifically identified in the Table, this data should be submitted to the Associate Director, Office of Hazardous Materials Regulation, MTB.

(e) Column 3(a) lists the identification numbers assigned to hazardous materials. Those preceded by a "UN" are associated with descriptions considered appropriate for international shipments as well as domestic shipments. Those preceded by an "NA" are associated with descriptions that are not recognized for international shipments, except to and from Canada. If an identification number is in the "NA9000" series, it is either associated with the description of a material that is not appropriately covered by international hazardous materials (dangerous goods) shipping standards or not appropriately addressed by such standards for emergency response information purposes, except for transportation between the United States and Canada.

(f) Column 4 specifies the labels required to be applied to each package, subject to the additional labeling requirements in § 172.402.

(g) Column 5 references the applicable packaging section of Part 173 of this subchapter. Exceptions from some of the requirements of this subchapter are noted in column 5(a). Other exceptions relating to the specific mode of transportation are contained in Parts 174, 175, 176, and 177 of this subchapter. Reference to specific packaging requirements and certain additional exceptions are noted in column 5(b).

(h) Column 6 specifies the maximum net quantity in one package for transportation by aircraft or passenger railcar. In this column, "Forbidden" means the material may not be offered or carried and is limited in its applicability only to the types of transportation covered by the column. In addition, an exception for certain flammable liquids is provided in § 173.118 of this subchapter.

(1) Column 6(a) specifies the maximum net quantity permitted in one package for transportation by passenger-carrying aircraft or passenger railcar. For transportation by aircraft, any material forbidden on passenger-carrying aircraft but permitted on cargo aircraft, or which exceeds the maximum quantity authorized on passenger-carrying aircraft, must be shipped by cargo-only aircraft and bear the CARGO AIRCRAFT ONLY label as described in § 172.448.

(2) Column 6(b) specifies the maximum net quantity permitted in one package for transportation by cargo-only aircraft. When offered for transportation by aircraft, a package must bear the CARGO AIRCRAFT ONLY label when the quantity of hazardous material in one package exceeds that authorized on passenger-carrying aircraft, or is forbidden on passenger-carrying aircraft.

(i) Column 7 specifies each of the authorized locations on board cargo vessels and passenger vessels and certain additional requirements for shipments of each listed hazardous material. Section 176.63 of this subchapter sets forth the physical requirements for each of the authorized locations listed in Column 7. (For bulk shipments by vessel see 46 CFR Parts 30 to 40, 70, 98, 148, 151, 153, and 154.)

(1) "1" means the material may be stowed "on deck" subject to the requirements of § 176.63(b) of this subchapter. When both "on deck" and "under deck" are authorized, "under deck" should be used if is available.

(2) "2" means the material may be stowed "under deck" in a compartment or hold subject to the requirements of § 176.63(c). When both "on deck" and "under deck" are authorized, "under deck" should be used if it is available.

(3) "3" means the material may be stowed "under deck away from heat" in a ventilated compartment or hold subject to the requirements of § 176.63(d) of this subchapter.

(4) "4" means the material is authorized to be transported in only the limited quantities specified in the CFR section listed in Column 5 and is subject to the stowage requirements specified for a cargo vessel for the same material.

(5) "5" means the material is forbidden and may not be offered or accepted for transportation.

(6) "6" means the material is authorized to be transported in a magazine subject to the requirements of §§ 176.135 through 176.144 of this subchapter.

(j) If the proper shipping name or hazard class of a material is changed by an amendment to the Table, such a change does not apply to the shipment of any package filled prior to the effective date of the amendment, unless specifically stated otherwise in the amendment.

(k) Except for hazardous substances and hazardous wastes, Amendment No. 172–58, to the extent that it requires a change in the shipping name or class of a material, applies after June 30, 1981.

§172.101 Hazardous Materials Table

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Accumulator, pressurized *(pneumatic or hydraulic), containing nonflammable gas*	Nonflammable gas	NA1956	Nonflammable gas	173.306		No limit	No limit	1,2	1,2	
	Acetal	Flammable liquid	UN1088	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
E	Acetaldehyde (*ethyl aldehyde*) (*RQ-1000/454*)	Flammable liquid	UN1089	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
EA	Acetaldehyde ammonia (*RQ-1000/454*)	ORM-A	UN1841	None	173.505	173.510	No limit	No limit	1,2	1,2	
E	Acetic acid (*aqueous solution*) (*RQ-1000/454*)	Corrosive material	UN2790	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	Stow separate from nitric acid or oxidizing materials
E	Acetic acid, glacial (*RQ-1000/454*)	Corrosive material	UN2789	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	Stow separate from nitric acid or oxidizing materials. Segregation same as for flammable liquids
E	Acetic anhydride (*RQ-1000/454*)	Corrosive material	UN1715	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	
	Acetone	Flammable liquid	UN1090	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
E	Acetone cyanohydrin (*RQ-10/4.54*)	Poison B	UN1541	Poison	None	173.346	Forbidden	55 gallons	1	5	Shade from radiant heat. Stow away from corrosive materials
	Acetone oil	Flammable liquid	UN1091	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Acetonitrile	Flammable liquid	UN1648	Flammable liquid	173.118	173.119	1 quart	10 gallons	1	4	Shade from radiant heat
	Acetyl acetone peroxide, *in solution with not more than 9% by weight active oxygen. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2080								
	Acetyl acetone peroxide with more that 9% by weight active oxygen	Forbidden									
	Acetyl benzoyl peroxide, *not more than 40% in solution. See* Acetyl benzoyl peroxide solution, *not over 40% peroxide*		UN2081								
	Acetyl benzoyl peroxide, solid, or more than 40% in solution	Forbidden									
	Acetyl benzoyl peroxide solution, *not over 40% peroxide*	Organic peroxide	UN2081	Organic peroxide	None	173.222	Forbidden	1 quart	1,2	1	
E	Acetyl bromide (*RQ-5000/2270*)	Corrosive material	UN1716	Corrosive	173.244	173.247	1 quart	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
E	Acetyl chloride (*RQ-5000/2270*)	Flammable liquid	UN1717	Flammable liquid	173.244	173.247	1 quart	1 gallon	1	1	Stow away from alcohols. Keep cool and dry. Separate longitudinally by an intervening complete compartment or hold from explosives
	Acetyl cyclohexanesulfonyl peroxide, more than 82%, wetted with less than 12% water	Forbidden									
	Acetyl cyclohexanesulphonyl peroxide, *not more than 82%, wetted with not less than 12% water. See* Organic peroxide, solid, n.o.s.		UN2082								
	Acetyl cyclohexanesulphonyl peroxide, *not more than 32% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2083								
	Acetylene	Flammable gas	UN1001	Flammable gas	None	173.303	Forbidden	300 pounds	1	1	Shade from radiant heat
	Acetylene (liquid)	Forbidden									
	Acetylene silver nitrate	Forbidden									
A	Acetylene tetrabromide	ORM-A	UN2504	None	173.505	173.510	10 gallons	55 gallons			
	Acetyl iodide	Corrosive material	UN1898	Corrosive	173.244	173.247	1 quart	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Acetyl peroxide, *not more than 25% in solution. See* Acetyl peroxide solution, *not over 25% peroxide*		UN2084								
	Acetyl peroxide, solid, or more than 25% in solution	Forbidden									
	Acetyl peroxide solution, *not over 25% peroxide*	Organic peroxide	UN2084	Organic peroxide	173.153	173.222	Forbidden	1 quart	1,2	1	
	Acid butyl phosphate	Corrosive material	UN1718	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	Glass carboys in hampers not permitted under deck
	Acid carboy, empty. *See* Carboy, empty.										
	Acid, liquid, n.o.s.	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	5 pints	1	4	Keep cool
	Acid, sludge	Corrosive material	UN1906	Corrosive	None	173.248	Forbidden	1 quart	1,2	1	
+E	Acrolein, inhibited (*RQ-1/.454*)	Flammable liquid	UN1092	Flammable liquid and Poison	None	173.122	Forbidden	1 quart	1,2	5	Keep cool. Stow away from living quarters
	Acrylic acid	Corrosive material	UN2218	Corrosive	173.244	173.245	1 quart	5 pints	1	1	
E	Acrylonitrile (*RQ-100/45.4*)	Flammable liquid	UN1093	Flammable liquid and Poison	None	173.119	Forbidden	1 quart	1,2	5	Keep cool
	Actuating cartridge, explosive(*fire extinguisher, or valve*)	Class C explosive		Explosive C	173.114		50 pounds	150 pounds	1,2	1,2	Keep cool and dry
	Adhesive, n.o.s. *See* Cement, liquid, n.o.s.										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
E	Adipic acid (*RQ-5000/2270*)	ORM-E	NA9077	None	None	173.510	No limit	No limit	1,2	1,2	
	Aerosol product. See Compressed gas, n.o.s.										
	Air, compressed	Nonflammable gas	UN1002	Nonflammable gas	173.306	173.302	150 pounds	300 pounds	1,2	1,2	
	Air conditioning machine. *See* Refrigerating machine										
	Aircraft rocket engine (*Commercial*)	Flammable solid	NA2791	Flammable solid	None	173.238	Forbidden	550 pounds	1,3	5	
	Aircraft rocket engine igniter (*Commercial*)	Flammable solid	UN2792	Flammable solid	None	173.238	Forbidden	25 pounds	1,3	5	
	Airplane flare. See Fireworks, special										
	Alcoholic beverage	Flammable liquid	UN1170	Flammable liquid	173.118	173.125	See 173.118(c)	10 gallons	1,2	1	
	Alcoholic beverage	Combustible liquid	UN1170	None	173.118a	None	No limit	No limit	1,2	1,2	
	Alcohol, n.o.s.	Flammable liquid	UN1987	Flammable liquid	173.118	173.125	1 quart	10 gallons	1,2	1	
	Alcohol, n.o.s.	Combustible liquid	UN1987	None	173.118a	None	No limit	No limit	1,2	1,2	
E	Aldrin (*RQ-1/.454*)	Poison B	NA2761	Poison	173.364	173.376	50 pounds	200 pounds	1,2	1,2	
EA	Aldrin, cast solid (*RQ-1/.454*)	ORM-A	NA2761	None	173.505	173.510	No limit	No limit	1,2	1,2	
E	Aldrin mixture, dry (*with more than 65% aldrin*) (*RQ-1/.454*)	Poison B	NA2761	Poison	173.364	173.376	50 pounds	200 pounds	1,2	1,2	
EA	Aldrin mixture, dry, with 65% or less aldrin (*RQ-1/.454*)	ORM-A	NA2761	None	173.505	173.510	No limit	No limit	1,2	1,2	
E	Aldrin mixture, liquid (*with more than 60% aldrin*) (*RQ-1/.454*)	Poison B	NA2762	Poison	173.345	173.361	1 quart	55 gallons	1,2	1,2	If flash point less than 141 deg F, segregation same as for flammable liquids
EA	Aldrin mixture, liquid, with 60% or less aldrin (*RQ-1/.454*)	ORM-A	NA2762	None	173.505	173.510	No limit	No limit	1,2	1,2	
	Alkaline *(corrosive)* liquid, n.o.s.	Corrosive material	NA1719	Corrosive	173.244	173.249	1 quart	5 gallons	1,2	1,2	
	Alkaline battery fluid	Corrosive material	NA2797	Corrosive	173.244	173.249 173.257	1 quart	5 gallons	1,2	1,2	
	Alkaline battery fluid with empty storage battery	Corrosive material	NA2797	Corrosive	None	173.258	Forbidden	5 pints	1,2	1,2	
	Alkanesulfonic acid	Corrosive material	UN2584	Corrosive	173.244	173.245	5 pints	1 gallon	1,2	1	
	Alkyl aluminum halides. See Pyrophoric liquid, n.o.s.										
A	Allethrin	ORM-A		None	173.505	173.510	No limit	No limit			
E	Allyl alcohol (*RQ-100/45.5*)	Flammable liquid	UN1098	Flammable liquid and Poison	173.118	173.119	1 quart	10 gallons	1,2	1	
	Allyl bromide	Flammable liquid	UN1099	Flammable liquid	173.118	173.119	Forbidden	10 gallons	1,2	1	
E	Allyl chloride (*RQ-1000/454*)	Flammable liquid	UN1100	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
	Allyl chlorocarbonate	Flammable liquid	UN1722	Flammable liquid	None	173.288	Forbidden	5 pints	1	5	Keep dry. Separate longitudinally by an intervening complete hold or compartment from explosives. Segregation same as for corrosive materials
	Allyl chloroformate. *See* Allyl chlorocarbonate										
	Allyl trichlorosilane	Corrosive material	UN1724	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Aluminum alkyl. *See* Pyrophoric liquid, n.o.s.										
	Aluminum bromide, anhydrous	Corrosive material	UN1725	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
	Aluminum dross, wet or hot. See 173.173	Forbidden									
	Aluminum hydride	Flammable solid	UN2463	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solid labeled Dangerous When Wet
	Aluminum, liquid. *See* Paint, Enamel, Lacquer, Stain, Shellac, Varnish, *etc.*										
	Aluminum, metallic, powder	Flammable solid	UN1396	Flammable solid	173.232	173.232	25 pounds	100 pounds	1,2	1,2	Keep dry. Segregation same as for flammable solids labeled dangerous when wet
	Aluminum nitrate	Oxidizer	UN1438	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Aluminum phosphate solution	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Aluminum phosphide	Flammable solid	UN1397	Flammable solid and Dangerous when wet	None	173.154	Forbidden	25 pounds	1,2	1,2	Stow away from acids and oxidizing materials
E	Aluminum sulfate, solid (*RQ-5000/2270*)	ORM-E	NA9078	None	None	173.510	No limit	No limit	1,2	1,2	
EA	Aluminum sulfate solution (*RQ-5000/2270*)	ORM-B	NA1760	None	173.505	173.510	25 pounds	100 pounds	1,2	1,2	
	Amatol. See High explosive										
	2-(2-Aminoethoxy) ethanol	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	N-Aminoethylpiperazine	Corrosive material	UN2815	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Aminopropyldiethanolamine	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	N-Aminopropylmorpholine	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	bis (Aminopropyl) piperazine	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
E	Ammonia, anhydrous (*RQ-100/45.4*)	Nonflammable gas	UN1005	Nonflammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	4	Stow in well ventilated space
E	Ammonia solution (*containing more than 44% ammonia*) (*RQ-1000/454*)	Nonflammable gas	UN2073	Nonflammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	4	Stow in well ventilated space
	Ammonia solution (containing 44% or less ammonia in water). See Ammonium hydroxide										
E	Ammonium acetate (*RQ-5000/2270*)	ORM-E	NA9079	None	None	173.510	No limit	No limit	1,2	1,2	
	Ammonium arsenate, solid	Poison B	UN1546	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	Stow away from alkaline corrosives
	Ammonium azide	Forbidden									
E	Ammonium benzoate (*RQ-5000/2270*)	ORM-E	NA9080	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ammonium bicarbonate (*RQ-5000/2270*)	ORM-E	NA9081	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ammonium bifluoride, solid *or* solution. *See* Ammonium hydrogen fluoride, solid *or* solution										
EA	Ammonium bisulfite, solid (*RQ-5000/2270*)	ORM-B	NA2693	None	173.505	173.510	25 pounds	100 pounds	1,2	1,2	
E	Ammonium bisulfite solution (*RQ-5000/2270*)	Corrosive material	NA2693	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	
	Ammonium bromate	Forbidden									
EA	Ammonium carbamate (*RQ-5000/2270*)	ORM-A	NA9083	None	173.505	173.510	50 pounds	No limit	1,2	1,2	Keep away from heat.
EA	Ammonium carbonate (*RQ-5000/2270*)	ORM-A	NA9084	None	173.505	173.510	50 pounds	No limit	1,2	1,2	Keep away from heat, acids, alum and salts of iron or zinc.
	Ammonium chlorate	Forbidden									
E	Ammonium chloride (*RQ-5000/2270*)	ORM-E	NA9085	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ammonium chromate (*RQ-1000/454*)	ORM-E	NA9086	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ammonium citrate (*RQ-5000/2270*)	ORM-E	NA9087	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ammonium dichromate (*ammonium bichromate*) (*RQ-1000/454*)	Oxidizer	UN1439	Oxidizer	173.153	173.154 173.235	25 pounds	100 pounds	1,2	1,2	
EA	Ammonium fluoborate (*RQ-5000/2270*)	ORM-B	NA9088	173.505	None	173.510	25 pounds	100 pounds	1,2	1,2	
EA	Ammonium fluoride (*RQ-5000/2270*)	ORM-B	UN2505	173.505	173.505	173.800	25 pounds	100 pounds	1,2	1,2	
	Ammonium fulminate	Forbidden									
E	Ammonium hydrogen fluoride, solid (*RQ-5000/2270*)	Corrosive material	UN1727	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
E	Ammonium hydrogen fluoride solution (*RQ-5000/2270*)	Corrosive material	UN2817	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	Keep dry
A	Ammonium hydrogen sulfate	ORM-B	UN2506	None	173.505	173.800	25 pounds	100 pounds			
A	Ammonium hydrosulfide solution	ORM-A	NA2683	None	173.505	173.605	10 gallons	55 gallons			
E	Ammonium hydroxide (*containing not more than 44% ammonia*) (*RQ-1000/454*)	Corrosive material	NA2672	Corrosive	173.244	173.245	2 gallons	2 gallons	1	4	
	Ammonium nitrate-carbonate mixture	Oxidizer	UN2068	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Ammonium nitrate fertilizer, *containing no more than 0.2% carbon*	Oxidizer	UN2067	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Ammonium nitrate - fuel oil mixture. See High explosive										
	Ammonium nitrate - fuel oil mixture (*Containing only prilled ammonium nitrate and fuel oil*). *See* Blasting agent, n.o.s.										
	Ammonium nitrate mixed fertilizer	Oxidizer	UN2069	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Ammonium nitrate (no organic coating)	Oxidizer	NA1942	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Ammonium nitrate (organic coating)	Oxidizer	NA1942	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Ammonium nitrate-phosphate	Oxidizer	UN2070	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Ammonium nitrate, solution (*containing not less than 15% water*). *See 173.154(a)(17) and 173.154(a)(18)*	Oxidizer	NA2426	Oxidizer							
	Ammonium nitrite	Forbidden									
E	Ammonium oxalate (*RQ-5000/2270*)	ORM-A	NA2449	None	173.505	173.510	50 pounds	200 pounds	1,2	1,2	
	Ammonium perchlorate	Oxidizer	UN1442	Oxidizer	173.153	173.239a	25 pounds	100 pounds	1,2	4	Stow away from powdered metals
	Ammonium perchlorate. *See* High explosive										
	Ammonium permanganate	Oxidizer	NA9190	Oxidizer	None	173.154	Forbidden	Forbidden	1,2	1,2	Separate from ammonium compounds and hydrogen peroxide. This material may be forbidden in water transportation by certain countries
	Ammonium picrate, dry. See High explosive										
	Ammonium picrate, wet (*with 10% or more water*)	Flammable solid	UN1310	Flammable solid	173.192		1 pound	1 pound	1	4	Stow away from heavy metals and their compounds
	Ammonium picrate, wet, with 10% or more water, over 16 ounces in one outside packaging. See High explosive										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) * Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
A	Ammonium polysulfide solution	ORM-A	UN2818	None	173.505	173.605	10 gallons	55 gallons			
EA	Ammonium silicofluoride (*RQ-1000/454*)	ORM-B	UN2854	None	173.505	173.510	25 pounds	100 pounds	1,2	1,2	
E	Ammonium sulfamate (*RQ-5000/2270*)	ORM-E	NA9089	None	None	173.510	No limit	No limit	1,2	1,2	
W	Ammonium sulfate nitrate	ORM-C	NA1477	None	173.505	173.910			1,2	1,2	Must not be accepted for transportation while hot. Separate by an intervening hold or compartment from Class A explosives. Separate from other explosives, corrosive materials, flammable solids, liquids, or gases, oxidizing materials, organic peroxides, or organic materials
E	Ammonium sulfide solution (*RQ-5000/2270*)	Flammable liquid	UN2683	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
E	Ammonium sulfite (*RQ-5000/2270*)	ORM-E	NA9090	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ammonium tartrate (*RQ-5000/2270*)	ORM-E	NA9091	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ammonium thiocyanate (*RQ-5000/2270*)	ORM-E	NA9092	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ammonium thiosulfate (*RQ-5000/2270*)	ORM-E	NA9093	None	None	173.510	No limit	No limit	1,2	1,2	
	Ammunition, chemical (containing a Poison A liquid or gas). See Chemical ammunition, nonexplosive (*containing a Poison A material*)										
	Ammunition, chemical (containing a Poison B material). See Chemical ammunition, nonexplosive (*containing a Poison B material*)										
	Ammunition, chemical (containing an irritating liquid or solid). See Chemical ammunition, nonexplosive (*containing an irritating material*)										
	Ammunition, chemical, explosive, with Poison A material	Class A explosive		Explosive A and Poison gas	None	173.59	Forbidden	Forbidden	6	5	No other cargo may be stowed in the same hold with these items
	Ammunition, chemical, explosive, with Poison B material	Class A explosive		Explosive A and Poison	None	173.59	Forbidden	Forbidden	6	5	No other cargo may be stowed in the same hold with these items
	Ammunition, chemical, explosive, with irritant	Class A explosive		Explosive A and Irritant	None	173.59	Forbidden	Forbidden	6	5	No other cargo may be stowed in the same hold with these items
	Ammunition for cannon with empty projectile	Class B explosive		Explosive B	None	173.89	Forbidden	Forbidden	1,2	5	
	Ammunition for cannon with explosive projectile	Class A explosive		Explosive A	None	173.54	Forbidden	Forbidden	6	5	
	Ammunition for cannon with gas projectile	Class A explosive		Explosive A	None	173.54	Forbidden	Forbidden	6	5	
	Ammunition for cannon with illuminating projectile	Class A explosive		Explosive A	None	173.54	Forbidden	Forbidden	6	5	
	Ammunition for cannon with incendiary projectile	Class A explosive		Explosive A	None	173.54	Forbidden	Forbidden	6	5	
	Ammunition for cannon with inert loaded projectile	Class B explosive		Explosive B	None	173.89	Forbidden	Forbidden	1,2	5	
	Ammunition for cannon without projectile	Class B explosive		Explosive B	None	173.89	Forbidden	Forbidden	1,2		5
	Ammunition for cannon with smoke projectile	Class A explosive		Explosive A	None	173.54	Forbidden	Forbidden	6	5	
	Ammunition for cannon with solid projectile	Class B explosive		Explosive B	None	173.89	Forbidden	Forbidden	1,2	5	
	Ammunition for cannon with tear gas projectile	Class A Explosive		Explosive A	None	173.54	Forbidden	Forbidden	6	5	
	Ammunition for cannon with tear gas projectile	Class B Explosive		Explosive B	None	173.89	Forbidden	Forbidden	1,2	5	
	Ammunition for small-arms with explosive projectile	Class A explosive		Explosive A	None	173.58	Forbidden	Forbidden	6	5	
	Ammunition for small-arms with incendiary projectile	Class A explosive		Explosive A	None	173.58	Forbidden	Forbidden	6	5	
	Ammunition, non-explosive. See 173.55										
	Ammunition, rocket. See Rocket ammunition with ...										
	Ammunition, small-arms. *See* Small-arms ammunition										
E	Amyl acetate (*RQ-1000/454*)	Flammable liquid	UN1104	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	Amyl acid phosphate	Corrosive material	UN2819	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Amylamine	Flammable liquid	UN1106	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Amyl chloride	Flammable liquid	UN1107	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Amylene, *normal*	Flammable liquid	UN1108	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	1,3	
	Amyl formate	Flammable liquid	UN1109	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Amyl mercaptan	Flammable liquid	UN1111	Flammable liquid	None	173.141	Forbidden	10 gallons	1,2	1	
	Amyl nitrite	Flammable liquid	UN1113	Flammable liquid	173.118	173.119	1 quart	10gallons	1,3	4	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	tert-Amyl peroxy-2-ethylhexanoate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2898								
	tert-Amyl peroxyneodecanoate, *not more than 75% with phlegmatizer. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2891								
	Amyl trichorosilane	Corrosive material	UN1728	Corrosive	None	173.280	Forbidden	10 gallons	1	5	Keep dry
E	Anhydrous ammonia. *See* Ammonia, anhydrous										
	Anhydrous hydrazine. *See* Hydrazine, anhydrous										
E	Anhydrous hydrofluoric acid. *See* Hydrogen fluoride										
	Aniline oil drum, empty *See 173.347(d)*	Poison B							1,2	1	Do not accept unless returnable package notice is on drum and the instructions thereon have been carried out
+E	Aniline oil, liquid (*RQ-1000/454*)	Poison B	UN1547	Poison	None	173.347	Forbidden	55 gallons	1,2	1,2	Stow away from oxidizing materials and acids
	Anisoyl chloride	Corrosive material	UN1729	Corrosive	173.244	173.279	1 quart	1 quart	1	1	Keep dry
	Antifreeze compound, liquid	Flammable liquid	NA1142	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Antifreeze compound, liquid	Combustible liquid	NA1142	None	173.118a	None	No limit	No limit	1,2	1,2	
	Antifreeze preparation, liquid	Flammable liquid	NA1142	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Antifreeze preparation, liquid	Combustible liquid	NA1142	None	173.118a	None	No limit	No limit	1,2	1,2	
E	Antimonous chloride. *See* Antimony trichloride										
A	Antimony lactate, solid	ORM-A	UN1550	None	173.505	173.510	No limit	No limit			
E	Antimony pentachloride (*RQ-1000/454*)	Corrosive material	UN1730	Corrosive	None	173.247	1 quart	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
E	Antimony pentachloride solution (*RQ-1000/454*)	Corrosive material	UN1731	Corrosive	173.244	173.245	1 quart	5 pints	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Antimony pentafluoride	Corrosive material	UN1732	Corrosive	None	173.246	Forbidden	25 pounds	1	5	Keep dry
EA	Antimony potassium tartrate, solid (*RQ-1000/454*)	ORM-A	UN1551	None	173.505	173.510	No limit	No limit	1,2	1,2	
	Antimony sulfide and a chlorate, mixtures of	Forbidden									
A	Antimony sulfide, solid	ORM-A	NA1325	None	173.505	173.510	No limit	No limit			
E	Antimony tribromide, solid (*RQ-1000/454*)	Corrosive material	NA1549	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry.
E	Antimony tribromide solution (*RQ-1000/454*)	Corrosive material	NA1549	Corrosive	173.244	173.245	1 quart	5 pints	1	1	Keep dry.
E	Antimony trichloride, solid (*RQ-1000/454*)	Corrosive material	UN1733	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
E	Antimony trichloride solution (*RQ-1000/454*)	Corrosive material	UN1733	Corrosive	173.244	173.245	1 quart	5 pints	1	1	Keep dry
E	Antimony trifluoride, solid (*RQ-1000/454*)	Corrosive material	NA1549	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry.
E	Antimony trifluoride solution (*RQ-1000/454*)	Corrosive material	NA1549	Corrosive	173.244	173.245	1 quart	5 pints	1	1	Keep dry.
E	Antimony trioxide (*RQ-5000/2270*)	ORM-E	NA9201	None	None	173.510	No limit	No limit	1,2	1,2	
E	Aqua ammonia solution *(containing 44% or less ammonia). See* Ammonium hydroxide										
	Argon	Nonflammable gas	UN1006	Nonflammable gas	173.306	173.302 173.314	150 pounds	300 pounds	1,2	1,3	
	Argon, liquid pressurized	Nonflammable gas	UN1951	Nonflammable gas	None	173.304	Forbidden	300 pounds	1,3	1,3	
	Arsenic acid, solid	Poison B	UN1554	Poison	173.364	173.366	50 pounds	200 pounds	1,2	1,2	
	Arsenic acid solution	Poison B	UN1553	Poison	173.345	173.348	1 quart	55 gallons	1,2	1,2	
	Arsenical compound, liquid, n.o.s., *or* Arsenical mixture, liquid, n.o.s.	Poison B	UN1556	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Arsenical compound, solid, n.o.s., *or* Arsenical mixture, solid, n.o.s.	Poison B	UN1557	Poison	173.364	173.367	50 pounds	200 pounds	1,2	1,2	Keep dry
	Arsenical dip, liquid *(sheep dip)*	Poison B	NA1557	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Arsenical dust	Poison B	UN1562	Poison	173.364	173.368	50 pounds	200 pounds	1,2	1,2	
	Arsenical pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2760	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Arsenical pesticide (*compounds and preparations*), liquid	Poison B	UN2759	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Arsenical pesticide (*compounds and preparations*), solid	Poison B	UN2759	Poison	173.364	173.367	50 pounds	200 pounds	1,2	1,2	
	Arsenic bromide, solid	Poison B	UN1555	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Arsenic chloride *(arsenious)* liquid. *See* Arsenic trichloride										
E	Arsenic disulfide. *See* Arsenic sulfide, solid										
	Arsenic iodide, solid	Poison B	NA1557	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Arsenic pentoxide, solid (*RQ-5000/2270*)	Poison B	UN1559	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Arsenic, solid	Poison B	UN1558	Poison	173.364	173.366	50 pounds	200 pounds	1,2	1,2	
	Arsenic sulfide and a chlorate, mixtures of	Forbidden									
E	Arsenic sulfide, solid (*RQ-5000/2270*)	Poison B	NA1557	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	Keep dry
E	Arsenic trichloride, liquid (*RQ-5000/2270*)	Poison B	UN1560	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
E	Arsenic trioxide, solid (*RQ-5000/2270*)	Poison B	UN1561	Poison	173.364	173.366 173.368	50 pounds	200 pounds	1,2	1,2	
E	Arsenic trisulfide (*RQ-5000/2270*)	Poison B	NA1557	Poison	173.364	173.365	50 pounds	200 pounds	2	2	
E	Arsenic, white, solid. *See* Arsenic trioxide, solid										
E	Arsenious acid, solid. *See* Arsenic trioxide, solid										
	Arsenious and mercuric iodide solution	Poison B	NA2810	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Arsine	Poison A	UN2188	Poison gas and Flammable gas	None	173.328	Forbidden	Forbidden	1	5	
	Asbestos	ORM-C		None	173.1090	173.1090	No limit	No limit	1,2	1,2	Stow and handle to avoid airborne particles.
	Ascaridole (organic peroxide)	Forbidden									
W	Asphalt, *at or above its flashpoint*	ORM-C	NA1999	None	None	None	Forbidden	Forbidden	1	5	When applicable, no fire or residue thereof may be present in the furnace heating the substance while the vehicle is on board a cargo vehicle
	Asphalt, cut back	Flammable liquid	NA1999	Flammable liquid	173.118	173.131	1 quart	10 gallons	1,2	1	
	Asphalt, cut back	Combustible liquid	NA1999	None	173.118a	None	No limit	No limit	1,2	1,2	
	Automobile, motorcycle, tractor, or other self-propelled vehicle. See Motor vehicle										
	Automobile, motorcycle, tractor, or other self-propelled vehicle, engine, or other mechanical apparatus, with charged electric storage battery, wet. See Motor vehicle										
	Azaurolic acid (salt of). (dry)	Forbidden									
	3-Azido-1,2-Propylene glycol dinitrate	Forbidden									
	5-Azido-1-hydroxy tetrazole	Forbidden									
	Azidodithiocarbonic acid	Forbidden									
	Azidoethyl nitrate	Forbidden									
	Azido guanidine picrate (dry)	Forbidden									
	Azido hydroxy tetrazole (mercury and silver salts)	Forbidden									
E	Azinphos methyl (*RQ-1/0.454*)	Poison B	NA2783	Poison	173.364	173.365	50 pounds	200 pounds	1,2	4	
	1-Aziridinyl phosphine oxide (tris). *See* Tris-(1-aziridinyl) phosphine oxide										
	Azotetrazole (dry)	Forbidden									
	Bags, burlap, used, must be classed for the hazardous material previously contained in bag. See 173.28, 173.29										
	Bags, sodium nitrate, empty and unwashed	Flammable solid	UN1359	Flammable solid	None	173.155	Forbidden	25 pounds	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Barium azide, wet, *50% or more water*	Flammable solid	UN1571	Flammable solid	None	173.239	Forbiddenn	1 pound	1,2	1,2	Stow away from heavy metals
	Barium chlorate	Oxidizer	UN1445	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds. Stow away from powdered metals
	Barium chlorate, wet	Oxidizer	NA1445	Oxidizer	173.153	173.163	25 pounds	200 pounds	1,2	1,2	Separate from ammonium compounds. Stow away from powdered metals
E	Barium cyanide, solid (*RQ-10/4.54*)	Poison B	UN1565	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
	Barium nitrate	Oxidizer	UN1446	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
A	Barium oxide	ORM-B	UN1884	None	173.505	173.800	25 pounds	100 pounds			
	Barium perchlorate	Oxidizer	UN1447	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Stow away from powdered metals
	Barium permanganate	Oxidizer	UN1448	Oxidizer	173.153	172.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and hydrogen peroxide
	Barium peroxide	Oxidizer	UN1449	Oxidizer	173.153	173.156	25 pounds	100 pounds	1,2	1,2	Keep dry
	Barrel, empty. *See* Drum, empty										
	Battery charger with electrolyte (acid) *or* alkaline battery fluid	Corrosive material	NA2794	Corrosive	None	173.259	Forbidden	5 pints	1,2	1,2	
	Battery, dry. Not subject to Parts 170-189 of this subchapter										
	Battery, electric storage, wet	Corrosive material	NA2794	Corrosive	173.260	173.260	Forbidden	No limit	1,2	1,2	
	Battery, electric storage, wet, with automobile, auto parts, engine (*or other specifically named mechanical apparatus*)	Corrosive material	NA2794	Corrosive	173.250	173.260	No limit	No limit	1,2	1,2	Keep dry
	Battery, electric storage, wet, with containers of electrolyte (acid) *or* alkaline battery fluid	Corrosive material	NA2794	Corrosive	None	173.258	Forbidden	2 gallons	1,2	1,2	
	Battery fluid. See Electrolyte (acid) *or* Alkaline battery fluid										
	Battery, lithium. See 173.206(f)										
W	Battery parts *(plates, grids, etc. unwashed, exhausted)*	ORM-C		None	173.505	173.915			1,2	4	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Benzaldehyde	Combustible liquid	UN1989	None	173.118a	None	No limit	No limit	1,2	1,2	
E	Benzene (*benzol*) (*RQ-1000/454*)	Flammable liquid	UN1114	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Benzene diazonium chloride (dry)	Forbidden									
	Benzene diazonium nitrate (dry)	Forbidden									
	Benzene phosphorus dichloride	Corrosive material	UN2798	Corrosive	None	173.250a	Forbidden	5 pints	4	5	
	Benzene phosphorus thiodichloride	Corrosive material	UN2799	Corrosive	None	173.250a	Forbidden	5 pints	1	5	
	Benzene triozonide	Forbidden									
	Benzidine	Poison B	UN1885	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1	
	Benzine	Flammable liquid	UN1115	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	Benzoic acid (*RQ-5000/2270*)	ORM-E	NA9094	None	None	173.510	No limit	No limit	1,2	1,2	
	Benzoic derivative pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2770	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Benzoic derivative pesticide (*compounds and preparations*), liquid	Poison B	UN2769	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Benzoic derivative pesticide (*compounds and preparations*), solid	Poison B	UN2769	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Benzonitrile (*RQ-1000/454*)	Combustible liquid	UN2224	None	173.118b	None	No limit	No limit	1,2	1,2	
	Benzoxidiazoles (dry)	Forbidden									
	Benzoyl azide	Forbidden									
E	Benzoyl chloride(*RQ-1000/454*)	Corrosive material	UN1736	Corrosive	173.244	173.247	1 quart	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Benzoyl peroxide	Organic peroxide	NA2085	Organic peroxide	None	173.157 173.158	Forbidden	25 pounds	1,2	1	
	Benzoyl peroxide, *more than 77% but less than 95% with water. See* Benzoyl peroxide.		UN2088								
	Benzoyl peroxide, *not less than 30% but not more than 52% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2089								
	Benzoyl peroxide, *not more than 72% as a paste. See* Organic peroxide, solid, n.o.s.		UN2087								
	Benzoyl peroxide, *not more than 77% with water. See* Benzoyl peroxide.		UN2090								
	Benzoyl peroxide, *technically pure or* Benzoyl peroxide, *more than 52% with inert solid. See* Benzoyl peroxide.		UN2085								
	Benzyl bromide (*bromotoluene, alpha*)	Corrosive material	UN1737	Corrosive	None	173.281	Forbidden	5 pints	1	5	Keep dry
E	Benzyl chloride (*RQ-100/45.4*)	Corrosive material	UN1738	Corrosive	173.244	173.295	Forbidden	1 quart	1	4	Keep dry
	Benzyl chloroformate (*benzyl chlorocarbonate*)	Corrosive	UN1739	Corrosive	None	173.288	Forbidden	5 pints	1	5	Keep dry
E	Beryllium chloride (*RQ-5000/2270*)	Poison B	NA1566	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Beryllium compound, n.o.s.	Poison B	UN1566	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Beryllium fluoride (*RQ-5000/2270*)	Poison B	NA1566	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Beryllium nitrate (*RQ-5000/2270*)	Oxidizer	UN2464	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Biphenyl triozonide	Forbidden									
	Bipyridilium pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2782	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Bipyridilium pesticide (*compounds and preparations*), liquid	Poison B	UN2781	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Bipyridilium pesticide (*compounds and preparations*), solid	Poison B	UN2781	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Black powder	Class A explosive		Explosive A	None	173.60	Forbidden	Forbidden	6	5	
	Black powder igniter with empty cartridge bag	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Blasting agent, n.o.s.	Blasting agent		Blasting agent	None	173.114a	Forbidden	100 pounds	1,2	1,2	
	Blasting caps. See Detonators, Class A *or* Class C explosives										
	Blasting caps, electric. See Detonators, Class A *or* Class C explosives										
	Blasting caps, percussion activated. See Detonators, Class A *or* Class C explosives										
	Blasting caps with detonating cord. See Detonators *and* Detonating primers										
	Blasting caps with metal clad mild detonating fuze. See Detonators, Class A *or* Class C explosives										
	Blasting caps with safety fuse. See Detonators, Class A *or* Class C explosives										
	Blasting caps with shock tubes. See Detonators, Class A *or* Class C explosives										
	Blasting gelatin. See High explosive										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Blasting powder. See Black powder										
W	Bleaching powder, *containing 39% or less available chlorine*	ORM-C	UN2208	None	173.505	173.920			1,2	1,2	Keep dry. Stow separate from flammable liquids and acids. (Stow away from oils, grease, and similar organic materials.
	Boiler compound, liquid	Corrosive material	NA1760	Corrosive	173.244	173.249	1 quart	10 gallons	1,2	1,2	
	Bomb, explosive. See Explosive bomb										
	Bomb, explosive with gas, smoke, or incendiary material. See Explosive bomb										
	Bomb, fireworks. See Fireworks, special										
	Bomb, gas, smoke, or incendiary, nonexplosive. See Chemical ammunition, nonexplosive										
	Bomb, incendiary, or smoke without bursting charge. See Fireworks, special										
	Bomb, practice, with electric primer or electric squib (non-explosive). See 173.55										
	Bomb, sand-loaded or empty (non-explosive). See 173.55										
A	Bone oil	ORM-A		None	173.505	173.510	No limit	No limit			
	Booster, explosive	Class A explosive		Explosive A	None	173.69	Forbidden	Forbidden	6	5	
	Bordeaux arsenite, liquid	Poison B	NA2759	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Bordeaux arsenite, solid	Poison B	NA2759	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Boron tribromide	Corrosive material	UN2692	Corrosive	None	173.251	Forbidden	1 quart	1	5	
	Boron trichloride	Corrosive material	UN1741	Corrosive	None	173.251	Fobidden	1 quart	1,2	5	Stow in well ventilated space. Shade from radiant heat. Segregation same as for nonflammable gases.
+	Boron trifluoride	Nonflammable gas	UN1008	Nonflammable gas and Poison	None	173.302	Forbidden	Forbidden	1	5	Stow away from living quarters and foodstuffs
	Boron trifluoride-acetic acid complex	Corrosive material	UN1742	Corrosive	173.244	173.247	1 quart	1 gallon	1,2	1,2	
	Bottles, having previously contained a hazardous material and not cleaned. See 173.29										
W	Box toe board (*nitrocellulose base*)	ORM-C		None	173.505	173.925			1,3	1,3	Provide cool stowage in a compartment having a temperature not exceeding 130 deg F., well away from any sources of heat, and in position to protect or move, even to jettison in event of fire. Separate from explosives, flammable liquids or gases, oxidizing materials, organic peroxides, or corrosive liquids.
	Box toe gum	Combustible liquid	UN2060	None	173.118a	None	No limit	No limit	1,2	1,2	
	Box toe gum	Flammable liquid	UN2059	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Bromine	Corrosive material	UN1744	Corrosive	None	173.252	Forbidden	1 quart	1	5	Keep cool
	Bromine azide	Forbidden									
	Bromine pentafluoride	Oxidizer	UN1745	Oxidizer	None	173.246	Forbidden	100 pounds	1	5	Shade from radiant heat. Segregation same as for corrosives
	Bromine trifluoride	Oxidizer	UN1746	Oxidizer and Poison	None	173.246	Forbidden	100 pounds	1	5	Shade from radiant heat. Segregation same as for corrosives
	4-Bromo-1,2-dinitrobenzene (unstable at 59 deg C.)	Forbidden									
	1-Bromo-2-nitrobenzene (unstable at 59 deg C.)	Forbidden									
	Bromoacetic acid, solid	Corrosive material	UN1938	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
	Bromoacetic acid solution	Corrosive material	UN1938	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	Glass carboys in hampers not permited under deck
	Bromoacetone, liquid	Poison A	UN1569	Poison gas	None	173.329	Forbidden	Forbidden	1	5	Segregation same as for flammable liquids
	Bromobenzene	Combustible liquid	UN2514	None	173.118a	None	No limit	No limit	1,2	1,2	
A	Bromochloromethane	ORM-A	UN1887	None	173.505	173.605	10 gallons	55 gallons			
	Bromosilane	Forbidden									
	Bromotoluene, alpha. See Benzyl bromide										
	Brucine, solid (*dimethoxy strychnine*)	Poison B	UN1570	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
W	Burlap bags, cleaned (*vacuum cleaned, wheel cleaned, or otherwise mechanically brushed). See* Burlap cloth										
W	Burlap bags, new. *See* Burlap cloth										
AW	Burlap bags, used and unwashed, *or* not cleaned	ORM-C		None	173.505	173.930	No limit	No limit	1	1	Keep cool
W	Burlap cloth (*hessian*)	ORM-C		None	173.505	173.931			1,2	1,2	Keep dry. Stow away from organic liquids
	Burnt cotton, not repicked	Flammable solid	NA1325	Flammable solid	None	173.159	Forbidden	Forbidden	1	5	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Burnt fiber	Flammable solid	NA1372	Flammable solid	None	173.169	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials or organic peroxides.

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Burster, explosive	Class A explosive		Explosive A	None	173.69	Forbidden	Forbidden	6	5	
+	Butadiene, inhibited	Flammable gas	UN1010	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	1	Stow away from living quarters
	Butane *or* Liquefied petroleum gas. *See* Liquefied petroleum gas										
	1,2,4-Butanetriol trinitrate	Forbidden									
	tert-Butoxycarbonyl azide	Forbidden									
	n-Butyl-4,4-di-(tert-butylperoxy)valerate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2140								
	n-Butyl-4,4-di-(tert-butylperoxy)valerate, *not more than 52% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2141								
E	Butyl acetate (*RQ-5000/2270*)	Flammable liquid	UN1123	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	n-Butyl acid phosphate. *See* Acid butyl phosphate										
	Butyl alcohol	Flammable liquid	NA1120	Flammable liquid	173.118	173.125	1 quart	10 gallons	1,2	1	
E	Butylamine (*RQ-1000/454*)	Flammable liquid	UN1125	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Butyl bromide, *normal*	Flammable liquid	UN1126	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Butyl chloride	Flammable liquid	UN1127	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	tert-Butyl cumyl peroxide, *technically pure or* tert-Butyl cumene peroxide, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2091								
	Butyl ether	Flammable liquid	UN1149	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	Butyl formate	Flammable liquid	UN1128	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	tert-Butyl hydroperoxide, *more than 72% but not more than 90% with water. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2094								
	tert-Butyl hydroperoxide, *not more than 72% with water. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2093								
	tert-Butyl hydroperoxide, *not more than 80% in di-tert-butyl peroxide and solvent. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2092								
	tert-Butyl hydroperoxide, *not more than 80% in di-tert-butyl peroxide or solvent. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2092								
	tert-Butyl hydroperoxide, more than 90% with water	Forbidden									
	n-Butyl isocyanate	Flammable liquid	UN2485	Flammable liquid and Poison	173.118	173.119	1 quart	10 gallons	1,2	1	
	tert-Butyl isopropyl benzene hydroperoxide	Organic peroxide	NA2091	Organic peroxide	173.153	173.224	1 quart	1 quart	1,2	4	
	Butyl mercaptan	Flammable liquid	UN2347	Flammable liquid	None	173.141	Forbidden	10 gallons	1,3	5	
	tert-Butyl peroxy-2-ethylhexanoate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2143								
	tert-Butyl peroxy-2-ethylhexanoate, *not more than 30%* with 2,2-Di-(tert-butylperoxy)butane, *not more than 35%, with not less than 35% phlegmatizer. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2886								
	tert-Butyl peroxy-2-ethylhexanoate, *not more than 12%* with 2,2-Di-(tert-butylperoxy)butane, *not more than 14% with not less than 14% phlegmatizer and 60% inert inorganic solid. See* Organic peroxide, solid, n.o.s.		UN2887								
	tert-Butyl peroxy-2-ethylhexanoate, *not more than 50% with phlegmatizer. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2888								
	tert-Butyl peroxy-3,5,5-trimethylhexanoate *or* tert-Butyl peroxyisononanoate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2104								
	3-tert-Butyl peroxy-3-phenylphthalide, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2596								

§172.101 Hazardous Materials Table (cont'd)

(1) +/E/A/W	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class	(3A) Identification number	(4) Label(s) required (if not excepted)	(5) Packaging (a) Exceptions	(5) Packaging (b) Specific requirements	(6) Maximum net quantity in one package (a) Passenger carrying aircraft or railcar	(6) Maximum net quantity in one package (b) Cargo only aircraft	(7) Water shipments (a) Cargo vessel	(7) Water shipments (b) Passenger vessel	(7) Water shipments (c) Other requirements
	tert-Butyl peroxyacetate, *not more than 76% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2095								
	tert-Butyl peroxyacetate, *not more than 52% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2096								
	tert-Butyl peroxyacetate, more than 76% in solution	Forbidden									
	tert-Butyl peroxybenzoate, *not more than 75% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2098								
	tert-Butyl peroxybenzoate, *not more than 50% with inert inorganic solid. See* Organic peroxide, solid, n.o.s.		UN2890								
	tert-Butyl peroxybenzoate, *technically pure or* tert-Butyl peroxybenzoate, *more than 75% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2097								
	tert-Butyl peroxycrotonate, *not more than 76% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2183								
	n-Butyl peroxydicarbonate, *not more than 52% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2169								
	n-Butyl peroxydicarbonate, *not more than 27% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2170								
	n-Butyl peroxydicarbonate, more than 52% in solution	Forbidden									
	tert-Butyl peroxydiethylacetate, *33%* with tert-Butyl peroxybenzoate, *33%, and solvent. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2551								
	tert-Butyl peroxydiethylacetate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2144								
	tert-Butyl peroxyisobutyrate, *more than 52% but not more than 77% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2142								
	tert-Butyl peroxyisobutyrate, *not more than 52% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2562								
	tert-Butyl peroxyisobutyrate, more than 77% in solution	Forbidden									
	tert-Butyl peroxyisopropyl carbonate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2103								
	tert-Butyl peroxymaleate, *not more than 55% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2100								
	tert-Butyl peroxymaleate, *not more than 55% as a paste. See* Organic peroxide, solid, n.o.s.		UN2101								
	tert-Butyl peroxymaleate, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2099								
	tert-Butyl peroxyneodecanoate, *not more than 77% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2177								
	tert-Butyl peroxyneodecanoate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2594								
	tert-Butyl peroxyphthalate, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2105								
	tert-Butyl peroxypivalate, *not more than 77% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2110								
	Butyl phosphoric acid. *See* Acid butyl phosphate										
E	n-Butyl phthalate (*RQ-100/45.4*)	ORM-E	NA9095	None	None	173.510	No limit	No limit	1,2	1,2	
	Butyl trichlorosilane	Corrosive material	UN1747	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Butyraldehyde	Flammable liquid	UN1129	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	Butyric acid (*RQ-5000/2270*)	Corrosive material	UN2820	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Cabazide	Forbidden									
E	Cadmium acetate (*RQ-100/45.4*)	ORM-E	NA2570	None	None	173.510	No limit	No limit	1,2	1,2	
E	Cadmium bromide (*RQ-100/45.4*)	ORM-E	NA2570	None	None	173.510	No limit	No limit	1,2	1,2	
E	Cadmium chloride (*RQ-100/45.4*)	ORM-E	NA2570	None	None	173.510	No limit	No limit	1,2	1,2	
E	Calcium arsenate, solid (*RQ-1000/454*)	Poison B	UN1573	Poison	173.364	173.367 173.368	50 pounds	200 pounds	1,2	1,2	If stowed under deck, must be stowed in a recoverable location.
E	Calcium arsenite, solid (*RQ-1000/454*)	Poison B	NA1574	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Calcium bisulfite solution. *See* Calcium hydrogen sulfite solution										
E	Calcium carbide (*RQ-5000/2270*)	Flammable solid	UN1402	Flammable solid and Dangerous when wet	None	173.178	Forbidden	25 pounds	1,2	1,2	Keep dry. Stow away from copper, its alloys, and salts
	Calcium chlorate	Oxidizer	UN1452	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds. Stow away from powdered metals and cyanide
	Calcium chlorite	Oxidizer	UN1453	Oxidizer	None	173.160	Forbidden	100 pounds	1,2	1,2	Separate from ammonium compounds, powdered materials, and cyanides
E	Calcium chromate (*RQ-1000/454*)	ORM-E	NA9096	None	None	173.510	No limit	No limit	1,2	1,2	
AW	Calcium cyanamide, not hydrated (*containing more than 0.1% calcium carbide*)	ORM-C	UN1403	None	None	173.945	25 pounds	200 pounds	1,2	1,2	Segregation same as for flammable solids labeled Dangerous When Wet
E	Calcium cyanide, solid *or* Calcium cyanide mixture, solid (*RQ-10/4.54*)	Poison B	UN1575	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from corrosive liquids. Keep dry
E	Calcium dodecylbenzenesulfonate (*RQ-1000/454*)	ORM-E	NA9097	None	None	173.510	No limit	No limit	1,2	1,2	
	Calcium hydrogen sulfite solution	Corrosive material	NA2693	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	
E	Calcium hypochlorite, hydrated (*minimum 5.5% but not more than 10% water, and containing more than 39% available chlorine*) (*RQ-100/45.4*)	Oxidizer	UN2880	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,2	1,2	
E	Calcium hypochlorite mixture, *dry. (Containing more than 39% available chlorine)* (*RQ-100/45.4*)	Oxidizer	UN1748	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,2	1,2	Keep cool and dry
	Calcium, metal	Flammable solid	NA1401	Flammable solid and Dangerous when wet	173.153	173.154	25 pounds	100 pounds	1,2	4	Keep cool and dry. Segregation same as for flammable solids labeled Dangerous When Wet
	Calcium, metal, crystalline	Flammable solid	NA1401	Flammable solid and Dangerous when wet	None	173.231	Forbidden	25 pounds	1,2	5	Keep cool and dry. Segregation same as for flammable solids labeled Dangerous When Wet
	Calcium nitrate (*See 173.182(a) Note*)	Oxidizer	UN1454	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
AW	Calcium oxide	ORM-B	UN1910	None	173.505	173.850	25 pounds	100 pounds	1,2	1,2	Keep dry. Stow away from explosives, acids, combustible materials, and ammonium salts
	Calcium permanganate	Oxidizer	UN1456	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and hydrogen peroxide
	Calcium peroxide	Oxidizer	UN1457	Oxidizer	173.153	173.156	25 pounds	100 pounds	1,2	1,2	Keep dry
	Calcium phosphide	Flammable solid	UN1360	Flammable solid and Dangerous when wet	None	173.161	Forbidden	25 pounds	1	5	Keep cool and dry. Segregation same as for flammable solids labeled Dangerous When Wet
	Calcium resinate	Flammable solid	UN1313	Flammable solid	None	173.166	Forbidden	125 pounds	1	5	
	Calcium resinate, fused	Flammable solid	UN1314	Flammable solid	None	173.166	Forbidden	125 pounds	1	5	
AW	Camphene	ORM-A	NA9011	None	173.505	173.610	No limit	No limit	1,3	1,3	Stow away from foodstuffs and living quarters
	Camphor oil	Combustible liquid	UN1130	None	173.118a	None	No limit	No limit	1,2	1,2	
	Cannon primer	Class C explosive		None	None	173.107	50 pounds	150 pounds	1,3	5	
	Caprylyl peroxide solution	Organic peroxide	NA2129	Organic peroxide	173.153	173.221	1 quart	1 quart	1,2	4	Keep cool. Stow separate from combustible materials, explosives, or acids
	Caps, blasting. See Detonators, Class A *or* Class C explosives										
	Caps, toy. See Toy caps										
E	Captan (*RQ-10/4.54*)	ORM-E	NA9099	None	None	173.510	100 pounds	No limit	1,2	1,2	
	Carbamate pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2758	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Carbamate pesticide (*compounds and preparations*), liquid	Poison B	UN2757	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Carbamate pesticide (*compounds and preparations*), solid	Poison B	UN2757	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
EA	Carbaryl (*RQ-100/45.4*)	ORM-A	NA2757	None	173.505	173.510	No limit	No limit	1,2	1,2	
E	Carbofuran (*RQ-10/4.54*)	Poison B	NA2757	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+E	Carbolic acid. *See* Phenol										
E	Carbolic acid, liquid (*liquid tar acid containing over 50% phenol*). *See* Phenol, liquid										
E	Carbon bisulfide, *or* Carbon disulfide (*RQ-5000/2270*)	Flammable liquid	UN1131	Flammable liquid	None	173.121	Forbidden	Forbidden	1	5	Keep cool. Not permitted on any vessel transporting explosives
	Carbon dioxide, liquefied	Nonflammable gas	UN2187	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	
	Carbon dioxide-nitrous oxide mixture	Nonflammable gas	UN1015	Nonflammable gas	173.306	173..304	150 pounds	300 pounds	1,2	1,2	
	Carbon dioxide-oxygen mixture	Nonflammable gas	UN1014	Nonflammable gas	173.306	173.304	150 pounds	300 pounds	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
AW	Carbon dioxide, solid, *or* Dry ice, *or* Carbonice	ORM-A	UN1845	None	None	173.615	440 pounds	440 pounds	1	1	Stow away from open ventilators. Stow away from cyanides or cyanide mixtures, liquid or dry
+	Carbon monoxide	Flammable gas	UN1016	Flammable gas	173.306	173.302	Forbidden	150 pounds	1	4	
	Carbon remover, liquid	Flammable liquid	UN1132	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
EAW	Carbon tetrachloride (*RQ-5000/2270*)	ORM-A	UN1846	None	173.505	173.620	1 quart	55 gallons	1,2	1,2	Stow away from living quarters
	Carbonyl chloride. See Phosgene										
	Carboys, empty, must be classed for the hazardous material previously contained in carboy. See 173.29										
	Cartridge bags, empty, with black powder igniter	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Cartridge cases, empty, primed	Class C explosive		None	None	173.107	50 pounds	150 pounds	1,3	1,3	
	Cartridge, practice ammunition	Class C explosive		Explosive C	None	173.101a	50 pounds	150 pounds	1,2	1,2	
	Case oil. See Gasoline *or* Naptha										
	Casinghead gasoline. See Gasoline										
W	Castor Beans	ORM-C		None	173.505	173.952			1,2	1,2	Stow away from living quarters and foodstuffs. Bulk shipments permitted in tight vans or containers only on cargo vessels (Castor beans only)
W	Castor pomace. *See* Castor beans										
E	Caustic, potash, dry, solid, flake, bead, *or* granular. *See* Potassium hydroxide, dry, *etc.*										
E	Caustic potash, liquid *or* solution. *See* Potassium hydroxide solution										
E	Caustic soda, dry, solid, flake, bead, *or* granular. *See* Sodium hydroxide, dry, *etc.*										
E	Caustic soda, liquid *or* solution. *See* Sodium hydroxide solution										
W	*Cellosolve. See* Ethylene glycol monoethyl ether										
W	*Cellosolve acetate. See* Ethylene glycol monoethyl ether acetate										
	Cement, adhesive, n.o.s. *See* Cement, liquid, n.o.s.										
	Cement, container, linoleum, tile, *or* wallboard, liquid	Flammable liquid	NA1133	Flammable liquid	173.118	173.132	1 quart	15 gallons	1,2	1	
	Cement, leather	Flammable liquid	NA1133	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Cement, liquid, n.o.s.	Combustible liquid	NA1133	None	173.118a	None	No limit	No limit	1,2	1,2	
	Cement, liquid, n.o.s.	Flammable liquid	NA1133	Flammable liquid	173.118	173.132	1 quart	10 gallons	1,2	1	
	Cement, pyroxylin	Flammable liquid	NA1133	Flammable liquid	173.118	173.132	1 quart	15 gallons	1,2	1	
	Cement, roofing, liquid	Flammable liquid	NA1133	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Cement, rubber	Flammable liquid	NA1133	Flammable liquid	173.118	173.132	1 quart	15 gallons	1,2	1	
	Cesium metal	Flammable solid	UN1407	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Charcoal, activated	Flammable solid	UN1362	Flammable solid	173.162	173.162	25 pounds	200 pounds	1,3	1,3	
	Charcoal briquettes *or* briquets	Flammable solid	NA1361	Flammable solid	173.162	173.162	50 pounds	50 pounds	1,2	1,2	
	Charcoal screenings, made from 'pinon' wood	Flammable solid	NA1361	Flammable solid	173.162	173.162	25 pounds	200 pounds	1,2	1,	
	Charcoal screenings, wet	Forbidden									
	Charcoal, shell	Flammable solid	NA1361	Flammable solid	173.162	173.162	25 pounds	200 pounds	1,2	1,2	
	Charcoal, wet	Forbidden									
	Charcoal, wood, ground, crushed, granulated, *or* pulverized	Flammable solid	NA1361	Flammable solid	173.162	173.162	25 pounds	200 pounds	1,2	1,2	
	Charcoal, wood, lump	Flammable solid	NA1361	Flammable solid	173.162	173.162	50 pounds	50 pounds	1,2	1,2	
	Charcoal wood screenings, other than 'pinon' wood screenings	Flammable solid	NA1361	Flammable solid	None	173.162	Forbidden	Forbidden	1	1	
	Charged oil well jet perforating gun (*total explosive contents in guns 20 pounds or more per motor vehicle*)	Class A explosive		Explosive A	None	173.53 173.80	Forbidden	Forbidden			Forbidden
	Charged oil well jet perforating gun (*total explosive contents in guns not exceeding 20 pounds per motor vehicle or special offshore down hole tool pallet*)	Class C explosive		Explosive C	None	173.53 173.110	Forbidden	Forbidden	1,2	5	Forbidden

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Chemical ammunition, explosive. See Ammunition, chemical, explosive, with ...										
	Chemical ammunition, nonexplosive (*containing a Poison B material*)	Poison B	UN2016	Poison	173.345	173.350	Forbidden	55 gallons			See correct shipping name of applicable Poison B material for stowage, special handling, and special segregation requirements
	Chemical ammunition, nonexplosive (*containing an irritating material*)	Irritating material	UN2017	Irritant	None	173.383	Forbidden	20 pounds			See correct shipping name of applicable Irritant material for stowage, special handling, and special segregation requirements
	Chemical ammunition, nonexplosive (*containing a Poison A material*)	Poison A	UN2016	Poison gas	None	173.330	Forbidden	Forbidden			See correct shipping name of applicable Poison A material for stowage, special handling, and special segregation requirements
	Chemical kit	Corrosive material	NA1760	Corrosive	173.286		1 quart	1 quart	1,3	1,3	
	Chlorate and borate mixture (*containing more than 28% chlorate*)	Oxidizer	UN1458	Oxidizer	173.153	173.229	25 pounds	100 pounds	1,2	4	Stow away from ammonium compounds and away from powdered metals
	Chlorate and magnesium chloride mixture (*containing more than 28% chlorate*)	Oxidizer	UN1459	Oxidizer	173.153	173.229	25 pounds	100 pounds	1,2	4	Stow away from ammonium compounds, and away from powdered metals
	Chlorate explosive, dry. See High explosive										
	Chlorate, n.o.s.	Oxidizer	UN1461	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	4	Stow away from ammonium compounds and away from powdered metals
	Chlorate, n.o.s., wet	Oxidizer	NA1461	Oxidizer	173.153	173.163	25 pounds	200 pounds	1,2	4	Stow away from ammonium compounds and away from powdered metals
	Chlorate of potash. *See* Potassium chlorate										
	Chlorate of soda. *See* Sodium chlorate										
	Chlorate powder. *See* High explosive										
E	Chlordane, liquid (*RQ-1/0.454*)	Flammable liquid	NA2762	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	Chlordane, liquid (*RQ-1/0.454*)	Combustible liquid	NA2762	None	173.118a	None	No limit	No limit	1,2	1,2	
	Chloric acid	Oxidizer	NA2626	Oxidizer and Poison	None	173.237	Forbidden	Forbidden			Forbidden
	Chloride of phosphorus. *See* Phosphorus trichloride										
	Chloride of sulfur. *See* Sulfur chloride										
W	Chlorinated lime (*chloride of lime.*) *See* Bleaching powder										
+E	Chlorine (*RQ-10/4.54*)	Nonflammable gas	UN1017	Nonflammable gas and Poison	None	173.304 173.314 173.315	Forbidden	Forbidden	1,2	5	Stow in a well-ventilated space. Stow away from organic materials
	Chlorine azide	Forbidden									
	Chlorine dioxide hydrate, frozen	Oxidizer	NA9191	Oxidizer and Poison	None	173.237	Forbidden	Forbidden			Forbidden
	Chlorine dioxide (not hydrate)	Forbidden									
	Chlorine trifluoride	Oxidizer	UN1749	Oxidizer and Poison	None	173.246	Forbidden	100 pounds	1,3	5	Stow in well ventilated area away from organic material
	Chloroacetic acid, liquid *or* solution	Corrosive material	UN1750	Corrosive	173.244	173.294	1 quart	1 quart	1,2	1,2	Glass carboys in hampers not permitted under deck
	Chloroacetic acid, solid	Corrosive material	UN1751	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
	Chloroacetophenone, gas, liquid, *or* solid (*CN*)	Irritating material	UN1697	Irritant	None	173.382	Forbidden	75 pounds	1	5	
	Chloroacetyl chloride	Corrosive material	UN1752	Corrosive	None	173.253	Forbidden	1 quart	1	5	Keep dry
E	Chlorobenzene(*RQ-100/45.4*)	Flammable liquid	UN1134	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
E	Chlorobenzol. *See* Chlorobenzene										
	p-Chlorobenzoyl peroxide	Organic peroxide	UN2113	Organic peroxide	None	173.157 173.158	Forbidden	25 pounds	1	1	
	p-Chlorobenzoyl peroxide, *not more than 75% with water. See* p-Chlorobenzoyl peroxide.		UN2113								
	p-Chlorobenzoyl peroxide, *not more than 52% as a paste. See* Organic peroxide, solid, n.o.s.		UN2114								
	p-Chlorobenzoyl peroxide, *not more than 52% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2115								
	Chlorodinitrobenzene. See Dinitrochlorobenzene										
EAW	Chloroform (*RQ-5000/2270*)	ORM-A	UN1888	None	173.505	173.630	10 gallons	55 gallons	1,2	1,2	Stow away from living quarters and foodstuffs
+	4-Chloro-o-toluidine hydrochloride	Poison B	UN1579	Poison	None	173.362	Forbidden	1 quart	1,2	1,2	
	3-Chloroperoxybenzoic acid, *not more than 86% with 3-chlorobenzoic acid See* Organic peroxide, solid, n.o.s.		UN2755								
	Chlorophenyltrichlorosilane	Corrosive material	UN1753	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
+	Chloropicrin, absorbed	Poison B	NA1583	Poison	None	173.357	Forbidden	Forbidden	1	5	Keep cool
+	Chloropicrin and methyl chloride mixture	Poison A	UN1582	Flammable gas and Poison gas	None	173.329	Forbidden	Forbidden	1	5	Keep cool

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
+	Chloropicrin and nonflammable, nonliquefied compressed gas mixture	Poison A	NA1955	Nonflammable gas and Poison gas	None	173.329	Forbidden	Forbidden	1	5	Keep cool
+	Chloropicrin, liquid	Poison B	UN1580	Poison	None	173.357	Forbidden	Forbidden	1	5	Keep cool
+	Chloropicrin mixture (*containing no compressed gas or Poison A liquid*)	Poison B	UN1583	Poison	None	173.357	Forbidden	Forbidden	1	5	Keep cool
A	Chloroplatinic acid, solid	ORM-B	UN2507	None	173.505	173.800	25 pounds	100 pounds			
	Chloroprene, inhibited	Flammable liquid	UN1991	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Chloroprene, uninhibited	Forbidden									
	2-Chloropropene	Flammable liquid	UN2456	Flammable liquid	None	173.119	Forbidden	10 gallons	1,2	5	
E	Chlorosulfonic acid (*RQ-1000/454*)	Corrosive material	UN1754	Corrosive	173.244	173.254	1 quart	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
E	Chlorosulfonic acid-sulfur trioxide mixture (*RQ-1000/45.4*)	Corrosive material	UN1754	Corrosive	173.144	173.254	1 quart	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
EA	Chlorpyrifos (*RQ-1/0.454*)	ORM-A	NA2783	None	173.505	173.510	100 pounds	No limit	1,2	1,2	
E	Chromic acetate (*RQ-1000/454*)	ORM-E	NA9101	None	None	173.510	No limit	No limit	1,2	1,2	
E	Chromic acid mixture, dry (*RQ-1000/454*)	Oxidizer	NA1463	Oxidizer	173.153	173.164	25 pounds	100 pounds	1,2	1,2	Stow away from foodstuffs
E	Chromic acid, solid (*RQ-1000/454*)	Oxidizer	NA1463	Oxidizer	173.153	173.164	25 pounds	100 pounds	1,2	1,2	Stow away from foodstuffs. Stow separate from flammable liquids and solids
E	Chromic acid solution (*RQ-1000/454*)	Corrosive material	UN1755	Corrosive	173.244	173.287	1 quart	1 gallon	1	1	
E	Chromic anhydride. *See* Chromic acid, solid										
	Chromic fluoride, solid	Corrosive material	UN1756	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	
	Chromic fluoride solution	Corrosive material	UN1757	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	
E	Chromic sulfate (*RQ-1000/454*)	ORM-E	NA9100	None	None	173.510	No limit	No limit	1,2	1,2	
E	Chromic trioxide. *See* Chromic acid, solid										
	Chromium oxychloride *or* Chromyl chloride	Corrosive material	UN1758	Corrosive	None	173.247	Forbidden	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
E	Chromous chloride (*RQ-1000/454*)	ORM-E	NA9102	None	None	173.510	No limit	No limit	1,2	1,2	
	Cigar and cigarette lighter fluid. See Lighter fluid										
	Cigarette lighter (*or other similar ignition device*)	Flammable gas	UN1057	Flammable gas	173.21 175.10	173.308	21 ounces	25 pounds	1	1	
	Cigarette lighter (*or other similar ignition device*)	Flammable liquid	UN1226	Flammable liquid	173.21 175.10	173.118	Forbidden	Forbidden	1	1	
	Cigarette load	Class C explosive		Explosive C	None	173.111	50 pounds	150 pounds	1,2	1,2	
	Cloud gas cylinder. See Chemical ammunition, nonexplosive										
	Coal briquettes, hot	Forbidden									
	Coal facings. *See* Coal ground bituminous, *etc.*										
	Coal gas. See Hydrocarbon gas, nonliquefied										
	Coal, ground bituminous, sea coal, coal facings, *etc.*	Flammable solid	NA1361	Flammable solid	173.165		Forbidden	Forbidden	1	1	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Coal oil (*export shipment only*). *See* Kerosene										
	Coal tar distillate	Combustible liquid	UN1137	None	173.118a	None	No limit	No limit	1,2	1,2	
	Coal tar distillate	Flammable liquid	UN1136	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Coal tar dye, liquid (*not otherwise specifically named in 172.101*)	Corrosive material	NA2801	Corrosive	173.244	173.249a	1 quart	10 gallons	1,2	1,2	
	Coal tar light oil	Combustible liquid	NA1137	None	173.118a	None	No limit	No limit	1,2	1,2	
	Coal tar light oil	Flammable liquid	NA1136	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Coal tar naptha	Combustible liquid	NA2553	None	173.118a	None	No limit	No limit	1,2	1,2	
	Coal tar naptha	Flammable liquid	NA2553	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Coal tar oil	Combustible liquid	NA1137	None	173.118a	None	No limit	No limit	1,2	1,2	
	Coal tar oil	Flammable liquid	NA1136	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	Coating solution	Flammable liquid	UN1139	Flammable liquid	173.118	173.132	1 quart	15 gallons	1,2	1	
E	Cobaltous bromide (*RQ-1000/454*)	ORM-E	NA9103	None	None	173.510	No limit	No limit	1,2	1,2	
E	Cobaltous formate (*RQ-1000/454*)	ORM-E	NA9104	None	None	173.510	No limit	No limit	1,2	1,2	
E	Cobaltous sulfamate (*RQ-1000/454*)	ORM-E	NA9105	None	None	173.510	No limit	No limit	1,2	1,2	
	Cobalt resinate, precipitated	Flammable solid	UN1318	Flammable solid	None	173.166	Forbidden	125 pounds	1,2	1,2	
	Cocculus, solid (*fishberry*)	Poison B	UN1584	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
W	Coconut meal pellets *containing at least 6% and not more than 13% moisture and not more than 10% residual fat content*	ORM-C		None	173.505	173.955			1,2	4	Keep dry
	Coir. *See* Fibers										
	Coke, hot	Forbidden									
	Collodion	Flammable liquid	NA2059	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Cologne spirits (*alcohol*)	Flammable liquid	NA1170	Flammable liquid	173.118	173.125	1 quart	10 gallons	1,2	1	
	Columbian spirits (*wood alcohol*)	Flammable liquid	NA1230	Flammable liquid	173.118	173.125	1 quart	10 gallons	1,2	1	
	Combination fuze	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
	Combination primer	Class C explosive		None	None	173.107	50 pounds	150 pounds	1,3	5	
	Combustible liquid, n.o.s.	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Commercial shaped charge. See High explosive										
	Common fireworks. *See* Fireworks, common										
	Compound, cleaning, liquid	Flammable liquid	NA1993	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Compound, cleaning, liquid	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Compound, cleaning, liquid	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Compound, cleaning, liquid (*containing phosphoric acid, acetic acid, sodium hydroxide or potassium hydroxide*)	Corrosive material	NA1760	Corrosive	173.244	173.249a	1 quart	1 quart	1,2	1,2	
	Compound, cleaning, liquid (containing hydrochloric (muriatic) acid)	Corrosive material	NA1789	Corrosive	173.244	173.263	1 quart	1 gallon	1	1	
	Compound, cleaning, liquid (containing hydrofluoric acid)	Corrosive material	NA1790	Corrosive	172.244	173.256	1 quart	1 gallon	1	4	
	Compound, enamel	Flammable liquid	NA1263	Flammable liquid	173.118	173.128	1 quart	55 gallons	1,2	1	
	Compound, lacquer, paint, *or* varnish, removing, reducing, *or* thinning, liquid	Combustible liquid	NA1142	None	173.118a				1,2	1,2	
	Compound, lacquer, paint, *or* varnish removing, liquid	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	
	Compound, lacquer, paint, *or* varnish, removing, reducing, *or* thinning, liquid	Flammable liquid	NA1142	Flammable liquid	173.118	173.128	1 quart	55 gallons	1,2	1	
	Compound, polishing, liquid	Flammable liquid	NA1142	Flammable liquid	173.118	173.129	1 quart	55 gallons	1,2	1	
	Compound, rust preventing *or* Compound, rust removing	Corrosive material	NA1760	Corrosive	173.144	173.245	1 quart	1 gallon	1,2	1,2	
	Compound, tree *or* weed killing, liquid	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Compound, tree *or* weed killing, liquid	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Compound, tree *or* weed killing, liquid	Flammable liquid	NA1993	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Compound, tree *or* weed killing, liquid	Poison B	NA2810	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Compound, tree *or* weed killing, solid	Oxidizer	NA1479	Oxidizer	173.153	173.154 173.229	25 pounds	100 pounds			
	Compound, vulcanizing, liquid	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Compound, vulcanizing, liquid	Flammable liquid	NA1142	Flammable liquid	173.118	172.119	1 quart	10 gallons	1,2	1	
	Compound, water treatment, liquid. *See* Water treatment, liquid										
+	Compressed gas, n.o.s.	Flammable gas	UN1954	Flammable gas	173.306	173.302 173.304 173.305	Forbidden	300 pounds	1	4	
	Compressed gas, n.o.s.	Nonflammable gas	UN1956	Nonflammable gas	173.306 173.307	173.302 173.304 173.305	150 pounds	300 pounds	1,2	1,2	
	Consumer commodity	ORM-D		None	None	173.510 173.1200	65 pounds gross	65 pounds gross			Not subject to requirements of Part 176
	Container, reused or empty, must be classed for the hazardous material previously contained. See 173.28, 173.29										
E	Copper acetoarsenite, solid (*RQ-100/45.4*)	Poison B	UN1585	Poison	173.364	173.367	50 pounds	200 pounds	1,2	1,2	
	Copper acetylide	Forbidden									
	Copper amine azide	Forbidden									
	Copper arsenite, solid	Poison B	UN1586	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Copper based pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2776	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Copper based pesticide (*compounds and preparations*), liquid	Poison B	UN2775	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Copper based pesticide (*compounds and preparations*), solid	Poison B	UN2775	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
EA	Copper chloride (*RQ-10/4.54*)	ORM-B	UN2802	None	173.505	173.800	25 pounds	100 pounds	1,2	1,2	
	Copper cyanide	Poison B	UN1587	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
	Copper tetramine nitrate	Forbidden									
W	Copra	ORM-C	UN1363	None	173.505	173.960			1,2	1,2	Segregation same as for flammable solids. Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Copra pellets. See Coconut meal pellets										
	Cordeau detonant fuse	Class C explosive		Explosive C	None	173.104	50 pounds	300 pounds	1,2	1,2	
	Corrosive liquid, n.o.s.	Corrosive material	UN1760	Corrosive	173.244	173.245 173.245a	1 quart	1 quart	1	4	For material that meets only the corrosion to skin criteria of 49 CFR 173.240(a)(1), 'under deck' stowage is also authorized if the description includes the additional entry specified by 172.203(c)(2).
	Corrosive liquid, poisonous, n.o.s.	Corrosive material	UN2922	Corrosive and Poison	173.244	173.245	1 quart	1 quart	1	4	
	Corrosive solid, n.o.s.	Corrosive material	UN1759	Corrosive	173.244	173.245b	25 pounds	100 pounds	1	4	For material that meets only the corrosion to skin criteria of 49 CFR 173.240(a)(1), 'under deck' stowage is also authorized if the description includes the additional entry specified by 172.203(c)(2).
	Cosmetics, liquid, n.o.s.	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Cosmetics, n.o.s.	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Cosmetics, n.o.s.	Flammable liquid	NA1993	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Cosmetics, n.o.s.	Flammable solid	NA1325	Flammable solid	173.153	173.154	25 pounds	100 pounds	1,2	1,2	
	Cosmetics, n.o.s.	Oxidizer	NA1479	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	
	Cosmetics, solid, n.o.s.	Corrosive material	NA1759	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
W	Cotton	ORM-C		None	173.505	173.965			1,2	1,2	Segregation same as for flammable solids. See 176.900 to 176.904
W	Cotton batting	ORM-C		None	173.505	173.970			1,2	1,2	Keep dry. Stow away from vegetable or animal oils. See 176.900 to 176.904
W	Cotton batting dross. *See* Cotton batting										
	Cotton, burnt. See Burnt cotton										
W	Cotton seed hull fiber *or* shavings, pulp, *or* cut linters. See Cotton batting										
	Cotton sweepings. *See* Cotton waste										
W	Cotton wadding. *See* Cotton batting										
W	Cotton waste	ORM-C		None	173.505	173.975			1,2	1,2	Keep dry. Stow away from vegetable or animal oils. See 176.900 to 176.904
	Cotton waste, oily (*with more than 5% of animal or vegetable oil*)	Flammable solid	UN1364	Flammable solid			Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
E	Coumaphos (*RQ-10/4.54*)	Poison B	NA2783	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Creosote, coal tar	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Creosote oil. See Creosote coal tar										
E	Cresol (*RQ-1000/454*)	Corrosive material	NA2076	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
E	Crotonaldehyde (*RQ-100/45.4*)	Flammable liquid	UN1143	Flammable liquid and Poison	173.118	173.119	1 quart	1 gallon	1,2	1	
	Crotonic acid	Corrosive material	UN2823	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Crotonylene	Flammable liquid	UN1144	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Crude nitrogen fertilizer solution (*more than 25.3 p.s.i.g.*)	Nonflammable gas	NA1043	Nonflammable gas	173.306	173.304 173.314	Forbidden	300 pounds	1,3	1,3	
	Crude oil, petroleum	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Crude oil, petroleum	Flammable liquid	NA1993	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Cumene hydroperoxide	Organic peroxide	UN2116	Organic peroxide	173.153	173.224	1 quart	1 quart	1,2	4	
	Cumene hydroperoxide, *technically pure. See* Cumene hydroperoxide.		UN2116								
E	Cupric acetate (*RQ-100/45.4*)	ORM-E	NA9106	None	None	173.510	No limit	No limit	1,2	1,2	
	Cupric cyanide. See Copper cyanide										
E	Cupric nitrate (*RQ-100/45.4*)	Oxidizer	NA1479	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
E	Cupric oxalate (*RQ-100/45.4*)	ORM-E	NA2449	None	None	173.510	No limit	No limit	1,2	1,2	
E	Cupric sulfate (*RQ-10/4.54*)	ORM-E	NA9109	None	None	173.510	No limit	No limit	1,2	1,2	
E	Cupric sulfate, ammoniated (*RQ-100/45.4*)	ORM-E	NA9110	None	None	173.510	No limit	No limit	1,2	1,2	
E	Cupric tartrate (*RQ-100/45.4*)	ORM-E	NA9111	None	None	173.510	No limit	No limit	1,2	1,2	
	Cupriethylene-diamine solution	Corrosive material	UN1761	Corrosive	173.244	173.249	1 quart	1 gallon	1,2	1,2	
	Cyanide *or* cyanide mixture, dry	Poison B	UN1588	Poison	173.364	173.370	25 pounds	200 pounds	1,2	1,2	Keep dry. Stow away from acids
	Cyanide solution, n.o.s.	Poison B	NA1588	Poison	173.345	173.352	1 quart	55 gallons	1,2	1,2	Stow away from acids

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Cyanogen bromide	Poison B	UN1889	Poison	None	173.379	Forbidden	25 pounds	1	5	Shade from radiant heat. Segregation same as for corrosive materials
E	Cyanogen chloride *containing less than 0.9% water (RQ-10/4.54)*	Poison A	UN1589	Nonflammable gas and Poison gas	None	173.328	Forbidden	Forbidden	1	5	Shade from radiant heat
	Cyanogen gas	Poison A	UN1026	Flammable gas and Poison gas	None	173.328	Forbidden	Forbidden	1	5	
	Cyanuric triazide	Forbidden									
E	Cyclohexane (*RQ-1000/454*)	Flammable liquid	UN1145	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Cyclohexanone peroxide, *50 to 85% peroxide*	Organic peroxide	UN2119	Organic peroxide	173.157	173.158	Forbidden	25 pounds	1	1	
	Cyclohexanone peroxide, *as a paste with not more than 9% by weight active oxygen. See* Cyclohexanone peroxide, *50 to 85% peroxide.*		UN2896								
	Cyclohexanone peroxide, *in solution with not more than 9% by weight active oxygen. See* Cyclohexanone peroxide, *50 to 85% peroxide*		UN2118								
	Cyclohexanone peroxide, *not over 50% peroxide*	Organic peroxide	UN2896	Organic peroxide	173.153	173.154	2 pounds	25 pounds	1,2	1,2	
	Cyclohexanone peroxide and di-(1-hydroxy cyclohexyl) peroxide mixture. *See appropriate cyclohexanone peroxide entry*										
	Cyclohexenyl trichlorosilane	Corrosive material	UN1762	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Cyclohexylamine	Flammable liquid	UN2357	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Cyclohexyl trichlorosilane	Corrosive material	UN1763	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Cyclopentane	Flammable liquid	UN1146	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Cyclopentane, methyl	Flammable liquid	UN2298	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Cyclopropane	Flammable gas	UN1027	Flammable gas	173.306	173.304	Forbidden	300 pounds	1,2	1	
	Cyclotetramethylene tetranitramine (dry) (HMX)	Forbidden									
	Cyclotetramethylene tetranitramine, wet with not less than 10% water. See High explosive.										
	Cyclotrimethylene trinitramine, desensitized. See High explosive										
	Cyclotrimethylene trinitramine, wet with not less than 10% water. See High explosive										
	Cylinder, empty, including ton tanks, must be classed for the hazardous material previously contained in cylinder. See 173.29										
EA	2,4-D. *See* 2,4-Dichlorophenoxyacetic acid										
EA	DDT *or* Dichlorodiphenyltrichloroethane (*RQ-1/.454*)	ORM-A	NA2761	None	173.505	173.510	No limit	No limit	1,2	1,2	
	Dead oil. See Creosote, coal tar										
	Decaborane	Flammable solid	UN1868	Flammable solid and Poison	173.118a	None	No limit	No limit	1,2	1,2	
	Decahydronaphthalene	Combustible liquid	UN1147	None	173.118a	None	No limit	No limit	1,2	1,2	
	Decalin. See Decahydronaphthalene										
	Decanoyl peroxide, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2120								
	Delay electric igniter	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Denatured alcohol	Flammable liquid	NA1986	Flammable liquid	173.118	173.125	1 quart	10 gallons	1,2	1	
	Depth bomb. See Explosive bomb										
EA	2,4-D ester. *See* 2,4-Dichlorophenoxyacetic acid ester										
	Detonating fuze, Class A, *with or without radioactive components*	Class A explosive		Explosive A	None	173.69	Forbidden	Forbidden	6	5	
	Detonating fuze, Class C explosive	Class C explosive		Explosive C	None	173.113	50 pounds	150 pounds	1,3	1,3	
	Detonating primers, Class A explosives. *See 173.53*	Class A explosive		Explosive A	None	173.68	Forbidden	Forbidden	6	5	Do not stow detonating primers, Class A explosives with any high explosives. Do not handle at the same time high explosives are being loaded.

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/- E/ A/ W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Detonating primers, Class C explosives. *See 173.100*	Class C explosive		Explosive C	None	173.68	173.103(d)	150 pounds	1,2	1,2	The maximum net quantity in one package for this material shipped aboard passenger vessel is limited to 50 pounds. Must not be stowed in portable magazine for metal locker. Do not stow detonating primers, Class C explosives with high explosives. Do not handle at the same time high explosives are being loaded.
	Detonators, Class A explosives. *See 173.53*	Class A explosive		Exploslte A	None	173.66	Forbidden	Forbidden	6	--	Do not stow detonators, Class A with any high explosives. Do not handle at the same ttime high explosives are being loaded.
	Detonators, Class C explosives. *See 173.100*	Class C explosive		Explosive C	None	173.66	173.103(d)	150 pounds	1,2	1,2	The maximum net quantity in one package for this material shipped aboard passenger vessel is limited to 50 pounds. Must be stowed in portable magazine or metal locker. Do not stow detonators, Class C explosives with high explosives. Do not handle at the same time high explosives are being loaded.
	Detonators, commercial. See Detonators, Class A *or* Class C explosives										
	Di-(1-hydroxycyclohexyl) peroxide, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2148								
	Di-(1-hydroxytetrazole) (dry)	Forbidden									
	Di-(1-naphthoyl)peroxide	Forbidden									
	Di-(2-ethylhexyl) peroxydicarbonate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2122								
	Di-(2-ethylhexyl) peroxydicarbonate, *not more than 67% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2123								
	Di-(2-ethylhexyl) phosphoric acid	Corrosive material	NA1902	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Di-(2-methylbenzoyl)peroxide, *not more than 85% with water. See* Organic peroxide, solid, n.o.s.		UN2593								
	1,3-Di-(2-tert-butylperoxyisopropyl) benzene, *technically pure or more than 40% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2112								
	1,3-Di-(2-tert-butylperoxyisopropyl) benzene and 1,4-Di-(2-tert-butylperoxyisopropyl) benzene mixture, *technically pure or more than 40% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2112								
	1,4-Di-(2-tert-butylperoxyisopropyl) benzene, *technically pure or more than 40% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2112								
	Di-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide, *not more than 50% as a paste, with phlegmatizer. See* Organic peroxide, solid, n.o.s.		UN2597								
	2,2-Di-(4,4-di-tert-butylperoxycyclohexyl)propane, *not more than 42% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2168								
	2,2-Di-(4,4-di-tert-butylperoxycyclohexyl) propane, more than 42% with inert solid	Forbidden									
	Di-(4-tert-butylcyclohexyl)peroxydicarbonate, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2154								
	Di-(4-tert-butylcyclohexyl)peroxydicarbonate, *not more than 42%, stable dispersion, in water. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2894								
	Diacetone alcohol	Flammable liquid	UN1148	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Diacetone alcohol peroxide, *not more than 57% in solution with not more than 9% hydrogen peroxide, not less than 26% diacetone alcohol and not less than 9% water; total active oxygen content not more than 9%. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2163								
	Diacetone alcohol peroxides, more than 57% in solution with more than 9% hydrogen peroxide, less than 26% diacetone alcohol and less than 9% water; total active oxygen content more than 9% by weight	Forbidden									
	Diacetyl	Flammable liquid	UN2346	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	p-Diazidobenzene	Forbidden									
	1,2-Diazidoethane	Forbidden									

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
EA	Diazinon (*RQ-1/.454*)	ORM-A	NA2783	None	173.505	173.510	No limit	No limit	1,2	1,2	
	1,1'-Diazoaminonaphthalene	Forbidden									
	Diazoaminotetrazole (dry)	Forbidden									
	Diazodinitrophenol. *See* Initiating explosive										
	Diazodinitrophenol (dry)	Forbidden									
	Diazodiphenylmethane	Forbidden									
	Diazonium nitrates (dry)	Forbidden									
	Diazonium perchlorates (dry)	Forbidden									
	1,3-Diazopropane	Forbidden									
	Dibenzyl peroxydicarbonate, *not more than 87% with water. See* Organic peroxide, solid, n.o.s.		UN2149								
	Dibenzyl peroxydicarbonate, more than 87% with water	Forbidden									
	Di-(beta-nitroxyethyl)ammonium nitrate	Forbidden									
+	Diborane *or* diborane mixtures	Flammable gas	UN1911	Flammable gas and Poison	None	173.302	Forbidden	Forbidden	1	5	Separate from Chlorine and materials bearing the oxidizer label.
	Dibromoacetylene	Forbidden									
A	Dibromodifluoromethane	ORM-A	UN1941	None	173.505	173.605	10 gallons	55 gallons			
EW	1,2-Dibromoethane. *See* Ethylene dibromide										
E	Dicamba (*RQ-1000/454*)	ORM-E	NA2769	None	None	173.510	No limit	No limit	1,2	1,2	
	Dicetyl peroxydicarbonate, *not more than 42%, stable dispersion, in water. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2895								
	Dicetyl peroxydicarbonate, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2164								
E	Dichlobenil (*RQ-1000/454*)	ORM-E	NA2769	None	None	173.510	No limit	No limit	1,2	1,2	
E	Dichlone (*RQ-1/0.454*)	ORM-E	NA2761	None	None	173.510	No limit	No limit	1,2	1,2	
	N,N'-Dichlorazodicarbonamidine (salts of), (dry)	Forbidden									
E	*1,1-Dichloro-2,2-bis(parachlorophenyl) ethane. See* TDE										
	Dichloroacetic acid	Corrosive material	UN1764	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	Glass carboys in hampers not permitted under deck
	Dichloroacetyl chloride	Corrosive material	UN1765	Corrosive	173.244	173.247	1 quart	1 gallon	1	4	Keep dry
	Dichloroacetylene	Forbidden									
EA	Dichlorobenzene, ortho, liquid (*RQ-100/45.4*)	ORM-A	UN1591	None	173.505	173.510	No limit	No limit	1,2	1,2	
EA	Dichlorobenzene, para, solid (*RQ-100/45.4*)	ORM-A	UN1592	None	173.505	173.510	No limit	No limit	1,2	1,2	
	2,4-Dichlorobenzoyl peroxide, *not more than 75% with water. See* Organic peroxide, solid, n.o.s.		UN2137								
	2,4-Dichlorobenzoyl peroxide, *not more than 52% as a paste. See* Organic peroxide, solid, n.o.s.		UN2138								
	2,4-Dichlorobenzoyl peroxide, *not more than 52% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2139								
	2,4-Dichlorobenzoyl peroxide, more than 75% with water	Forbidden									
	Dichlorobutene	Flammable liquid	NA2924	Flammable liquid and Corrosive	173.118	173.119	1 quart	1 quart	1,2	1	
	Dichlorobutene	Corrosive material	NA2924	Corrosive	173.244	173.245 173.245a	1 quart	10 gallons	1	4	
A	Dichlorodifluoroethylene	ORM-A	NA9018	None	173.505	173.605	10 gallons	55 gallons			
	Dichlorodifluoromethane	Nonflammable gas	UN1028	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	
	Dichlorodifluoromethane and difluoroethane mixture (*constant boiling mixture*)	Nonflammable gas	UN2602	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	
	Dichlorodifluoromethane-dichlorotetrafluoroethane mixture	Nonflammable gas	NA1956	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	
	Dichlorodifluoromethane-monochlorodifluoromethane mixture	Nonflammable gas	NA1956	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	
	Dichlorodifluoromethane-trichloromonofluoromethane mixture	Nonflammable gas	NA1956	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	
	Dichlorodifluoromethane-trichloromonofluoromethane-monochlorodifluoromethane mixture	Nonflammable gas	NA1956	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	
	Dichlorodifluoromethane-trichlorotrifluoroethane mixture	Nonflammable gas	NA1956	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
EA	Dichlorodiphenyltrichloroethane. *See* DDT										
	Dichloroethylene	Flammable liquid	UN1150	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Dichloroisopropyl ether	Corrosive material	UN2490	Corrosive	173.244	173.254	1 quart	10 gallons	1,2	1,2	
A	Dichloromethane *or* Methylene chloride	ORM-A	UN1593	None	173.505	173.605	10 gallons	55 gallons			
	Dichloropentane	Flammable liquid	UN1152	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
EA	2,4-Dichlorophenoxyacetic acid (*RQ-100/45.4*)	ORM-A	NA2765	None	173.505	173.510	50 pounds	No limit	1,2	1,2	
E	2,4-Dichlorophenoxyacetic acid ester (*RQ-100/45.4*)	ORM-E	NA2765	None	None	173.510	No limit	No limit	1,2	1,2	
	Dichlorophenyltrichlorosilane	Corrosive material	UN1766	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
E	Dichloropropane. *See* Propylene dichloride										
E	Dichloropropene (*RQ-5000/2270*)	Flammable liquid	UN2047	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Dichloropropene and propylene dichloride mixture	Flammable liquid	NA2047	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	2,2-Dichloropropionic acid (*RQ-5000/2270*)	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
E	Dichlorvos (*RQ-10/4.54*)	Poison B	NA2783	Poison	173.345	173.346	Forbidden	1 quart	1,2	1,2	
	Dicumyl peroxide *50% solution*	Organic peroxide	NA2121	Organic peroxide	173.153	173.224	1 quart	1 quart	1,2	4	
	Dicumyl peroxide, *technically pure or* Dicumyl peroxide, *with inert solid. See* Dicumyl peroxide, dry.		UN2121								
	Dicumyl peroxide, dry	Organic peroxide	UN2121	Organic peroxide	173.153	173.154	2 pounds	25 pounds	1,2	1,2	
	Dicyclohexyl peroxydicarbonate, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2152								
	Dicyclohexyl peroxydicarbonate, *not more than 91% with water. See* Organic peroxide, solid, n.o.s.		UN2153								
EA	Dieldrin (*RQ-1/.454*)	ORM-A	NA2761	None	173.505	173.510	No limit	No limit	1,2	1,2	
	Diesel Fuel. *See* Fuel oil										
	Diethanol nitrosamine dinitrate (dry)	Forbidden									
E	Diethylamine (*RQ-1000/454*)	Flammable liquid	UN1154	Flammable liquid	173.118	173.119	Forbidden	5 pints	1,3	4	
	Diethyl cellosolve. *See* Ethylene glycol diethyl ether										
	Diethyl dichlorosilane	Flammable liquid	UN1767	Flammable liquid	None	173.135	Forbidden	10 gallons	1	1	Keep dry. Segregation same as for corrosives
	Diethylene glycol dinitrate. See 173.51	Forbidden									
	Diethylgold bromide	Forbidden									
	Diethyl ketone	Flammable liquid	UN1156	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Diethyl peroxydicarbonate, *not more than 27% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2175								
	Diethyl peroxydicarbonate, more than 27% in solution	Forbidden									
	1,1-Difluoro-1-chloroethane. *See* Difluoromonochloroethane										
+	Difluoroethane	Flammable gas	UN1030	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	1	
+	Difluoromonochloroethane	Flammable gas	UN2517	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	1	
	Difluorophosphoric acid, anhydrous	Corrosive material	UN1768	Corrosive	None	173.275	Forbidden	1 gallon	1,2	1,2	
	2,2-Dihydroperoxy propane, *not more than 25% with inert organic solid. See* Organic peroxide, solid, n.o.s.		UN2178								
	Dihydropyran	Flammable liquid	UN2376	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	4	
	1,8-Dihydroxy-2,4,5,7-tetranitroanihraquinone (chrysamminic acid)	Forbidden									
	Diiodoacetylene	Forbidden									
	Diisobutyl ketone	Combustible liquid	UN1157	None	173.118a	None	No limit	No limit	1,2	1,2	
	Diisobutyryl peroxide, *not more than 52% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2182								
	Diisooctyl acid phosphate	Corrosive material	UN1902	Corrosive	173.144	173.296	1 quart	1 quart	1,2	1,2	Glass carboys in hampers not permitted under deck
	Diisopropylamine	Flammable liquid	UN1158	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Diisopropylbenzene hydroperoxide solution, *not over 72% peroxide*	Organic peroxide	UN2171	Organic peroxide	173.153	173.224	1 quart	1 quart	1,2	4	
	Diisopropylbenzene hydroperoxide, *not more than 72% in solution. See* Diisopropylbenzene hydroperoxide solution, *not more than 72% peroxide.*		UN2171					a			
	Diisopropylbenzene hydroperoxide, more than 72% in solution	Forbidden									
	Diisopropyl ether	Flammable liquid	UN1159	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Diisotridecyl peroxydicarbonate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2889								
	2,5-Dimethyl-2,5-di-(2-ethylhexanoylperoxy)hexane, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2157								
	2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2172								
	2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane, *not more than 82% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2173								
	2,5-Dimethyl-2,5-dihydroperoxy hexane, *not more than 82% with water. See* Dimethylhexane dihydroperoxide, *with 18% or more water.*		UN2174								
	2,5-Dimethyl-2,5-dihydroperoxy hexane, more than 82% with water	Forbidden									
	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2155								
	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane, *not more than 52% with inert solid. See* Organic peroxide, solid n.o.s.		UN2156								
	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2158								
	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3, *not more than 52% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2159								
+E	Dimethylamine, anhydrous (*RQ-1000/454*)	Flammable gas	UN1032	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	4	
E	Dimethylamine, aqueous solution (*RQ-1000/454*)	Flammable liquid	UN1160	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	2,3-Dimethylbutane	Flammable liquid	UN2457	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Dimethyl carbonate	Flammable liquid	UN1161	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Dimethyl chlorothiophosphate	Corrosive material	NA2922	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	1,4-Dimethylcyclohexane	Flammable liquid	UN2263	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Dimethyldichlorosilane	Flammable liquid	UN1162	Flammable liquid	None	173.135	Forbidden	5 pints	1,2	1	
+	Dimethyl ether	Flammable gas	UN1033	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	1	
	Dimethylhexane dihydroperoxide (dry)	Forbidden									
	Dimethylhexane dihydroperoxide, (with 18% or more water)	Organic peroxide	UN2174	Organic peroxide	None	173.157	Forbidden	25 pounds	1	1	
	Dimethylhydrazine, unsymmetrical (*UDMH*)	Flammable liquid	UN1163	Flammable liquid and Poison	None	173.145	Forbidden	5 pints	1,2	1	Keep dry. Separate from corrosive and oxidizing materials, and organic peroxides.
	Dimethyl phosphorochloridothioate. *See* Dimethyl clorothiophosphate.										
	Dimethyl sulfate	Corrosive material	UN1595	Corrosive	None	173.255	Forbidden	1 quart	1	5	Keep cool
	Dimethyl sulfide	Flammable liquid	UN1164	Flammable liquid	None	173.119	Forbidden	10 gallons	1,2	5	
	Dimyristyl peroxydicarbonate, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2595								
	Dimyristyl peroxydicarbonate, *not more than 22%, stable dispersion, in water. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2892								
	1,4-Dinitro-1,1,4,4-tetramethylolbutanetetranitrate (dry)	Forbidden									
	2,4-Dinitro-1,3,5-trimethylbenzene	Forbidden									

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	1,3-Dinitro-4,5-dinitrosobenzene	Forbidden									
	1,3-Dinitro-5,5-dimethyl hydantoin	Forbidden									
	Dinitro-7,8-dimethylglycoluril (dry)	Forbidden									
E	Dinitrobenzene, solid, *or* Dinitrobenzol, solid (*RQ-1000/454*)	Poison B	UN1597	Poison	173.364	173.371	50 pounds	200 pounds	1,2	1,2	
E	Dinitrobenzene solution (*RQ-1000/454*)	Poison B	UN1597	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Dinitrochlorobenzene	Poison B	UN1577	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
A	Dinitrocyclohexylphenol	ORM-A	NA9026	None	173.505	173.510	No limit	No limit			
	1,2-Dinitroethane	Forbidden									
	1,1-Dinitroethane (dry)	Forbidden									
	Dinitroglycoluril	Forbidden									
	Dinitromethane	Forbidden									
E	Dinitrophenol solution (*RQ-1000/454*)	Poison B	UN1599	Poison	173.345	173.362a	1 quart	65 pounds	1,2	1,2	Stow away from heavy metals and their compounds. If flash point is 141 deg F or less segregation same as for flammable liquids
	Dinitropropylene glycol	Forbidden									
	2,4-Dinitroresorcinol (heavy metal salts of), (dry)	Forbidden									
	4,6-Dinitroresorcinol (heavy metal salts of), (dry)	Forbidden									
	3,5-Dinitrosalicylic acid (lead salt), (dry)	Forbidden									
	Dinitrosobenzylamidine and salts of (dry)	Forbidden									
	2,2-Dinitrostilbene	Forbidden									
E	Dinitrotoluene (*RQ-1000/454*)	ORM-E	UN1600	None	None	173.510	No limit	No limit	1,2	1,2	
	a,a'-Di-(nitroxy)methylether	Forbidden									
	1,9-Dinitroxy pentamethylene-2,4,6,8-tetramine (dry)	Forbidden									
	Di-n-propyl peroxydicarbonate, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2176								
	Dioxane	Flammable liquid	UN1165	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Dioxolane	Flammable liquid	UN1166	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Diphenylaminechloroarsine (*DM*)	Irritating material	UN1698	Irritant	None	173.382	Forbidden	75 pounds	1	5	
	Diphenyl dichlorosilane	Corrosive material	UN1769	Corrosive	None	173.280	Forbidden	10 gallons	1	1	
	Diphenyl methyl bromide, solid	Corrosive material	UN1770	Corrosive	173.244	173.245b	25 pounds	100 pounds	1	4	
	Diphenyl methyl bromide solution	Corrosive material	UN1770	Corrosive	173.244	173.247	1 quart	1 gallon	1,2	1,2	
	Diphosgene. See Phosgene										
E	Diquat (*RQ-1000/454*)	ORM-E	NA2781	None	None	173.510	No limit	No limit	1,2	1,2	
	Di-sec-butyl peroxydicarbonate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2150								
	Di-sec-butyl peroxydicarbonate, *not more than 52% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2151								
	Disinfectant, liquid	Corrosive material	UN1903	Corrosive	173.244	173.245	1 quart	10 gallons	1	4	
	Disinfectant, liquid	Poison B	UN1601	Poison	173.345	173.346	1 quart	55 gallons	1,2	1	
	Disinfectant, liquid, n.o.s.	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Disinfectant, solid	Poison B	UN1601	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1	
	Dispersant gas *or* Refrigerant gas. *See 173.314 NOTE 13 and 173.315 NOTE 9*										
	Distearyl peroxydicarbonate, *not more than 85% with stearyl alcohol. See* Organic peroxide, solid, n.o.s.		UN2592								
E	Disulfoton (*RQ-1/0.454*)	Poison B	NA2783	Poison	173.364	173.365	Forbidden	1 quart	1,2	5	
	Di-tert-Butyl peroxide, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2102								
	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane, *technically pure. See* Organic peroxide, liquid *or* solution n.o.s.		UN2145								
	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane, *not more than 57% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2146								
	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane, *not more than 58% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2147								
	2,2-Di-(tert-butylperoxy)butane, *not more than 55% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2111								
	2,2-Di-(tert-butylperoxy) butane, more than 55% in solution	Forbidden									

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	1,1-Di-(tert-butylperoxy)cyclohexane, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2179								
	1,1-Di-(tert-butylperoxy)cyclohexane, *not more than 77% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2180								
	1,2-Di-(tert-butylperoxy)cyclohexane, *not more than 77% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2181								
	1,1-Di-(tert-butylperoxy)cyclohexane, *not more than 40% with inert inorganic solid, with not less than 13% phlegmatizer. See* Organic peroxide, solid, n.o.s.		UN2885								
	1,1-Di-(tert-butylperoxy)cyclohexane, *not more than 50% with phlegmatizer. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2897								
	Di-(tert-butylperoxy) phthalate, more than 55% in solution	Forbidden									
	Di-(tert-butylperoxy)phthalate, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2106								
	Di-(tert-butylperoxy)phthalate, *not more than 55% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2107								
	Di-(tert-butylperoxy)phthalate, *not more than 55% as a paste. See* Organic peroxide, solid, n.o.s.		UN2108								
	2,2-Di-(tert-butylperoxy)propane, *not more than 50% with phlegmatizer. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2883								
	2,2-Di-(tert-butylperoxy)propane, *not more than 40% with inert inorganic solid with not less than 13% phlegmatizer. See* Organic peroxide, solid, n.o.s.		UN2884								
	Dithiocarbamate pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2772	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Dithiocarbamate pesticide (*compounds and preparations*), liquid	Poison B	UN2771	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Dithiocarbamate pesticide (*compounds and preparations*), solid	Poison B	UN2771	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Diuron (*RQ-100/45.4*)	ORM-E	NA2767	None	None	173.510	No limit	No limit	1,2	1,2	
	Divinyl ether	Flammable liquid	UN1167	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
E	Dodecylbenzenesulfonic acid (*RQ-1000/454*)	Corrosive material	NA2584	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Dodecyl trichlorosilane	Corrosive material	UN1771	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Dressing, leather	Combustible liquid	NA1142	None	173.118a	None	No limit	No limit	1,2	1,2	
	Dressing, leather	Flammable liquid	NA1142	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Drier. See Paint drier, liquid										
	Drill cartridge. See 173.55										
	Drugs, n.o.s.	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Drugs, n.o.s.	Flammable solid	NA1325	Flammable solid	173.153	173.154	25 pounds	100 pounds	1,2	1,2	
	Drugs, n.o.s.	Oxidizer	NA1479	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	
	Drugs, n.o.s,	Flammable liquid	NA1993	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Drugs, n.o.s. liquid	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Drugs, n.o.s. liquid	Poison B	NA2810	Poison	173.345	173.346	1 quart	55 gallons	1,3	1	
	Drugs, n.o.s. solid	Corrosive material	NA1759	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
	Drugs, n.o.s. solid	Poison B	NA2811	Poison	173.364	173.365	50 pounds	200 pounds	1,3	1,3	
	Drums, empty, must be classed for the hazardous material previously contained in drum. See 173.29										
	Dry ice. *See* Carbon dioxide, solid										
	Dye intermediate, liquid	Corrosive material	UN2801	Corrosive	173.244	173.249a	1 quart	10 gallons	1,2	1,2	Stow away from foodstuffs and living quarters
	Dynamite. See High explosive										
E	EDTA. *See* Ethylenediaminetetraacetic acid										
	Electric blasting caps. See Detonators, Class A *or* Class C explosives										
	Electric squib	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Electric storage battery, wet. *See* Battery, electric storage, wet										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Electrolyte (acid) *or* alkaline battery fluid, packed with dry-storage battery	Corrosive material	NA2797	Corrosive	None	173.258	Forbidden	5 pints	1,2	1,2	
	Electrolyte (acid) *or* alkaline battery fluid, packed with battery charger, radio current supply device, *or* electronic equipment and actuating device.	Corrosive material	NA2797	Corrosive	None	173.259	Forbidden	5 pints	1,2	1,2	
	Electrolyte (acid) battery fluid (*not over 47% acid*)	Corrosive material	UN2796	Corrosive	173.244	173.257	1 quart	5 gallons	1,2	1,2	Glass carboys in hampers not permitted under deck
	Empty cartridge bag with black powder igniter	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Enamel. *See* Paint, Enamel, Lacquer, *etc.*										
E	Endosulfan (*RQ-1/0.454*)	Poison B	NA2761	Poison	173.364	173.365	1 pound	10 pounds	1,2	1,2	If stowed under deck, must be stowed in a recoverable location.
E	Endrin (*RQ-1/0.454*)	Poison B	NA2761	Poison	173.364	173.365	1 pounds	10 pounds	1,2	1,2	If stowed under deck, must be stowed in a recoverable location.
	Engine, internal combustion				173.120						
	Engine starting fluid	Flammable gas	UN1960	Flammable gas	None	173.304	Forbidden	60 pounds	1,2	5	
E	Epichlorohydrin (*RQ-1000/454*)	Flammable liquid	UN2023	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	Eradicator, paint *or* grease, liquid	Flammable liquid	UN1850	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Escape *or* Evacuation slide, inflatable. *See* Life rafts, inflatable										
E	Etching acid, liquid, n.o.s. (*RQ-1000/454*)	Corrosive material	NA1790	Corrosive	None	173.299	Forbidden	10 pounds	1	5	
+	Ethane	Flammable gas	UN1035	Flammable gas	173.306	173.304	Forbidden	300 pounds	1,2	4	
	Ethanol amine dinitrate	Forbidden									
E	Ethion (*RQ-10/4.54*)	Poison B	NA2783	Poison	173.364	173.365	Forbidden	1 quart	1,2	5	
	Ethyl-3,3-di-(tert-butylperoxy)butyrate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2184								
	Ethyl-3,3-di-(tert-butylperoxy)butyrate, *not more than 77% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2185								
	Ethyl-3,3-di-(tert-butylperoxy)butyrate, *not more than 50% with inert inorganic solid. See* Organic peroxide, solid, n.o.s.		UN2598								
	Ethyl acetate	Flammable liquid	UN1173	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Ethyl acrylate, inhibited	Flammable liquid	UN1917	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Ethyl alcohol	Flammable liquid	UN1170	Flammable liquid	173.118	173.125	1 quart	10 gallons	1,2	1	
E	Ethyl aldehyde. *See* Acetaldehyde										
E	Ethyl benzene (*RQ-1000/454*)	Flammable liquid	UN1175	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Ethyl borate	Flammable liquid	UN1176	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	Keep dry
	Ethyl butyl acetate	Combustible liquid	UN1177	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethyl butyl ether	Flammable liquid	UN1179	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Ethyl butyraldehyde	Flammable liquid	UN1178	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Ethyl butyrate	Flammable liquid	UN1180	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	Ethyl chloride	Flammable liquid	UN1037	Flammable liquid	None	173.123	Forbidden	See 173.123	1,2	1	Segregation same as for flammable gases
	Ethyl chloroacetate	Combustible liquid	UN1181	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethyl chloroformate (*chlorocarbonate*)	Flammable liquid	UN1182	Flammable liquid and Poison	None	173.288	Forbidden	5 pints	1,2	1	
	Ethyl chlorothioformate	Corrosive material	UN2826	Corrosive	173.244	173.245 173.245a	1 quart	1 quart	1,2	1	
	Ethyl crotonate	Flammable liquid	UN1862	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Ethyl dichlorosilane	Flammable liquid	UN1183	Flammable liquid	None	173.135	Forbidden	5 pints	1,2	1	
+	Ethylene	Flammable gas	UN1962	Flammable gas	173.306	173.304	Forbidden	300 pounds	1,2	4	
	Ethylene chlorohydrin	Poison B	UN1135	Poison	173.345	173.346	1 quart	55 gallons	1,2	1	Segregation same as for flammable liquids
E	Ethylenediamine (*RQ-1000/454*)	Corrosive material	UN1604	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Ethylene diamine diperchlorate	Forbidden									
E	Ethylenediaminetetraacetic acid (*RQ-5000/2270*)	ORM-E	NA9117	None	None	173.510	No limit	No limit	1,2	1,2	
EAW	Ethylene dibromide (*RQ-1000/454*)	ORM-A	UN1605	None	173.505	173.620	1 quart	55 gallons	1,2	1,2	Stow away from living quarters
E	Ethylene dichloride (*RQ-5000/2270*)	Flammable liquid	UN1184	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Ethylene glycol diethyl ether (*diethyl 'Cellosolve'*)	Combustible liquid	UN1153	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethylene glycol dinitrate	Forbidden									
	Ethylene glycol monoethyl ether (*'Cellosolve'*)	Combustible liquid	UN1171	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethylene glycol monoethyl ether acetate (*'Cellosolve acetate'*)	Combustible liquid	UN1172	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethylene glycol monomethyl ether (*methyl 'Cellosolve'*)	Combustible liquid	UN1188	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethylene glycol monomethyl ether acetate (*methyl 'Cellosolve acetate'*)	Combustible liquid	UN1189	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethylene imine, inhibited	Flammable liquid	UN1185	Flammable liquid and Poison	None	173.139	Forbidden	5 pints	1,2	1	
	Ethylene oxide	Flammable liquid	UN1040	Flammable liquid	None	173.124	Forbidden	See 173.124	1,2	1	Segregation same as for flammable gases
	Ethyl ether	Flammable liquid	UN1155	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
	Ethyl formate	Flammable liquid	UN1190	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Ethylhexaldehyde	Combustible liquid	UN1191	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethyl hydroperoxide (explodes above 100 deg C)	Forbidden									
	Ethyl lactate	Combustible liquid	UN1192	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethyl mercaptan	Flammable liquid	UN2363	Flammable liquid	None	173.141	Forbidden	10 gallons	1,2	1	
	Ethyl methyl ether	Flammable liquid	UN1039	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	1	Segregation same as for flammable gases
	Ethyl methyl ketone	Flammable liquid	UN1193	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Ethyl nitrate (*nitric ether*)	Flammable liquid	NA1993	Flammable liquid	173.118	173.119	Forbidden	Forbidden	1,2	1	
	Ethyl nitrite (nitrous ether)	Flammable liquid	UN1194	Flammable liquid	None	173.119	Forbidden	Forbidden	1,3	5	
	Ethyl perchlorate	Forbidden									
	Ethyl phenyl dichlorosilane	Corrosive material	UN2435	Corrosive	None	173.280	Forbidden	10 gallons	1	5	
	Ethyl phosphonothioic dichloride, anhydrous	Corrosive material	NA1760	Corrosive	173.244	173.245 173.245a	1 quart	1 quart	1	4	
	Ethyl phosphonous dichloride, anhydrous	Corrosive material	NA1760	Corrosive	173.244	173.245 173.245a	1 quart	1 quart	1	4	
	Ethyl phosphorodichloridate	Corrosive material	NA1760	Corrosive	173.244	173.245 173.245a	1 quart	1 quart	1	4	
	Ethyl propionate	Flammable liquid	UN1195	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Ethyl silicate (*tetraethyl orthosilicate*)	Combustible liquid	UN1292	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ethyl trichlorosilane	Flammable liquid	UN1196	Flammable liquid	None	173.135	Forbidden	5 pints	1,2	1	
	Etiologic agent, n.o.s.	Etiologic agent	NA2814	Etiologic agent	173.386	173.387	See 173.386	4 liters			Not permitted except under specific conditions approved by the Department
W	Excelsior (shredded wood) *when dry, clear, and free from oil*	ORM-C		None	173.505	173.980			1,3	1,3	Stow away from organic, corrosive, or oxidizing materials
	Explosive auto alarm	Class C explosive		Explosive C	None	173.111	50 pounds	150 pounds	1,2	1,2	
	Explosive bomb	Class A explosive		Explosive A	None	173.56	Forbidden	Forbidden	1,2	5	Magazine stowage authorized. No other cargo may be stowed in the same hold with these items
	Explosive cable cutter	Class C explosive		Explosive C	None	173.102	50 pounds	150 pounds	1,3	1,3	
	Explosive, forbidden. See Sec. 173.51	Forbidden									
	Explosive mine	Class A explosive		Explosive A	None	173.56	Forbidden	Forbidden	1,2	5	Magazine stowage authorized. No other cargo may be stowed in the same hold with these items
	Explosive, new approval, and evaluation. See 173.86										
	Explosive power device, Class B	Class B explosive		Explosive B	None	173.94	Forbidden	150 pounds	1,2	5	
	Explosive power device, Class C	Class C explosive		Explosive C	None	173.102	50 pounds	150 pounds	1,3	1,3	
	Explosive projectile	Class A explosive		Explosive A	None	173.56	Forbidden	Forbidden	1,2	5	Magazine stowage authorized. No other cargo may be stowed in the same hold with this material
	Explosive release device	Class C explosive		Explosive C	None	173.102	50 pounds	150 pounds	1,3	1,3	
	Explosive rivet	Class C explosive		Explosive C	None	173.100	50 pounds	150 pounds	1,2	1,2	
	Explosive, sample for laboratory examination				173.86		Forbidden	See 173.86			

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Explosive torpedo	Class A explosive		Explosive A	None	173.56	Forbidden	Forbidden	1,2	5	Magazine stowage authorized. No other cargo may be stowed in the same hold with this material
	Extract, liquid, flavoring	Flammable liquid	UN1197	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Fabric with animal or vegetable oil. See Fibers *or* fabric, containing not more than 5% animal *or* vegetable fat										
AW	Feed, wet, mixed	ORM-C		None	173.505	173.990	Forbidden	Forbidden	3	3	Stow in cool, dry, well ventilated compartment. Do not stow bags over ten tiers high without flooring off. Do not overstow
W	Felt, waste. *See* Cotton waste										
	Felt, waste, wet. *See* Waste wool, wet										
E	Ferric ammonium citrate (*RQ-1000/454*)	ORM-E	NA9118	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ferric ammonium oxalate (*RQ-1000/454*)	ORM-E	NA9119	None	None	173.510	No limit	No limit	1,2	1,2	
	Ferric arsenate, solid	Poison B	UN1606	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Ferric arsenite, solid	Poison B	UN1607	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
EA	Ferric chloride, solid, *anhydrous* (*RQ-1000/454*)	ORM-B	UN1773	None	173.505	173.510	25 pounds	100 pounds	1,2	1,2	
E	Ferric chloride solution (*RQ-1000/454*)	Corrosive material	UN2582	Corrosive	173.244	173.245	1 quart	10 quarts	1,2	1,2	
E	Ferric fluoride (*RQ-100/45.4*)	ORM-E	NA9120	None	None	173.510	No limit	No limit	1,2	1,2	
E	Ferric nitrate (*RQ-1000/454*)	Oxidizer	UN1466	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
E	Ferric sulfate (*RQ-1000/454*)	ORM-E	NA9121	None	None	173.510	No limit	No limit	1,2	1,2	
W	Ferrochrome, exothermic	ORM-C		None	173.505	173.985			1	1	
W	Ferromanganese, exothermic. *See* Ferrochrome, exothermic										
W	Ferrophosphorus	ORM-A		None	173.505	173.635			1,2	1,2	Keep dry. Stow away from living quarters
AW	Ferrosilicon, *containing 30% or more but not more than 70% silicon*	ORM-A	UN1408	None	173.505	173.645	Forbidden	25 pounds	1,2	1,2	Keep dry. Stow away from living quarters. Segregation same as for flammable solids labeled Dangerous When Wet
E	Ferrous ammonium sulfate (*RQ-1000/454*)	ORM-E	NA9122	None	None	173.510	No limit	No limit	1,2	1,2	
	Ferrous arsenate (*iron arsenate*), solid	Poison B	UN1608	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
EA	Ferrous chloride, solid (*RQ-100/45.4*)	ORM-B	NA1759	None	173.505	173.510	No limit	No limit	1,2	1,2	
E	Ferrous chloride, solution (*RQ-100/45.4*)	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	
E	Ferrous sulfate (*RQ-1000/454*)	ORM-E	NA9125	None	None	173.510	No limit	No limit	1,2	1,2	
	Fertilizer ammoniating solution *containing free ammonia (more than 25.3 p.s.i.g.)*	Nonflammable gas	UN1043	Nonflammable gas	173.306	173.304 173.314	Forbidden	300 pounds	1,2	4	
	Fertilizer, tankage. *See* Garbage, tankage										
	Fibers *or* fabric, containing not more than 5% animal *or* vegetable oil	Flammable solid	NA1373	Flammable solid	None	173.170	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
W	Fibers (*jute, hemp, flax, sisal, coir, kapok, and similar vegetable fibers*)	ORM-C	NA1372	None	173.505	173.965			1,2	1,2	Stow away from animal or vegetable oils. Segregation same as for flammable solids
	Fibers, burnt	Flammable solid	NA1372	Flammable solid	None	173.169	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Film (*nitrocellulose*)	Flammable solid	NA1324	Flammable solid	None	173.177	50 pounds	200 pounds	1,3	1,3	Stow away from other flammable cargo or substances
	Film, photographic, (including scrap film), safety, nonflammable, or slow burning. Not subject to requirements of this subchapter										
	Firecracker. See Fireworks, common *or* special										
	Firecracker salute. See Fireworks, common *or* special										
	Fire extinguisher	Nonflammable gas	UN1044	Nonflammable gas	173.306		150 pounds	300 pounds	1,2	1,2	
	Fire extinguisher charge containing not more than 50 grains of propellant explosive per unit. Not subject to requirements of this subchapter.										
	Fire extinguisher charge containing sulfuric acid	Corrosive material	UN1774	Corrosive	173.261		1 quart	1 gallon	1,2	1,2	
	Fireworks, common	Class C explosive		Explosive C	None	173.100 173.108	50 pounds	200 pounds	1,3	1,3	Passenger vessels in metal lockers only
	Fireworks, exhibition display piece. See Fireworks, special										
	Fireworks, special	Class B explosive		Explosive B	None	173.88 173.91	Forbidden	200 pounds	3	3	Passenger vessels in metal lockers only. Toy torpedoes must not be packed with other special fireworks
W	Fish meal *or* fish scrap containing 6% to 12% water	ORM-C	NA2216	None	173.505	173.995			1,2	1,2	Segregation same as for flammable solids. Separate from flammable gases or liquids, oxidizing materials, or organic peroxides. *Use double strip stowage* for cargo 6-12 percent moisture containing not more than 12 percent fat. *Use single strip stowage* for cargo 6-12 percent moisture containing 12-15 percent fat.
	Fish meal *or* fish scrap containing less than 6% or more than 12% water	Flammable solid	NA1374	Flammable solid	None	173.171	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Fissile radioactive material. *See* Radioactive material, fissile										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Flame retardant compound liquid	Corrosive material	NA1760	Corrosive	173.244	173.291	1 quart	10 gallons	1,2	1,2	
+	Flammable gas n.o.s. *See* Compressed gas, n.o.s.										
	Flammable liquid, corrosive, n.o.s.	Flammable liquid	UN2924	Flammable liquid and Corrosive	173.118	173.119	1 quart	1 quart	1,2	1	
	Flammable liquid, n.o.s.	Flammable liquid	UN1993	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Flammable liquid, poisonous, n.o.s.	Flammable liquid	UN1992	Flammable liquid and Poison	173.118	173.119	1 quart	10 gallons	1,2	1	
	Flammable solid, corrosive, n.o.s.	Flammable solid	UN2925	Flammable solid and Corrosive	173.153	173.154	25 pounds	25 pounds	1	4	
	Flammable solid, n.o.s.	Flammable solid	UN1325	Flammable solid	173.153	173.154	25 pounds	25 pounds	1,2	1,2	
	Flammable solid, poisonous, n.o.s.	Flammable solid	UN2926	Flammable solid and Poison	173.153	173.154	25 pounds	25 pounds	1,2	1	
	Flare. See Fireworks, common										
	Flare, airplane. See Fireworks, special										
	Flash cartridge. See Fireworks, special *or* Low explosives										
	Flash cracker. See Fireworks, common *or* special										
	Flash powder. See Fireworks, special *or* Low explosives										
	Flax. See Fibers										
	Flexible linear shaped charge, metal clad	Class C explosive		Explosive C	None	173.104	50 pounds	300 pounds	1,3	1,3	
	Flowers of sulfur. *See* Sulfur										
	Flue dust, poisonous	Poison B	NA2811	Poison	173.364	173.368	50 pounds	200 pounds	1,2	1,2	
	Fluoboric acid	Corrosive material	UN1775	Corrosive	173.244	173.283	1 quart	1 gallon	1,2	1,2	
E	Fluoric acid. *See* Hydrofluoric acid										
	Fluorine	Nonflammable gas	UN1045	Poison and Oxidizer	None	173.302	Forbidden	Forbidden	1	5	Stow in well ventilated space away from organic materials
	Fluorophosphoric acid, anhydrous. *See* Monofluorophosphoric acid, anhydrous										
	Fluorosilicic acid. *See* Hydrofluorosilicic acid										
	Fluorosulfonic acid *or* Fluosulfonic acid	Corrosive material	UN1777	Corrosive	None	173.274	Forbidden	1 gallon	1	5	Keep dry
	Forbidden explosives. See 173.51	Forbidden									
	Forbidden materials. See 173.21	Forbidden									
EAW	Formaldehyde solution (*flash point more than 141 deg F.; in containers of 110 gallons or less*) (*RQ-1000/454*)	ORM-A	UN2209	None	173.505	173.510	10 gallons	55 gallons	1,2	4	
E	Formaldehyde solution (*flash point not more than 141 deg F.; in containers over 110 gallons*) (*RQ-1000/454*)	Combustible liquid	UN1198	None	173.118a	None	10 gallons	55 gallons	1,2	1,2	
EAW	Formaldehyde solution (*flash point not more than 141 deg F.; in containers of 110 gallons or less*) (*RQ-1000/454*)	ORM-A	UN1198	None	173.505	173.510	10 gallons	55 gallons	1,2	4	
E	Formaldehyde solution (*flash point more than 141 deg F.; in containers over 110 gallons*) (*RQ-1000/454*)	Combustible liquid	UN2209	None	173.118a	None	10 gallons	55 gallons	1,2	1,2	
	Formalin. *See* Formaldehyde solution										
E	Formic acid (*RQ-5000/2270*)	Corrosive material	UN1779	Corrosive	173.244	173.245 173.289	1 quart	5 gallons	1,2	1,2	Glass carboys in hampers not permitted under deck
E	Formic acid solution (*RQ-5000/2270*)	Corrosive material	NA1779	Corrosive	173.244	173.245 173.289	1 quart	5 gallons	1,2	1,2	
	Fuel, aviation, turbine engine	Flammable liquid	UN1863	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Fuel, aviation, turbine engine	Combustible liquid	UN1863	None	173.118a	None	No limit	No limit	1,2	1,2	
	Fuel oil	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Fuel oil, Diesel. *See* Fuel oil										
	Fuel oil, No. 1, 2, 4, 5 *or* 6	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Fulminate of mercury (dry)	Forbidden									
	Fulminate of mercury, wet. See Initiating explosive										
	Fulminating gold	Forbidden									
	Fulminating mercury	Forbidden									
	Fulminating platinum	Forbidden									
	Fulminating silver	Forbidden									
	Fulminic acid	Forbidden									
E	Fumaric acid (*RQ-5000/2270*)	ORM-E	NA9126	None	None	173.510	No limit	No limit	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Fumaryl chloride	Corrosive material	UN1780	Corrosive	173.244	173.245	1 quart	1 quart	1	1	Glass carboys not permitted
	Fumigant. See 173.152(a) Note 1										
	Furan	Flammable liquid	UN2389	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	Furfural (*RQ-1000/454*)	Combustible liquid	UN1199	None	173.118a	None	No limit	No limit	1,2	1	
	Fusee (*railway or highway*)	Flammable solid	NA1325	Flammable solid	None	173.154a	50 pounds	200 pounds	1,3	1,3	
	Fuse igniter	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Fuse, instantaneous	Class C explosive		Explosive C	173.100		50 pounds	150 pounds	1,2	1,2	
	Fuse lighter	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Fusel oil	Combustible liquid	UN1201	None	173.118a	None	No limit	No limit	1,2	1,2	
	Fuse, mild detonating, metal clad	Class C explosive		Explosive C	None	173.104	50 pounds	300 pounds	1,2	1,2	
	Fuse, safety	Class C explosive		Explosive C	173.100	173.100	50 pounds	300 pounds	1,2	1,2	
	Fuze, combination	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
	Fuze, detonating	Class A explosive		Explosive A	None	173.69	Forbidden	Forbidden	6	5	
	Fuze, detonating, Class C explosive	Class C explosive		Explosive C	None	173.113	50 pounds	150 pounds	1,3	1,3	
	Fuze, detonating, radioactive	Class A explosive		Explosive A	None	173.69	Forbidden	Forbidden	6	5	
	Fuze, percussion	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
	Fuze, time	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
	Fuze, tracer	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
	Galactsan trinitrate	Forbidden									
	Gallium metal, liquid	ORM-B	UN2803	None	None	173.861	Forbidden	Forbidden	1	5	None
	Gallium metal, solid	ORM-B	UN2803	None	None	173.862	40 pounds	40 pounds	1,3	1	Shade from radiant heat
W	Garbage tankage *containing 8% or more water*	ORM-C		None	173.505	173.1000			1,2	1,2	
	Garbage tankage, *containing less than 8% water*	Flammable solid	NA1325	Flammable solid	None	173.209	Forbidden	Forbidden	1	1	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Gas cylinder, empty. *See* Cylinder, empty										
	Gas drips, hydrocarbon	Combustible liquid	UN1864	None	173.118a	None	No limit	No limit	1,2	1,2	
	Gas drips, hydrocarbon	Flammable liquid	UN1864	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Gas identification set	Poison A	NA9035	Poison gas	None	173.331	Forbidden	Forbidden	1	5	
	Gas identification set	Irritating material	NA9035	Irritant	None	173.331	Forbidden	Forbidden	1	5	
	Gas mine. See Explosive mine										
	Gasohol *(gasoline mixed with ethyl alcohol). See* Gasoline										
	Gas oil. *See* Fuel oil										
	Gasoline (*including casing-head and natural*)	Flammable liquid	NA1257	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	4	
	Gelatine Dynamite. See High explosive										
	Germane	Poison A	UN2192	Poison gas and Flammable gas	None	173.328	Forbidden	Forbidden	1	5	
	Glycerol-1,3-dinitrate	Forbidden									
	Glycerol monogluconate trinitrate	Forbidden									
	Glycerol monolactate trinitrate	Forbidden									
	Grenade *without bursting charge. (With incendiary material)*	Class B explosive		Explosive B	None	173.91	Forbidden	Forbidden	3	3	Passenger vessels in metal lockers only
	Grenade *without bursting charge. (With smoke charge)* (Smoke grenade)	Class C explosive		Explosive C	None	173.108	50 pounds	150 pounds	1,3	1,3	
	Grenade *without bursting charge. (With Poison A gas charge)*	Poison A	NA2016	Poison gas	None	173.330	Forbidden	Forbidden			*See* correct shipping name of applicable Poison A material for stowage, special handling, and special segregation requirements
	Grenade *without bursting charge. (With Poison B charge)*	Poison B	NA2016	Poison	None	173.350	Forbidden	Forbidden			*See* correct shipping name of applicable Poison B material for stowage, special handling, and special segregation requirements
	Grenade, empty, primed	Class C explosive		None	None	173.107	50 pounds	150 pounds	1,3	1,3	
	Grenade, hand *or* rifle, explosive (*with or without gas, smoke, or incendiary material*)	Class A explosive		Explosive A	None	173.56	Forbidden	Forbidden	1,2	5	No other cargo may be stowed in the same hold with these items

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
-+/ E/ A/ W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Grenade, tear gas	Irritating material	NA2017	Irritant	None	173.385	Forbidden	75 pounds	1,2	1	
	Guanidine nitrate	Oxidizer	UN1467	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	Separate from nitro-compounds, chlorates, and acids
	Guanyl nitrosamino guanylidene hydrazine. See Initiating explosive										
	Guanyl nitrosamino guanylidene hydrazine (dry)	Forbidden									
	Guanyl nitrosamino guanyl tetrazene. See Initiating explosive										
	Guided missile, without warhead. See Rocket motor, Class A explosive *or* Rocket motor, Class B explosive										
	Guided missile with warhead. See Rocket ammunition with explosive, illuminating, gas, incendiary, *or* smoke projectile										
	Guncotton. See High explosive										
E	Guthion. *See* Azinphos methyl										
	Hafnium metal, dry. (*See 173.214 Note 3*)	Flammable solid	UN2545	Flammable solid	None	173.214	Forbidden	75 pounds	1	5	
	Hafnium metal, wet	Flammable solid	UN1326	Flammable solid	None	173.214	Forbidden	150 pounds	1,2	5	
	Hair, wet	Flammable solid	NA1372	Flammable solid	None	173.172	Forbidden	Forbidden	1,2	5	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Hand signal device	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,2	1,2	
W	Hay	ORM-C	UN1327	None	173.505	173.1005			1,2	1,2	Segregation same as for flammable solids. Stow away from animal or vegetable oils
W	Hay or straw (*loose, wet, or damp*)		UN1327								Forbidden for water shipment
E	Hazardous substance, liquid *or* solid, n.o.s.	ORM-E	NA9188	None	None	173.1300	No limit	No limit	1,2	1,2	
E	Hazardous waste, liquid *or* solid, n.o.s.	ORM-E	NA9189	None	173.505	173.1300	Forbidden	550 pounds	1,2	1,2	
	Hazardous waste, meeting the definition of a hazard class other than ORM-E. See 172.101(c)(10)										
	Heater for refrigerator car, liquid fuel type (*containing fuel*)	Flammable liquid	NA1993	Flammable liquid	173.146		Forbidden	Forbidden	1,2	1	
	Helium	Nonflammable gas	UN1046	Nonflammable gas	173.306	173.302 173.314	150 pounds	300 pounds	1,2	1,2	
	Helium-oxygen mixture	Nonflammable gas	NA1980	Nonflammable gas	173.306	173.302	150 pounds	300 pounds	1,2	1,2	
E	Heptachlor (*RQ-1/0.454*)	ORM-E	NA2761	None	None	173.510	No limit	No limit	1,2	1,2	If stowed under deck, must be stowed in a recoverable location.
	Heptane	Flammable liquid	UN1206	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
W	*Hessian. See* Burlap cloth										
E	Hexachlorocyclopentadiene (*RQ-1/0.454*)	Corrosive material	UN2646	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
W	Hexachloroethane	ORM-A	NA9037	None	173.505	173.650			1,2	1,2	
	Hexadecyltrichlorosilane	Corrosive material	UN1781	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Hexadiene	Flammable liquid	UN2458	Flammable liquid	None	173.119	Forbidden	10 gallons	1,2	5	
	Hexaethyl tetraphosphate and compressed gas mixture	Poison A	UN1612	Poison gas	None	173.334	Forbidden	Forbidden	1	5	Shade from radiant heat
	Hexaethyl tetraphosphate, liquid	Poison B	UN1611	Poison	None	173.358	Forbidden	1 quart	1	4	
	Hexaethyl tetraphosphate mixture, dry (*containing more than 2% hexaethyl tetraphosphate*)	Poison B	NA2783	Poison	None	173.377	Forbidden	200 pounds	1,2	5	
	Hexaethyl tetraphosphate mixture, dry (*containing not more than 2% hexaethyl tetraphosphate*)	Poison B	NA2783	Poison	173.377	173.377	50 pounds	200 pounds	1,2	4	
	Hexaethyl tetraphosphate mixture, liquid (*containing more than 25% hexaethyl tetraphosphate*)	Poison B	NA2783	Poison	None	173.359	Forbidden	1 quart	1,2	5	
	Hexaethyl tetraphosphate mixture, liquid (*containing not more than 25% hexaethyl tetraphophate*)	Poison B	UN2783	Poison	173.359	173.359	1 quart	1 quart	1,2	4	
	Hexafluorophosphoric acid	Corrosive material	UN1782	Corrosive	None	173.275	Forbidden	1 gallon	1,2	1,2	
	Hexafluoropropylene	Nonflammable gas	UN1858	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1	4	
	Hexafluoropropylene oxide	Nonflammable gas	NA1956	Nonflammable gas	173.306	173.304 173.314	150 pounds	300 pounds	1,2	1,2	
	Hexaldehyde	Flammable liquid	UN1207	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxocyclononane, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2165								

§172.101 Hazardous Materials Table (cont'd)

(1) +/E/A/W	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class	(3A) Identification number	(4) Label(s) required (if not excepted)	(5) Packaging (a) Exceptions	(5) Packaging (b) Specific requirements	(6) Maximum net quantity in one package (a) Passenger carrying aircraft or railcar	(6) Maximum net quantity in one package (b) Cargo only aircraft	(7) Water shipments (a) Cargo vessel	(7) Water shipments (b) Passenger vessel	(7) Water shipments (c) Other requirements
	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxocyclononane, *not more than 52% with inert solid. See* Organic peroxide, solid, n.o.s.		UN2166								
	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxocyclononane, *not more than 52% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2167								
	Hexamethylenediamine, solid	Corrosive material	UN2280	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	
	Hexamethylenediamine, solution	Corrosive material	UN1783	Corrosive	173.244	173.292	1 quart	10 gallons	1,2	1,2	
	Hexamethyleneimine	Corrosive material	UN2493	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Hexamethylene triperoxide diamine (dry)	Forbidden									
	Hexamethylol benzene hexanitrate	Forbidden									
	Hexane	Flammable liquid	UN1208	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	2,2',4,4',6,6'-Hexanitro-3,3'-dihydroxyazobenzene (dry)	Forbidden									
	Hexanitroazoxy benzene	Forbidden									
	2,2',3',4,4',6-Hexanitrodiphenylamine	Forbidden									
	2,3',4,4',6,6'-Hexanitrodiphenylether	Forbidden									
	N,N'-(hexanitrodiphenyl)ethylene dinitramine (dry)	Forbidden									
	Hexanitrodiphenyl urea	Forbidden									
	Hexanitroethane	Forbidden									
	Hexanitrooxanilide	Forbidden									
	Hexanoic acid	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Hexyltrichlorosilane	Corrosive material	UN1784	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	High explosive	Class A explosive		Explosive A	173.655	173.61 to 173.87	Forbidden	Forbidden	6	5	
	High explosive, liquid	Class A explosive		Explosive A	None	173.62	Forbidden	Forbidden	6	5	
	Hydraulic accumulator. *See* Accumulator, pressurized										
	Hydrazine, anhydrous	Flammable liquid	UN2029	Flammable liquid and Poison	None	173.276	Forbidden	5 pints	1	5	Segregation same as for corrosives
	Hydrazine, aqueous solution	Corrosive material	UN2030	Corrosive	None	173.276	Forbidden	5 pints	1	5	
	Hydrazine azide	Forbidden									
	Hydrazine chlorate	Forbidden									
	Hydrazine dicarbonic acid diazide	Forbidden									
	Hydrazine perchlorate	Forbidden									
	Hydrazine selenate	Forbidden									
	Hydriodic acid	Corrosive material	UN1787	Corrosive	173.244	173.245	1 quart	1 gallon	1	1	Glass carboys not permitted on passenger vessel
	Hydrobromic acid, *more than 49% strength*	Corrosive material	UN1788	Corrosive	None	173.262	Forbidden	Forbidden	1	1	Glass carboys not permitted on passenger vessel
	Hydrobromic acid, anhydrous. *See* Hydrogen bromide										
	Hydrobromic acid not more than 49% strength	Corrosive material	UN1788	Corrosive	173.244	173.262	1 quart	1 gallon	1	1	Glass carboys not permitted on passenger vessel
+	Hydrocarbon gas, liquefied	Flammable gas	UN1965	Flammable gas	173.306	173.304 173.314	Forbidden	300 pounds	1,2	1	
+	Hydrocarbon gas, nonliquefied	Flammable gas	UN1964	Flammable gas	173.306	173.302	Forbidden	300 pounds	1,2	1	
E	Hydrochloric acid (*RQ-5000/2270*)	Corrosive material	UN1789	Corrosive	173.244	173.263	1 quart	1 gallon	1	1	Glass carboys not permitted on passenger vessel
E	Hydrochloric acid, anhydrous. *See* Hydrogen chloride										
E	Hydrochloric acid mixture (*RQ-5000/2270*)	Corrosive material	NA1789	Corrosive	173.244	173.263	1 quart	1 gallon	1	1	Glass carboys not permitted on passenger vessel
E	Hydrochloric acid solution, inhibited (*RQ-5000/2270*)	Corrosive material	UN1789	Corrosive	173.244	173.263	1 quart	1 gallon	1	1	Glass carboys not permitted on passenger vessel
E	Hydrocyanic acid (*prussic*) solution (*5% or more hydrocyanic acid*) (*RQ-10/4.54*)	Poison A	UN1613	Flammable gas and Poison gas	None	173.332	Forbidden	Forbidden	1	5	Shade from radiant heat. Aqueous solutions containing more than 20 percent hydrogen cyanide are not permitted in transportation by water
E	Hydrocyanic acid, liquefied (*RQ-10/4.54*)	Poison A	NA1051	Flammable gas and Poison gas	None	173.332	Forbidden	Forbidden	1	5	
	Hydrocyanic acid (prussic), unstabilized	Forbidden									
+E	Hydrocyanic acid solution, less than 5% hydrocyanic acid (*RQ-10/4.54*)	Poison B	UN1613	Poison	None	173.351	Forbidden	25 pounds	1	5	Shade from radiant heat
E	Hydrofluoric acid, anhydrous. *See* Hydrogen fluoride										

§172.101 Hazardous Materials Table (cont'd)

(1) +/E/A/W	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class	(3A) Identification number	(4) Label(s) required (if not excepted)	(5) Packaging (a) Exceptions	(5) Packaging (b) Specific requirements	(6) Maximum net quantity in one package (a) Passenger carrying aircraft or railcar	(6) Maximum net quantity in one package (b) Cargo only aircraft	(7) Water shipments (a) Cargo vessel	(7) Water shipments (b) Passenger vessel	(c) Other requirements
E	Hydrofluoric acid solution (*RQ-5000/2270*)	Corrosive material	UN1790	Corrosive	173.244	173.264	1 quart	1 gallon	1	4	
E	Hydrofluoric and sulfuric acid mixture (*RQ-5000/2270*)	Corrosive material	UN1786	Corrosive	None	173.290	Forbidden	1 gallon	1	5	
	Hydrofluoroboric acid. *See* Fluoboric acid										
	Hydrofluorosilicic acid	Corrosive material	NA1778	Corrosive	None	173.265	1 quart	1 gallon	1,2	1,2	
-+	Hydrogen	Flammable gas	UN1049	Flammable gas	173.306	173.302 173.314	Forbidden	300 pounds	1,2	54	
	Hydrogen bromide	Nonflammable gas	UN1048	Nonflammable gas	173.306	173.304	Forbidden	300 pounds	1	4	
E	Hydrogen chloride (*RQ-5000/2270*)	Nonflammable gas	UN1050	Nonflammable gas	173.306	173.304	Forbidden	300 pounds	1	4	
E	Hydrogen fluoride (*RQ-5000/2270*)	Corrosive material	NA1790	Corrosive	None	173.264	Forbidden	110 pounds	1	5	Segregation same as for nonflammable gases
	Hydrogen iodide solution. *See* Hydriodic acid										
+	Hydrogen, liquefied	Flammable gas	UN1966	Flammable gas	None	173.316	Forbidden	Forbidden			Forbidden
	Hydrogen peroxide solution (*40% to 52% peroxide*)	Oxidizer	UN2014	Oxidizer	173.244	173.266	Forbidden	Forbidden	1	4	Shade from radiant heat. Separate from permanganates. Keep away from powdered metals
	Hydrogen peroxide solution (*8% to 40% peroxide*)	Oxidizer	UN2014	Oxidizer	173.244	173.266	1 quart	1 gallon	1,2	1	Shade from radiant heat. Separate from permanganates. Keep away from powdered metals
	Hydrogen peroxide solution (*over 52% peroxide*)	Oxidizer	UN2015	Oxidizer and Corrosive	None	173.266	Forbidden	Forbidden	1	5	Shade from radiant heat. Separate from permanganates. Keep away from powdered metals. Concentrations greater than 60% hydrogen peroxide not permitted on any vessel except under conditions approved by the Department
+	Hydrogen selenide	Flammable gas	UN2202	Flammable gas and Poison	None	173.328	Forbidden	Forbidden	1	5	
E	Hydrogen sulfate. *See* Sulfuric acid										
+E	Hydrogen sulfide (*RQ-100/45.4*)	Flammable gas	UN1053	Flammable gas and Poison	None	173.304 173.314	Forbidden	300 pounds	1	5	
	Hydrosilicofluoric acid. *See* Hydrofluorosilicic acid										
	Hydroxyl amine iodide	Forbidden									
E	Hypochlorite solution *containing more than 7% available chlorine by weight* (*RQ-100/45.4*)	Corrosive material	NA1791	Corrosive	173.244	173.277	1 quart	4 gallons	1,2	1	Glass carboys in hampers not permitted under deck
EA	Hypochlorite solution containing not more than 7% available chlorine *by weight* (*RQ-100/45.4*)	ORM-B	NA1791	None	173.505	173.510	No limit	No limit			
	Hyponitrous acid	Forbidden									
	Igniter	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Igniter cord	Class C explosive		Explosive C	None	173.100	50 pounds	150 pounds	1,3	1,3	
	Igniter fuse, metal clad	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Igniter, jet thrust (jato)	Class A explosive		Explosive A	None	173.79	Forbidden	Forbidden	6	5	
	Igniter, jet thrust (jato)	Class B explosive		Explosive B	None	173.92	Forbidden	550 pounds	1,3	5	
	Igniter, rocket motor	Class A explosive		Explosive A	None	173.79	Forbidden	Forbidden	6	5	
	Igniter, rocket motor	Class B explosive		Explosive B	None	173.92	Forbidden	550 pounds	1,3	5	
	Illuminating projectile. *See* Fireworks, special										
	Iminobispropylamine	Corrosive material	UN2269	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Initiating explosive (*diazodinitrophenol*)	Class A explosive		Explosive A	None	173.70	Forbidden	Forbidden	6	5	
	Initiating explosive (*fulminate of mercury*)	Class A explosive		Explosive A	None	173.71	Forbidden	Forbidden	6	5	
	Initiating explosive (*guanyl nitrosamino guanylidene hydrazine*)	Class A explosive		Explosive A	None	173.72	Forbidden	Forbidden	6	5	
	Initiating explosive (*lead azide, dextrinated type only*)	Class A explosive		Explosive A	None	173.73	Forbidden	Forbidden	6	5	
	Initiating explosive (*lead mononitroresorcinate*)	Class A explosive		Explosive A	None	173.70	Forbidden	Forbidden	6	5	
	Initiating explosive (*lead styphnate (lead trinitroresorcinate)*)	Class A explosive		Explosive A	None	173.74	Forbidden	Forbidden	6	5	
	Initiating explosive (*nitro mannite*)	Class A explosive		Explosive A	None	173.75	Forbidden	Forbidden	6	5	
	Initiating explosive (*nitrosoguanidine*)	Class A explosive		Explosive A	None	173.76	Forbidden	Forbidden	6	5	

§172.101 Hazardous Materials Table (cont'd)

(1) +/E/A/W	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class	(3A) Identification number	(4) Label(s) required (if not excepted)	(5) Packaging (a) Exceptions	(5) Packaging (b) Specific requirements	(6) Maximum net quantity in one package (a) Passenger carrying aircraft or railcar	(6) Maximum net quantity in one package (b) Cargo only aircraft	(7) Water shipments (a) Cargo vessel	(7) Water shipments (b) Passenger vessel	(7) Water shipments (c) Other requirements
	Initiating explosive (*pentaerythrite tetranitrate*)	Class A explosive		Explosive A	None	173.77	Forbidden	Forbidden	6	5	
	Initiating explosive (*tetrazene (guanyl nitrosamine guanyl tetrazene)*)	Class A explosive		Explosive A	None	173.78	Forbidden	Forbidden	6	5	
	Initiating explosives (dry)	Forbidden									
	Ink	Combustible liquid	UN2867	None	173.118a	None	No limit	No limit	1,2	1,2	
	Ink	Flammable liquid	UN1210	Flammable liquid	173.118	173.144	1 quart	10 gallons	1,2	1	
	Inositol hexanitrate (dry)	Forbidden									
	Insecticide, dry, n.o.s.	Poison B	NA2588	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Insecticide, liquefied gas (*containing no Poison A or B material*)	Nonflammable gas	NA1968	Nonflammable gas	173.306	173.304	150 pounds	300 pounds	1,3	1,3	
	Insecticide, liquefied gas, containing Poison A material *or* Poison B material	Poison A	NA1967	Poison gas	None	173.329 173.334	Forbidden	Forbidden	1	5	Shade from radiant heat
	Insecticide, liquid, n.o.s.	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Insecticide, liquid, n.o.s.	Flammable liquid	NA1993	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Insecticide, liquid, n.o.s.	Poison B	NA2902	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
W	Insulation tape (*varnished cloth type*). *See* Oiled material										
	Inulin trinitrate (dry)	Forbidden									
	Iodine azide (dry)	Forbidden									
	Iodine monochloride	Corrosive material	UN1792	Corrosive	None	173.293	Forbidden	1 quart	1	5	Keep dry
	Iodine pentafluoride	Oxidizer	UN2495	Oxidizer and Poison	None	173.246	Forbidden	100 pounds	1	1	Keep dry
	Iodoxy compounds (dry)	Forbidden									
	Iridium nitratopentamine iridium nitrate	Forbidden									
E	Iron chloride, solid. *See* Ferric chloride, solid										
	Iron mass *or* sponge, *not properly oxidized*	Flammable solid	NA1383	Flammable solid	None	173.174	Forbidden	Forbidden	1,2	5	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Iron mass *or* sponge, spent	Flammable solid	UN1376	Flammable solid	None	173.174	Forbidden	Forbidden	1,2	5	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Iron oxide, spent. *See* Iron mass *or* sponge, spent										
E	Iron sesquichloride, solid. *See* Ferric chloride										
	Irritating agent, n.o.s.	Irritating material	NA1693	Irritant	None	173.382	Forbidden	75 pounds	1	1	Stow away from living quarters
	Isobutane *or* Liquefied petroleum gas. *See* Liquefied petroleum gas										
	Isobutyl acetate	Flammable liquid	UN1213	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Isobutylamine	Flammable liquid	UN1214	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Isobutylene *or* Liquefied petroleum gas. *See* Liquefied petroleum gas										
	Isobutyric acid	Corrosive material	UN2529	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Isobutyric anhydride	Corrosive material	UN2530	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Isononanyl peroxide, *technically pure or* Isononanyl peroxide, *in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2128								
	Isooctane	Flammable liquid	UN1262	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Isooctene	Flammable liquid	UN1216	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Isopentane	Flammable liquid	UN1265	Flammable liquid	173.118	173.119	Forbidden	10 gallons	1,3	4	
	Isopentanoic acid	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
E	Isoprene (*RQ-1000/454*)	Flammable liquid	UN1218	Flammable liquid	173.118	173.119	Forbidden	10 gallons	1,3	4	
	Isopropanol	Flammable liquid	UN1219	Flammable liquid	173.118	173.125	1 quart	10 gallons	1,0	1,2	
E	Isopropanolamine dodecylbenzenesulfonate (*RQ-1000/454*)	ORM-E	NA9127	None	None	173.510	No limit	No limit	1,2	1,2	
	Isopropyl acetate	Flammable liquid	UN1220	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Isopropyl acid phosphate, solid	Corrosive material	UN1793	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	
	Isopropyl alcohol. *See* Isopropanol										
	Isopropylamine	Flammable liquid	UN1221	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
	Isopropyl mercaptan	Flammable liquid	UN2703	Flammable liquid	None	173.141	Forbidden	10 gallons	1,3	5	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Isopropyl nitrate	Flammable liquid	UN1222	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Isopropyl percarbonate, stabilized	Organic peroxide	NA2134	Organic peroxide	None	173.282	Forbidden	Forbidden	5	5	
	Isopropyl percarbonate, unstabilized	Organic peroxide	NA2133	Organic peroxide	None	173.218	Forbidden	Forbidden	5	5	
	Isopropyl peroxydicarbonate, *technically pure. See* Isopropyl percarbonate, unstabilized		UN2133								
	Isopropyl peroxydicarbonate, *not more than 52% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2134								
	Isopropyl phosphoric acid, solid. *See* Isopropyl acid phosphate, solid										
	Isothiocyanic acid (polymerization hazard)	Forbidden									
	Jet thrust igniter. *See* Igniter, jet thrust										
	Jet thrust unit (*jato*)	Class A explosive		Explosive A	None	173.79	Forbidden	Forbidden	6	5	
	Jet thrust unit (*jato*)	Class B explosive		Explosive B	None	173.92	Forbidden	550 pounds	1,3	5	
W	*Jute. See* Fibers										
W	*Kapok. See* Fibers										
E	Kelthane (*RQ-5000/2270*)	ORM-E	NA2761	None	None	173.510	No limit	No limit	1,2	1,2	
E	Kepone (*RQ-1/0.454*)	ORM-E	NA2761	None	None	173.510	No limit	No limit	1,2	1,2	
	Kerosene	Combustible liquid	UN1223	None	173.118a	None	No limit	No limit	1,2	1,2	
	Lacquer. *See* Paint, Enamel, Lacquer, Stain, *etc.*										
	Lacquer base *or* Lacquer chips, plastic (*Wet with alcohol or solvent*)	Flammable liquid	NA1263	Flammable liquid	173.118	173.127	1 quart	25 pounds	1,2	1	
	Lacquer base, *or* Lacquer chips, dry	Flammable solid	NA2557	Flammable solid	173.153	173.175	25 pounds	100 pounds	1	1	
	Lacquer base, liquid. *See* Paint, Enamel, Lacquer, Stain, *etc.*										
	Lacquer removing, reducing, *or* thinning compound. *See* Compound, lacquer, paint, *or* varnish, removing, reducing *or* thinning liquid										
	Lauroyl peroxide	Organic peroxide	UN2124	Organic peroxide	173.153	173.157 173.158	2 pounds	25 pounds	1,2	1	
	Lauroyl peroxide, *not more than 42%, stable dispersion, in water. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2893								
	Lauroyl peroxide, *technically pure. See* Lauroyl peroxide.		UN2124								
E	Lead acetate (*RQ-5000/2270*)	ORM-E	UN1616	None	None	173.510	No limit	No limit	1,2	1,2	
E	Lead arsenate, solid (*RQ-5000/2270*)	Poison B	UN1617	Poison	173.364	173.367	50 pounds	200 pounds	1,2	1,2	
	Lead arsenite, solid	Poison B	UN1618	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Lead azide. See Initiating explosive										
	Lead azide (dry)	Forbidden									
EA	Lead chloride (*RQ-5000/2270*)	ORM-B	NA2291	None	173.505	173.800	25 pounds	100 pounds	1,2	1,2	
	Lead cyanide	Poison B	UN1620	Poison	173.370		25 pounds	No limit	1,2	1,2	Stow away from acids
W	Lead dross (*containing 3% or more free acid*)	ORM-C	NA1794	None	173.505	173.1010			1,2	1,2	Segregation same as for corrosive materials
EA	Lead fluoborate (*RQ-5000/2270*)	ORM-B	NA2291	None	173.505	173.510	25 pounds	100 pounds	1,2	1,2	
EA	Lead fluoride (*RQ-1000/454*)	ORM-B	NA2811	None	173.505	173.510	25 pounds	100 pounds	1,2	1,2	
E	Lead iodide (*RQ-5000/2270*)	ORM-E	NA2811	None	None	173.510	No limit	No limit	1,2	1,2	
	Lead mononitroresorcinate. See Initiating explosive										
	Lead mononitroresorcinate (dry)	Forbidden									
E	Lead nitrate (*RQ-5000/2270*)	Oxidizer	UN1469	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	Stow away from foodstuffs
	Lead peroxide	Oxidizer	UN1872	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Stow away from foodstuffs
	Lead picrate (dry)	Forbidden									
W	Lead scrap. *See* Lead dross										
E	Lead stearate (*RQ-5000/2270*)	ORM-E	NA2811	None	None	173.510	No limit	No limit	1,2	1,2	
	Lead styphnate (dry)	Forbidden									
	Lead styphnate (lead trinitroresorcinate). See Initiating explosive										
E	Lead sulfate, solid (*containing more than 3% free acid*) (*RQ-5000/2270*)	Corrosive material	UN1794	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	
E	Lead sulfide (*RQ-5000/2270*)	ORM-E	NA2291	None	None	173.510	No limit	No limit	1,2	1,2	
E	Lead thiocyanate (*RQ-5000/2270*)	ORM-E	NA2291	None	None	173.510	No limit	No limit	1,2	1,2	
	Leather bleach *or* dressing	Flammable liquid	NA1142	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Leather bleach *or* dressing	Combustible liquid	NA1142	None	173.118a	None	No limit	No limit	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Life-rafts, inflatable	ORM-C		None	None	173.906	1 per inaccessible cargo compartment	No limit	1,2	1,2	
	Lighter fluid	Flammable liquid	UN1226	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Lime-nitrogen. See Calcium cyanamide, not hydrated										
	Lime, unslaked. *See* Calcium oxide										
EA	Lindane (*RQ-1/.454*)	ORM-A	NA2761	None	173.505	173.510	No limit	No limit	1,2	1,2	
+	Liquefied hydrocarbon gas. *See* Hydrocarbon gas, liquefied										
	Liquefied nonflammable gas (*charged with nitrogen, carbon dioxide, or air*)	Nonflammable gas	NA1956	Nonflammable gas	173.306	173.304	300 pounds	300 pounds	1,2	1,2	
+	Liquefied petroleum gas	Flammable gas	UN1075	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	1	
	Liquid other than one classed as flammable, corrosive, poison or irritant, charged with nitrogen, carbon dioxide, or air. See Compressed gas n.o.s.										
	Lithium acetylide-ethylene diamine complex	Flammable solid	NA2813	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solid labeled Dangerous When Wet
	Lithium aluminum hydride	Flammable solid	UN1410	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solid labeled Dangerous When Wet
	Lithium aluminum hydride, ethereal	Flammable liquid	UN1411	Flammable liquid	None	173.137	Forbidden	1 quart	1	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Lithium amide, powdered	Flammable solid	UN1412	Flammable solid	173.153	173.168	25 pounds	100 pounds	1,2	4	Segregation same as for flammable solids labeled Dangerous When Wet
	Lithium battery. See 173.206(f).										
	Lithium borohydride	Flammable solid	UN1413	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
E	Lithium chromate (*RQ-1000/454*)	ORM-E	NA9134	None	None	173.510	No limit	No limit	1,2	1,2	
	Lithium ferrosilicon	Flammable solid	UN2830	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Lithium hydride	Flammable solid	UN1414	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Lithium hydride in fused solid form	Flammable solid	UN2805	Flammable solid and Dangerous when wet	None	173.206	Forbidden	100 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Lithium hypochlorite compound, dry (*containing more than 39% available chlorine*)	Oxidizer	UN1471	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,2	1,2	
	Lithium metal	Flammable solid	UN1415	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Lithium metal, in cartridges	Flammable solid	NA1415	Flammable solid and Dangerous when wet	173.206	173.206	1 pound	25 pounds	1,2	4	Segregation same as for flammable solids labeled Dangerous When Wet
	Lithium nitride	Flammable solid	UN2806	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Lithium peroxide	Oxidizer	UN1472	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Keep dry
	Lithium silicon	Flammable solid	UN1417	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	1,2	Segregation same as for flammable solids labeled Dangerous When Wet
	London purple, solid	Poison B	UN1621	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Low blasting explosive. See Low explosive										
	Low explosive	Class A explosive		Explosive A	None	173.60	Forbidden	Forbidden	6	5	
	Lye. See Sodium hydroxide, solid										
	Magnesium aluminum phosphide	Flammable solid	UN1419	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	1,2	Segregation same as for flammable solids labeled Dangerous When Wet
+	Magnesium arsenate, solid	Poison B	UN1622	Poison	173.364	173.367	50 pounds	200 pounds	1,2	1,2	
	Magnesium dross, wet or hot. See 173.173	Forbidden									

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Magnesium, metal (*powdered, pellets, turnings, or ribbons*)	Flammable solid	UN1869	Flammable solid and Dangerous when wet	173.153	173.220	25 pounds	100 pounds	1,2	1,2	Segregation same as for flammable solids labeled Dangerous When Wet
	Magnesium nitrate	Oxidizer	UN1474	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Magnesium perchlorate	Oxidizer	UN1475	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,3	1,3	Stow away from powdered metals
	Magnesium peroxide, solid	Oxidizer	UN1476	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Keep dry
	Magnesium scrap (*borings, clippings, shavings, sheet, turnings, or scalpings*)	Flammable solid	NA2793	Flammable solid and Dangerous when wet	173.153	173.220	Forbidden	Forbidden	1,2	1,2	Segregation same as for flammable solids labeled Dangerous When Wet
A	Magnetized material	ORM-C	UN2807	Magnetized material	None	173.1020	No limit	No limit			
EA	Malathion (*RQ-10/4.54*)	ORM-A	NA2783	None	173.505	173.510	No limit	No limit	1,2	1,2	
EA	Maleic acid (*RQ-5000/2270*)	ORM-A	NA2215	None	173.505	173.510	50 pounds	200 pounds	1,2	1,2	Keep tightly closed.
EAW	Maleic anhydride (*RQ-5000/2270*)	ORM-A	UN2215	None	173.505	173.510	50 pounds	200 pounds	1,2	1,2	Stow away from foodstuffs
A	Manganese dioxide	ORM-B	NA1479	None	173.505	173.510	No limit	No limit			
	Mannitan tetranitrate	Forbidden									
	Matches, block. See Matches, strike anywhere										
	Matches, safety, *book, card, or strike-on-box*	Flammable solid	UN1944	Flammable solid	173.176	173.176	50 pounds	50 pounds	1,2	1	
	Matches, strike anywhere	Flammable solid	UN1331	Flammable solid	None	173.176	Forbidden	Forbidden	1,2	1	
E	Matting acid. *See* Sulfuric acid										
	Medicines, n.o.s.	Combustible liquid	UN1851	None	173.118a	None	No limit	No limit	1,2	1,2	
	Medicines, n.o.s.	Flammable liquid	UN1851	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Medicines, n.o.s.	Flammable solid	UN1851	Flammable solid	173.153	173.154	25 pounds	100 pounds	1,2	1,2	
	Medicines, n.o.s.	Oxidizer	UN1851	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	
	Medicines, n.o.s., liquid	Corrosive material	UN1851	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Medicines, n.o.s., liquid	Poison B	UN1851	Poison	173.345	173.346	1 quart	55 gallons	1,3	1	
	Medicines, n.o.s., solid	Corrosive material	UN1851	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
	Medicines, n.o.s., solid	Poison B	UN1851	Poison	173.364	173.365	50 pounds	200 pounds	1,3	1,3	
	Memtetrahydro phthalic anhydride	Corrosive material	NA1760	Corrosive	None	173.298	Forbidden	1 quart	1,2	1	
	p-Menthane hydroperoxide, *technically pure. See* Paramenthane hydroperoxide		UN2125								
	Mercaptan mixture, aliphatic	Flammable liquid	NA1228	Flammable liquid	None	173.141	Forbidden	10 gallons	1,3	5	
	Mercaptan mixture, aliphatic (*in containers over 110 gallons*)	Combustible liquid	NA1228	None	173.118a	None	Forbidden	10 gallons	1,2	1,2	
AW	Mercaptan mixture, aliphatic (*in containers of 110 gallons or less). See 173.141(b)*	ORM-A	NA1228	None	173.505	173.510	Forbidden	10 gallons	1,3	5	Stow in well ventilated space away from living quarters
E	Mercaptodimethur (*RQ-100/45.4*)	ORM-E	NA2757	None	None	173.510	No limit	No limit	1,2	1,2	
+	Mercuric acetate	Poison B	UN1629	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercuric ammonium chloride, solid	Poison B	UN1630	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercuric benzoate, solid	Poison B	UN1631	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercuric bromide, solid	Poison B	UN1634	Poison	173.364	173.365	Forbidden	25 pounds	1,2	1,2	
	Mercuric chloride, solid	Poison B	UN1624	Poison	173.364	173.372	Forbidden	25 pounds	1,2	1,2	
+E	Mercuric cyanide, solid (*RQ-1/.454*)	Poison B	UN1636	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
	Mercuric iodide, solid	Poison B	UN1638	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Mercuric iodide solution	Poison B	NA1638	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
E	Mercuric nitrate (*RQ-10/4.54*)	Oxidizer	UN1625	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	If stowed under deck, must be stowed in a recoverable location.
+	Mercuric oleate, solid	Poison B	UN1640	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Mercuric oxide, solid	Poison B	UN1641	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercuric oxycyanide, solid	Poison B	UN1642	Poison	173.364	173.365	25 pounds	200 pounds	1,2	1,2	Stow away from acids
+	Mercuric potassium cyanide, solid	Poison B	UN1626	Poison	173.364	173.365 173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
+	Mercuric potassium iodide, solid	Poison B	UN1643	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercuric salicylate solid	Poison B	UN1644	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercuric subsulfate, solid	Poison B	NA2025	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+E	Mercuric sulfate, solid (*RQ-10/4.54*)	Poison B	UN1645	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+E	Mercuric sulfocyanate, solid *or* Mercuric thiocyanate, solid (*RQ-10/4.54*)	Poison B	UN1646	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercurol *or* Mercury nucleate, solid	Poison B	UN1639	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercurous acetate, solid	Poison B	UN1629	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Mercurous azide	Forbidden									
+	Mercurous bromide, solid	Poison B	UN1634	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercurous gluconate, solid	Poison B	UN1637	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercurous iodide, solid	Poison B	NA1638	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Mercurous nitrate, solid (*RQ-10/4.54*)	Oxidizer	UN1627	Oxidizer	173.153	173.154	50 pounds	100 pounds	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
+	Mercurous oxide, black, solid	Poison B	UN1641	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Mercurous sulfate, solid	Poison B	UN1628	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Mercury acetylide	Forbidden									
	Mercury based pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2778	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Mercury based pesticide (*compounds and preparations*), liquid	Poison B	UN2777	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Mercury based pesticide (*compounds and preparations*), solid	Poison B	UN2777	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Mercury compound, n.o.s., solid	Poison B	UN2025	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Mercury fulminate. See Initiating explosive										
	Mercury iodide aquabasic ammonobasic (Iodide of Million's base)	Forbidden									
A	Mercury, metallic	ORM-B	NA2809	None	None	173.860	173.860	See 173.860			
	Mercury nitride	Forbidden									
	Mercury oxycyanide	Forbidden									
	Mesityl oxide	Flammable liquid	UN1229	Flammable liquid	None	173.119	1 quart	10 gallons	1,2	1,2	
	Metal alkyl solution, n.o.s.	Flammable liquid	NA9195	Flammable liquid	173.118	173.119	1 quart	1 gallon	1,2	1	
W	Metal borings, shavings, turnings, *or* cuttings (*ferrous metals only, except stainless steel*)	ORM-C	NA2793	None	173.505	173.1025			1,2	1,2	Keep dry, not permitted if temperature of material is at or above 130 deg F
	Metal salts of methyl nitramine (dry)	Forbidden									
+	Methane	Flammable gas	UN1971	Flammable gas	173.306	173.302	Forbidden	300 pounds	1,2	4	
	Methanol. *See* Methyl alcohol										
	Methazoic acid	Forbidden									
E	Methoxychlor (*RQ-1/0.454*)	ORM-E	NA2761	None	None	173.510	No limit	No limit	1,2	1,2	
	Methyl acetate	Flammable liquid	UN1231	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methyl acetone	Flammable liquid	UN1232	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
+	Methylacetylene-propadiene, stabilized	Flammable gas	UN1060	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	1	
	Methyl acrylate, inhibited	Flammable liquid	UN1919	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methylal	Flammable liquid	UN1234	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
	Methyl alcohol	Flammable liquid	UN1230	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
+E	Methylamine, anhydrous (*RQ-1000/454*)	Flammable gas	UN1061	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1	4	
E	Methylamine, aqueous solution (*RQ-1000/454*)	Flammable liquid	UN1235	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	Stow away from mercury and its compounds
	Methylamine dinitramine and dry salts thereof	Forbidden									
	Methylamine nitroform	Forbidden									
	Methylamine perchlorate (dry)	Forbidden									
	Methylamyl acetate	Flammable liquid	UN1233	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	Methyl amyl ketone	Combustible liquid	UN1110	None	173.118a	None	No limit	No limit	1,2	1,2	
+	Methyl bromide and more than 2% chloropicrin mixture, liquid	Poison B	NA1581	Poison	None	173.353	Forbidden	Forbidden	1	5	Shade from radiant heat
+	Methyl bromide and nonflammable, nonliquefied compressed gas mixture, liquid (*including up to 2% chloropicrin*)	Poison B	NA1955	Poison	None	173.353a	Forbidden	300 pounds	1	5	Stow away from living quarters
+E	Methyl bromide - ethylene dibromide mixture, liquid (*RQ-1000/454*)	Poison B	UN1647	Poison	None	173.353	Forbidden	55 gallons	1	1	
+	Methyl bromide, liquid (*including up to 2% chloropicrin*)	Poison B	NA1581	Poison	None	173.353	Forbidden	55 gallons	1	5	Stow away from living quarters. Segregation same as for nonflammable gas.
	Methyl butene	Flammable liquid	NA2460	Flammable liquid	None	173.119	Forbidden	10 gallons	1,2	5	
	Methyl butyrate	Flammable liquid	UN1237	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methyl cellosolve. See Ethylene glycol monomethyl ether										
	Methyl cellosolve acetate. See Ethylene glycol monomethyl ether acetate										
+	Methyl chloride	Flammable gas	UN1063	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	4	
+	Methyl chloride-methylene chloride mixture	Flammable gas	UN1912	Flammable gas	173.306	173.304 173.314	Forbidden	300 pounds	1,2	4	
	Methyl chlorocarbonate. *See* Methyl chloroformate										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
A	Methyl chloroform. *See* 1,1,1-Trichloroethane										
	Methyl chloroformate	Flammable liquid	UN1238	Flammable liquid and Poison	None	173.288	Forbidden	5 pints	1,2	1	
	Methylchloromethyl ether, anhydrous	Flammable liquid	UN1239	Flammable liquid and Poison	None	173.143	Forbidden	Forbidden	1	5	Shade from radiant heat
	Methylcyclohexane	Flammable liquid	UN2296	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methylcyclopentane	Flammable liquid	UN2298	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Methyl dichloroacetate	Corrosive material	UN2299	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
	Methyldichloroarsine	Poison A	NA1556	Poison gas	None	173.328	Forbidden	Forbidden	1	5	Shade from radiant heat
	Methyl dichlorosilane	Flammable liquid	UN1242	Flammable liquid	None	173.136	Forbidden	5 pints	1,2	1	
	Methylene chloride. *See* Dichloromethane										
	Methylene glycol dinitrate	Forbidden									
	Methyl ethyl ether. *See* Ethyl methyl ether										
	Methyl ethyl ketone	Flammable liquid	UN1193	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methyl ethyl ketone peroxide, *in solution with not more than 9% by weight active oxygen. See* Organic peroxide, liquid, *or* solution, n.o.s.		UN2550								
	Methyl ethyl ketone peroxide, in solution with more than 9% by weight active oxygen	Forbidden									
	Methyl ethyl pyridine	Corrosive material	UN2300	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Methyl formate	Flammable liquid	UN1243	Flammable liquid	173.118	173.119	Forbidden	10 gallons	1,3	4	
	Methylfuran	Flammable liquid	UN2301	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	a-Methylglucoside tetranitrate	Forbidden									
	a-Methylglycerol trinitrate	Forbidden									
	Methylhydrazine	Flammable liquid	UN1244	Flammable liquid and Poison	None	173.145	Forbidden	5 pints	1,2	1	Stow separate from oxidizing materials and corrosives
	Methyl isobutyl ketone peroxide, *in solution with not more than 9% by weight active oxygen. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2126								
	Methyl isobutyl ketone peroxide, in solution with more than 9% by weight active oxygen	Forbidden									
	Methyl isopropenyl ketone, inhibited	Flammable liquid	UN1246	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methyl magnesium bromide in ethyl ether *not over 40% concentration*	Flammable liquid	UN1928	Flammable liquid	None	173.149	Forbidden	Forbidden	1	1	Segregation same as for flammable solids. Separate from flammable gases or liquids, oxidizing materials or organic peroxides
+E	Methyl mercaptan (*RQ-100/45.4*)	Flammable gas	UN1064	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	1	
E	Methyl methacrylate monomer, inhibited (*RQ-5000/2270*)	Flammable liquid	UN1247	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	Methyl methacrylate monomer, uninhibited (*high-purity, if acceptable under 173.21 of this subchapter*) (*RQ-5000/2270*)	Flammable liquid	NA1247	Flammable liquid	173.118	173.119	Forbidden	Forbidden	1,2	1	
	Methyl nitrate	Forbidden									
	N-Methyl-N'-nitro-N-nitrosoguanidine (*not exceeding 25 grams in one outside packaging*)	Flammable solid	NA1325	Flammable solid	None	173.179	Forbidden	Forbidden	4	5	
	Methyl norbornene dicarboxylic anhydride. *See* Memtetrahydro phthalic anhydride										
E	Methyl parathion, liquid (*RQ-100/45.4*)	Poison B	NA2783	Poison	None	173.358	Forbidden	1 quart	1,3	1,3	
E	Methyl parathion mixture, dry (*RQ-100/45.4*)	Poison B	NA2783	Poison	173.377	173.377	50 pounds	200 pounds	1,2	1,2	
E	Methyl parathion mixture, liquid, (containing 25% or less methyl parathion) (*RQ-100/45.4*)	Poison B	NA2783	Poison	None	173.359	1/2 pint	1 quart	1,2	1,2	
E	Methyl parathion mixture, liquid, (*containing over 25% methyl parathion*) (*RQ-100/45.4*)	Poison B	NA2783	Poison	None	173.359	Forbidden	1 quart	1,2	1,2	
	Methylpentadiene	Flammable liquid	UN2461	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methyl pentane	Flammable liquid	UN2462	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methyl phosphonothioic dichloride, anhydrous	Corrosive material	NA1760	Corrosive	173.244	173.245 173.245a	1 quart	1 quart	1	4	
	Methyl phosphonous dichloride	Corrosive material	NA1760	Corrosive	173.244	173.245 173.245a	1 quart	1 quart	1	4	
	Methyl picric acid (heavy metal salts of)	Forbidden									

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Methyl propionate	Flammable liquid	UN1248	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methyl propyl ketone	Flammable liquid	UN1249	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Methyl sulfate. *See* Dimethyl sulfate										
	Methyl sulfide. *See* Dimethyl sulfide										
	Methyltrichlorosilane	Flammable liquid	UN1250	Flammable liquid	None	173.135	Forbidden	10 gallons	1,2	1	
	Methyl trimethylol methane trinitrate	Forbidden									
	Methyl vinyl ketone, inhibited	Flammable liquid	UN1251	Flammable liquid	173.147	173.147	4 ounces	10 gallons	1,2	1	
E	Mevinphos (*RQ-1/0.454*)	Poison B	NA2783	Poison	173.364	173.365	Forbidden	1 quart	2	2	
E	Mexacarbate (*RQ-1000/454*)	Poison B	NA2757	Poison	173.364	173.365	50 pounds	200 pounds	2	2	
	Mild detonating fuse, metal clad. See Fuse, mild detonating, metal clad										
	Mine, empty. See 173.55										
	Mine, explosive, with gaseous material. See Explosive mine										
	Mine rescue equipment containing carbon dioxide	Nonflammable gas		Nonflammable gas	173.306		150 pounds	300 pounds	1,2	1,2	
	Mining reagent, liquid (*containing 20% or more cresylic acid*)	Corrosive material	NA2022	Corrosive	173.244	173.245 173.249a	1 quart	10 gallons	1,2	1,2	
A	Mipafox	ORM-A	UN2783	None	173.505	173.510	No limit	No limit			
E	Mixed acid. *See* Nitrating acid										
A	Molybdenum pentachloride	ORM-B	UN2508	None	173.505	173.800	25 pounds	100 pounds			
	Monobromotrifluoromethane	Nonflammable gas	UN1009	Nonflammable gas	173.306	173.304 173.314	150 pounds	300 pounds	1,2	1,2	
	Monochloroacetone, stabilized *or* inhibited	Irritating material	NA1695	Irritant	None	173.384	Forbidden	5 gallons	1	1	Stow away from living quarters
	Monochloroacetone (unstabilized)	Forbidden									
	Monochlorodifluoromethane	Nonflammable gas	UN1018	Nonflammable gas	173.306	173.304 173.314 173.315	150 pounds	300 pounds	1,2	1,2	
	Monochloroethylene. *See* Vinyl chloride										
	Monochloropentafluoroethane	Nonflammable gas	UN1020	Nonflammable gas	173.306	173.304	150 pounds	300 pounds	1,2	1,2	
	Monochlorotetrafluoroethane	Nonflammable gas	UN1021	Nonflammable gas	173.306	173.304 173.314	150 pounds	300 pounds	1,2	1,2	
	Monochlorotrifluoromethane	Nonflammable gas	UN1022	Nonflammable gas	173.306	173.304	150 pounds	300 pounds	1,2	1,2	
	Monoethanolamine	Corrosive material	UN2491	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
E	Monoethylamine (*RQ-1000/454*)	Flammable liquid	UN1036	Flammable liquid	None	173.148	Forbidden	5 pints	1,2	5	Segregation same as for flammable gas
	Monofluorophosphoric acid, anhydrous	Corrosive material	UN1776	Corrosive	None	173.275	Forbidden	1 gallon	1,2	1,2	Keep dry
	Morpholine	Flammable liquid	UN2054	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Morpholine, aqueous, mixture	Flammable liquid	NA2054	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Morpholine, aqueous, mixture	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1	4	
	Mortar stain, liquid	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Mortar stain, liquid	Flammable liquid	NA1993	Flammable liquid	173.118	173.128	1 quart	55 gallons	1,2	1	
	Moth balls. See Naphthalene										
	Motion picture film. See Film										
E	Motor fuel antiknock compound *or* Antiknock compound (*RQ100/45.4*)	Poison B	UN1649	Poison	None	173.354	Forbidden	55 gallons	1	5	If flashpoint less than 141 deg F, segregation same as for flammable liquids
E	Motor fuel antiknock compound *or* Antiknock compound; containing tetraethyl lead (*RQ-100/45.4*)	Poison B	UN1649	Poison	None	173.354	Forbidden	55 gallons	1	5	If flashpoint is less than 141 DEG F, segregation same as for flammable liquids
	Motor fuel, n.o.s.	Combustible liquid	NA1203	None	173.118a	None	No limit	No limit	1,2	1,2	
	Motor fuel, n.o.s.	Flammable liquid	NA1203	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Motor, internal combustion				173.120						
	Motor vehicle, *etc., including automobile, motorcycle, truck, tractor, and other self-propelled vehicle or equipment powered by internal combustion engine, when offered new or used for transportation and which contain fuel in the engine or fuel tank or the electric storage battery is connected to either terminal of the electrical system*	ORM-C		None	173.120 173.250 173.257 173.306 175.305 176.905				1,2	1,2	
E	Muriatic acid. *See* Hydrochloric acid										
E	Naled (*RQ-10/4.54*)	ORM-E	NA2783	None	None	173.510	No limit	No limit	1,2	1,2	
	Naphtha	Combustible liquid	UN2553	None	173.118a	None	No limit	No limit	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

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+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Naphtha	Flammable liquid	UN2553	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Naphtha distillate	Combustible liquid	NA1268	None	173.118a	None	No limit	No limit	1,2	1,2	
	Naphtha distillate	Flammable liquid	NA1268	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
EAW	Naphthalene *or* Naphthalin (*RQ-5000/2270*)	ORM-A	UN1334	None	173.505	173.655	25 pounds	300 pounds	1,2	1,2	Segregation same as for flammable solids
	Naphthalene diozonide	Forbidden									
	Naphtha petroleum. See Petroleum naphtha										
	Naphtha, solvent	Combustible liquid	UN1256	None	173.118a	None	No limit	No limit	1,2	1,2	
	Naphtha, solvent	Flammable liquid	UN1256	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	Naphthenic acid (*RQ-100/45.4*)	ORM-E	NA9137	None	None	173.510	No limit	No limit	1,2	1,2	
	Naphthyl amineperchlorate	Forbidden									
	Natural gasoline. See Gasoline										
	Neohexane	Flammable liquid	UN1208	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Neon	Nonflammable gas	UN1065	Nonflammable gas	173.306	173.302	150 pounds	300 pounds	1,2	1,2	
	New explosive or explosive device. See 173.51 and 173.86										
E	Nickel ammonium sulfate (*RQ-5000/2270*)	ORM-E	NA9138	None	None	173.510	No limit	No limit	1,2	1,2	
	Nickel carbonyl	Flammable liquid	UN1259	Flammable liquid and Poison	None	173.126	Forbidden	Forbidden	1	5	Not permitted on a vessel carrying explosives. Shade from radiant heat. Segregation same as for flammable liquids 1a*
	Nickel catalyst, wet, *finely divided, activated, or spent. With not less than 40% water or other suitable liquid*	Flammable solid	UN1378	Flammable solid	None	173.233	Forbidden	100 pounds	1,2	1	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
E	Nickel chloride (*RQ-5000/2270*)	ORM-E	NA9139	None	None	173.510	No limit	No limit	1,2	1,2	
+	Nickel cyanide, solid	Poison B	UN1653	Poison	173.370		25 pounds	200 pounds	1,2	1,2	Stow away from acids
E	Nickel hydroxide (*RQ-1000/454*)	ORM-E	NA9140	None	None	173.510	No limit	No limit	1,2	1,2	
E	Nickel nitrate (*RQ-5000/2270*)	Oxidizer	UN2725	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Nickel picrate	Forbidden									
E	Nickel sulfate (*RQ-5000/2270*)	ORM-E	NA9141	None	None	173.510	No limit	No limit	1,2	1,2	
	Nicotine hydrochloride	Poison B	UN1656	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Nicotine, liquid	Poison B	UN1654	Poison	None	173.346	Forbidden	55 gallons	1,2	1,2	
	Nicotine salicylate	Poison B	UN1657	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
+	Nicotine sulfate, liquid	Poison B	UN1658	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
+	Nicotine sulfate, solid	Poison B	UN1658	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Nicotine tartrate	Poison B	UN1659	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Nitrated paper (unstable)	Forbidden									
	Nitrate, n.o.s.	Oxidizer	NA1477	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Nitrate of ammonia explosives. See High explosive										
	Nitrates of diazonium compounds	Forbidden									
E	Nitrating acid (*RQ-1000/454*)	Oxidizer	NA1796	Oxidizer	None	173.267	Forbidden	1 quart	1	5	Segregation same as for corrosive materials
E	Nitrating acid, spent (*RQ-1000/454*)	Corrosive material	NA1796	Corrosive	None	173.248	Forbidden	1 quart	1	5	
E	Nitric acid (*over 40%*) (*RQ-1000/454*)	Oxidizer	UN2031	Oxidizer and Corrosive	None	173.268	Forbidden	5 pints	1	5	Segregation same as for corrosive materials. Stow away from hydrazine, separate from diethylenetriamine
E	Nitric acid, 40% or less (*RQ-1000/454*)	Corrosive material	NA1760	Corrosive	None	173.268	Forbidden	5 pints	1	5	Stow away from hydrazine, separate from diethylenetriamine
E	Nitric acid, fuming (*RQ-1000/454*)	Oxidizer	UN2032	Oxidizer and Poison	None	173.268	Forbidden	Forbidden	1	5	Segregation same as for corrosive materials. Stow away from hydrazine, separate from diethylenetriamine
	Nitric ether. See Ethyl nitrate										
	Nitric oxide	Poison A	UN1660	Poison gas	None	173.337	Forbidden	Forbidden	1	5	
	2-Nitro-2-methylpropanol nitrate	Forbidden									
	6-Nitro-4-diazotoluene-3-sulfonic acid (dry)	Forbidden									
	p-Nitroaniline. *See* Nitroaniline										
	N-Nitroaniline	Forbidden									
+	Nitroaniline	Poison B	UN1661	Poison	173.364	173.373	50 pounds	200 pounds	1,2	1,2	
	m-Nitrobenzene diazonium perchlorate	Forbidden									
E	Nitrobenzene, liquid *or* Nitrobenzol, liquid (*oil of mirbane*) (*RQ-1000/454*)	Poison B	UN1662	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Nitro carbonitrate. See Blasting agent, n.o.s.										
	Nitrocellulose, colloided, granular *or* flake, wet with not less than 20% alcohol *or* solvent, *or* block, wet with not less than 25% alcohol	Flammable liquid	NA2059	Flammable liquid	173.118	173.127	1 quart	25 pounds	1,3	1	
	Nitrocellulose, colloided, granular *or* flake, wet with not less than 20% water	Flammable solid	NA2555	Flammable solid	173.153	173.184	25 pounds	100 pounds	1,3	1	
	Nitrocellulose, dry. See High explosive										
	Nitrocellulose, wet with not less than 30% alcohol *or* solvent	Flammable liquid	NA2556	Flammable liquid	173.118	173.127	1 quart	25 pounds	1,3	1	

§172.101 Hazardous Materials Table (cont'd)

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+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Nitrocellulose, wet with not less than 20% water	Flammable solid	NA2555	Flammable solid	173.153	173.184	25 pounds	100 pounds	1,3	1	
+	Nitrochlorobenzene, meta *or* para, solid	Poison B	NA1578	Poison	173.364	173.374	50 pounds	200 pounds	1,2	1,2	
+	Nitrochlorobenzene, ortho, liquid	Poison B	NA1578	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Nitroethylene polymer	Forbidden									
	Nitroethyl nitrate	Forbidden									
	Nitrogen	Nonflammable gas	UN1066	Nonflammable gas	173.306	173.302 173.314	150 pounds	300 pounds	1,2	1,2	
E	Nitrogen dioxide, liquid (*RQ-1000/454*)	Poison A	UN1067	Poison gas and Oxidizer	None	173.336	Forbidden	Forbidden	1	5	Segregation same as for nonflammable gases. Stow away from organic materials
	Nitrogen fertilizer solution	Nonflammable gas	NA1043	Nonflammable gas	173.306	173.304 173.314	150 pounds	300 pounds	1,3	1,3	
	Nitrogen peroxide, liquid	Poison A	NA1067	Poison gas and Oxidizer	None	173.336	Forbidden	Forbidden	1	5	Segregation same as for nonflammable gas. Stow away from organic materials
	Nitrogen, pressurized liquid	Nonflammable gas	UN1977	Nonflammable gas	None	173.304	Forbidden	300 pounds	1,3	1,3	
	Nitrogen tetroxide, liquid	Poison A	NA1067	Poison gas and Oxidizer	None	173.336	Forbidden	Forbidden	1	5	Segregation same as for nonflammable gases. Stow away from organic materials
	Nitrogen trichloride	Forbidden									
	Nitrogen trifluoride	Nonflammable gas	UN2451	Nonflammable gas	None	173.302	Forbidden	300 pounds	1	5	Stow away from living quarters and organic materials
	Nitrogen triiodide	Forbidden									
	Nitrogen triiodide monoamine	Forbidden									
	Nitroglycerin, liquid, desensitized. See High explosive, liquid										
	Nitroglycerin, liquid, not desensitized. See 173.51	Forbidden									
	Nitroglycerin, spirits of. See Spirits of nitroglycerin										
	Nitroguanidine, dry. See High explosive										
	Nitroguanidine nitrate	Forbidden									
	Nitroguanidine, wet with not less than 20% water	Flammable solid	UN1336	Flammable solid	173.153	173.184	25 pounds	100 pounds	1,2	4	
	1-Nitro hydantoin	Forbidden									
E	Nitrohydrochloric acid (*RQ-1000/454*)	Corrosive material	UN1798	Corrosive	None	173.278	Forbidden	5 pints	1	5	
E	Nitrohydrochloric acid, diluted (*RQ-1000/454*)	Corrosive material	NA1798	Corrosive	None	173.278	Forbidden	5 pints	1	5	
	Nitro isobutane triol trinitrate	Forbidden									
	Nitromannite. See High explosive										
	Nitromannite (dry)	Forbidden									
	Nitromethane	Flammable liquid	UN1261	Flammable liquid	173.118	173.149a	1 quart	10 gallons	1,2	1,2	
E	Nitromuriatic acid. *See* Nitrohydrochloric acid										
	N-Nitro-N-methylglycolamide nitrate	Forbidden									
E	Nitrophenol (*RQ-1000/454*)	ORM-E	UN1663	None	None	173.510	No limit	No limit	1,2	1,2	
	Nitrophenol pesticide, substituted (*compounds and preparations*), liquid *or* solid. *See* Substituted nitrophenol pesticide (*compounds and preparations*), liquid *or* solid										
	m-Nitrophenyldinitro methane	Forbidden									
	Nitrosoguanidine. *See* Initiating explosive										
	Nitrostarch, dry. *See* High explosive										
	Nitrostarch, wet with not less than 30% alcohol *or* solvent	Flammable liquid	NA1993	Flammable liquid	173.118	173.127	1 quart	25 pounds	1,2	1	
	Nitrostarch, wet with not less than 20% water	Flammable solid	UN1337	Flammable solid	173.153	173.184	25 pounds	100 pounds	1	4	
	Nitrosugars (dry)	Forbidden									
	Nitrosyl chloride	Nonflammable gas	UN1069	Nonflammable gas	173.306	173.304 173.314	Forbidden	300 pounds	1	4	
E	Nitrotoluene (*RQ-1000/454*)	ORM-E	UN1664	None	None	173.510	No limit	No limit	1,2	1,2	
	Nitrourea. See High explosive										
	Nitrous oxide	Nonflammable gas	UN1070	Nonflammable gas	173.306	173.304 173.315	150 pounds	300 pounds	1,2	1,2	Under deck stowage must be in well-ventilated space
+	Nitroxylol	Poison B	NA1665	Poison	173.345	173.346	1 quart	55 gallons	1,2	1	
	Nonflammable gas, n.o.s. *See* Compressed gas, n.o.s.										
+	Nonliquefied hydrocarbon gas. *See* Hydrocarbon gas, nonliquefied										
	Nonyltrichlorosilane	Corrosive material	UN1799	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
E	Nordhausen acid. *See* Sulfuric acid										
W	Oakum	ORM-C		None	173.505	173.1030			1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

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+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Octadecyltrichlorosilane	Corrosive material	UN1800	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	1,7-Octadiene-3,5-diyne-1,8-dimethoxy-9-octadecynoic acid	Forbidden									
	Octane	Flammable liquid	UN1262	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	n-Octanoyl peroxide, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2129								
	Octyltrichlorosilane	Corrosive material	UN1801	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Oil, *described as oil*, Oil, n.o.s., Petroleum oil, *or* Petroleum oil, n.o.s.	Combustible liquid	NA1270	None	173.118a	None	No limit	No limit	1,2	1,2	
	Oil, *described as oil*, Oil, n.o.s., Petroleum oil, *or* Petroleum oil, n.o.s.	Flammable liquid	NA1270	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Oiled clothing (*manufactured article properly dried to prevent spontaneous heating*). *See* Oiled material										
AW	Oiled material (*manufactured article properly dried to prevent spontaneous heating*)	ORM-C	NA9053	None	173.505	173.1035	No limit	No limit	1,3	1,3	
	Oiled paper (*manufactured article properly dried to prevent spontaneous heating*). *See* Oiled material										
	Oil of mirbane. See Nitrobenzene, liquid										
	Oil of vitriol. See Sulfuric acid										
	Oil well cartridge	Class C explosive		Class C explosive	None	173.112	50 pounds	150 pounds	1,3	1,3	
E	Oleum (*fuming sulfuric acid*) (*RQ-1000/454*)	Corrosive material	NA1831	Corrosive	None	173.272	Forbidden	5 pints	1,2	1	Under deck stowage must be in metal drums only. Keep dry.
	Organic peroxide liquid *or* solution, n.o.s.	Flammable liquid	NA1993	Flammable liquid and Organic peroxide	None	173.119	Forbidden	1 quart	1,2	5	Stow separate from combustible materials, explosives, or acids
	Organic peroxide, liquid, *or* solution, n.o.s.	Organic peroxide	NA9183	Organic peroxide	173.153	173.221	Forbidden	1 quart	1,2	1,2	Stow separate from combustible materials, explosives, or acids.
	Organic peroxide, mixture. *See* Organic peroxide, solid, n.o.s. *or* Organic peroxide, liquid *or* solution, n.o.s., *as appropriate.*		UN2756								
	Organic peroxide, sample, n.o.s. *See* Organic peroxide, solid, n.o.s. *or* Organic peroxide, liquid *or* solution, n.o.s., *as appropriate.*		UN2255								
	Organic peroxide, solid, n.o.s.	Organic peroxide		Organic peroxide	173.153	173.154	Forbidden	25 pounds	1,2	1,2	Stow separate from combustible materials, explosives, or acids.
	Organic peroxide, trial quantity, n.o.s. *See* Organic peroxide, solid, n.o.s. *or* Organic peroxide, liquid *or* solution, n.o.s., *as appropriate.*		UN2899								
	Organic phosphate mixture, Organic phosphate compound mixture, *or* Organic phosphorus compound mixture; liquid	Poison B	NA2783	Poison	173.359	173.359	1/2 pint	1 quart	1,2	5	
	Organic phosphate mixture, Organic phosphate compound mixture, *or* Organic phosphorus compound mixture; solid *or* dry	Poison B	NA2783	Poison	173.377	173.377	50 pounds	200 pounds	1,2	4	
	Organic phosphate, Organic phosphate compound, *or* Organic phosphorus compound; mixed with compressed gas	Poison A	NA1955	Poison gas	None	173.334	Forbidden	Forbidden	1	5	Shade from radiant heat
	Organic phosphate, Organic phosphate compound, *or* Organic phosphorus compound; liquid	Poison B	NA2783	Poison	None	173.358	Forbidden	1 quart	1,2	5	
	Organic phosphate, Organic phosphate compound, *or* Organic phosphorus compound; solid *or* dry	Poison B	NA2783	Poison	None	173.377	Forbidden	200 pounds	1,2	4	
	Organochlorine pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2762	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Organochlorine pesticide (*compounds and preparations*), liquid	Poison B	UN2761	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Organochlorine pesticide (*compounds and preparations*), solid	Poison B	UN2761	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Organophosphorus pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2784	Flammable liquid	None	173.119	Forbidden	1 quart	1,2	5	
	Organophosphorus pesticide (*compounds and preparations*), liquid	Poison B	UN2783	Poison	173.359	173.359	Forbidden	1 quart	1,2	5	
	Organophosphorus pesticide (*compounds and preparations*), solid	Poison B	UN2783	Poison	173.377	173.377	Forbidden	200 pounds	1,2	4	
	Organotin pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2787	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Organotin pesticide (*compounds and preparations*), liquid	Poison B	UN2786	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Organotin pesticide (*compounds and preparations*), solid	Poison	UN2786	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
A	ORM-A, n.o.s.	ORM-A	NA1693	None	173.505	173.510	No limit	No limit			

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
A	ORM-B, n.o.s.	ORM-B	NA1760	None	173.505	173.510	No limit	No limit			
	ORM-C. See 173.500 and 176.900										
	Orthonitroaniline. *See* Nitroaniline										
	Oxidizer, corrosive, liquid, n.o.s.	Oxidizer	NA9193	Oxidizer and Corrosive	None	173.245	Forbidden	1 quart	1	5	
	Oxidizer, corrosive, solid, n.o.s.	Oxidizer	NA9194	Oxidizer and Corrosive	173.153	173.154	25 pounds	25 pounds	1	4	
	Oxidizer material packed with other articles. See 173.152										
	Oxidizer, n.o.s. *or* Oxidizing material, n.o.s.	Oxidizer	UN1479	Oxidizer	173.153	173.154	25 pounds	25 pounds	1,2	1,2	
	Oxidizer, poisonous, liquid, n.o.s.	Oxidizer	NA9199	Oxidizer and Poison	None	173.154	Forbidden	1 quart	1	5	
	Oxidizer, poisonous, solid, n.o.s.	Oxidizer	NA9200	Oxidizer and Poison	173.153	173.154	25 pounds	25 pounds	1,2	4	
	Oxygen	Nonflammable gas	NA1072	Oxidizer	173.306	173.302 173.314	150 pounds	300 pounds	1,2	1,2	Under deck stowage must be in well ventilated space
	Oxygen, pressurized liquid	Nonflammable gas	NA1073	Oxidizer	None	173.304	Forbidden	Forbidden	1,3	1,3	Stow separate from acetylene. Do not overstow with other cargo
	Paint drier, liquid	Combustible liquid	UN1168	None	173.118a	None	No limit	No limit	1,2	1,2	
	Paint drier, liquid	Flammable liquid	UN1168	Flammable liquid	173.118	173.128	1 quart	55 gallons	1,2	1	
	Paint, Enamel, Lacquer, Stain, Shellac, *or* Varnish; Aluminum, Bronze, Gold, Wood filler, liquid *or* Lacquer base, liquid	Combustible liquid	UN1263	None	173.118a	None	No limit	No limit	1,2	1,2	
	Paint, Enamel, Lacquer, Stain, Shellac, *or* Varnish; Aluminum, Bronze, Gold, Wood filler, liquid *or* Lacquer base, liquid	Flammable liquid	UN1263	Flammable liquid	173.118	173.128	1 quart	55 gallons	1,2	1	
	Paint, reducing or thinning compound. See Compound, lacquer, paint, *or* varnish, removing, reducing *or* thinning, liquid										
	Paper caps. See Toy caps										
W	Paper scrap (*when dry, clean, and free from oil*)	ORM-C		None	173.505	173.1075			1,2	1,2	
	Paper stock, wet	Flammable solid	NA1325	Flammable solid	None	173.185	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Paper waste (*when dry, clean, and free from oil*). *See* Paper scrap										
	Paper waste, wet. *See* Waste Paper, wet										
EAW	Paraformaldehyde (*RQ-1000/454*)	ORM-A	UN2213	None	173.505	173.510	50 pounds	200 pounds	1,2	1,2	
	Paraldehyde	Flammable liquid	UN1264	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Paramenthane hydroperoxide	Organic peroxide	UN2125	Organic peroxide	173.153	173.224	1 quart	1 quart	1,2	4	
	Paranitroaniline, solid. *See* Nitroaniline										
E	Parathion and compressed gas mixture (*RQ-1/.454*)	Poison A	NA1967	Poison gas	None	173.334	Forbidden	Forbidden	1,3	5	
E	Parathion, liquid (*RQ-1/.454*)	Poison B	NA2783	Poison	None	173.358	Forbidden	1 quart	1,3	1,3	
E	Parathion mixture, dry (*RQ-1/.454*)	Poison B	NA2783	Poison	173.377	173.377	50 pounds	200 pounds	1,3	1,3	
E	Parathion mixture, liquid (*RQ-1/.454*)	Poison B	NA2783	Poison	None	173.359	Forbidden	1 quart	1,3	1,3	
E	Paris green, solid. *See* Copper acetoarsenite, solid										
E	PCB. *See* Polychlorinated biphenyls										
	Pelargonyl peroxide, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2130								
	Pentaborane	Flammable liquid	UN1380	Flammable liquid and Poison	None	173.138	Forbidden	Forbidden	1	5	Segregation same as for flammable solids. Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
E	Pentachlorophenol (*RQ-10/4.54*)	ORM-E,	NA2020	None	None	173.510	No limit	No limit	1,2	1,2	
	Pentaerythrite tetranitrate. See Initiating explosive										
	Pentaerythrite tetranitrate, desensitized, wet. See High explosive										
	Pentaerythrite tetranitrate (dry)	Forbidden									
	Pentane	Flammable liquid	UN1265	Flammable liquid	173.118	173.119	Forbidden	10 gallons	1,3	4	
	Pentanitroaniline (dry)	Forbidden									
	Pentolite, dry. See High explosive										
	Peracetic acid solution, *not over 43% peracetic acid and not over 6% hydrogen peroxide*	Organic peroxide	NA2131	Organic peroxide	173.223	173.223	1 pint	5 pints	1	4	Shade from radiant heat
	Perchlorate, n.o.s.	Oxidizer	NA1481	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,3	1,3	Stow away from powdered metals
	Perchloric acid, *exceeding 50% but* not exceeding 72% strength	Oxidizer	UN1873	Oxidizer	None	173.269	Forbidden	5 pints	1	5	Segregation same as for corrosive materials. Stow away from hydrazine.
	Perchloric acid exceeding 72% strength	Forbidden									
	Perchloric acid, not over 50% acid	Oxidizer	UN1802	Oxidizer	173.244	173.269	Forbidden	5 pints	1	1	Segregation same as for corrosive materials. Stow away from hydrazine
+	Perchloromethyl mercaptan	Poison B	UN1670	Poison	173.345	173.360	Forbidden	10 pounds	1	4	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Percussion cap	Class C explosive		None	None	173.107	50 pounds	150 pounds	1,3	1,3	
	Percussion fuze	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
A	Perfluoro-2-butene	ORM-A	NA2422	None	173.505	173.605	10 gallons	55 gallons			
	Permanganate, n.o.s.	Oxidizer	NA1482	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds, hydrogen peroxide, and acids
E	*Permanganate of potash. See* Potassium permanganate										
	Peroxide, organic. See Organic Peroxide										
	Peroxyacetic acid, *not more than 43% and with not more than 6% hydrogen peroxide. See* Peracetic acid solution, *not over 43% peracetic acid and not over 6% hydrogen peroxide.*		UN2131								
	Peroxyacetic acid, more than 43% and with more than 6% hydrogen peroxide	Forbidden									
W	Pesticide, water reactive, *including but not limited to fungicides, and herbicides, etc., which contain manganese ethylenebisdithiocarbamate*	ORM-C	NA2210	None	173.505	173.1040			2	2	Keep dry
W	Petroleum coke (*uncalcined*)	ORM-C		None	173.505	173.1045			1,2	1,2	Not permitted if temperature of material is at or above 130 deg F
	Petroleum crude. See Crude oil										
	Petroleum distillate	Combustible liquid	UN1268	None	173.118a	None	No limit	No limit	1,2	1,2	
	Petroleum distillate	Flammable liquid	UN1268	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Petroleum ether	Flammable liquid	UN1271	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Petroleum gas, liquefied. *See* Liquefied petroleum gas										
	Petroleum naphtha	Combustible liquid	UN1255	None	173.118a	None	No limit	No limit	1,2	1,2	
	Petroleum naphtha	Flammable liquid	UN1255	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
A	Phencapton	ORM-A	NA2783	None	173.505	173.510	No limit	No limit			
+E	Phenol (*RQ-1000/454*)	Poison B	UN1671	Poison	173.364	173.369	50 pounds	250 pounds	1,2	1,2	
E	Phenol, liquid *or* solution (*liquid tar acid containing over 50% phenol*) (*RQ-1000/454*)	Poison B	NA2821	Poison	173.345	173.349	1 quart	55 gallons	1,2	1,2	
	Phenoxy pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2766	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Phenoxy pesticide (*compounds and preparations*), liquid	Poison B	UN2765	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Phenoxy pesticide (*compounds and preparations*), solid	Poison B	UN2765	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
A	Phenylenediamine, meta *or* para, solid	ORM-A	UN1673	None	173.505	173.510	No limit	No limit			
	Phenyldichloroarsine	Poison B	NA1556	Poison	None	173.355	Forbidden	30 gallons	1	5	
	m-Phenylene diaminediperchlorate (dry)	Forbidden									
	Phenyltrichlorosilane	Corrosive material	UN1804	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Phenylurea pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2768	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Phenylurea pesticide (*compounds and preparations*), liquid	Poison B	UN2767	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Phenylurea pesticide (*compounds and preparations*), solid	Poison B	UN2767	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Phosgene (*diphosgene*) (*RQ-5000/2270*)	Poison A	UN1076	Poison gas	None	173.333	Forbidden	Forbidden	1	5	
	Phosphine	Poison A	UN2199	Poison gas and Flammable gas	None	173.328	Forbidden	Forbidden	1	5	
E	Phosphoric acid (*RQ-5000/2270*)	Corrosive material	UN1805	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	Glass carboys in hampers not permitted under deck
	Phosphoric acid triethylenecimine. *See* Tris-(1-aziridiyl) phosphine oxide										
	Phosphoric anhydride (*phosphorus pentoxide*)	Corrosive material	NA1807	Corrosive	None	173.188	Forbidden	100 pounds	1,2	1,2	Keep dry. Glass bottles not permitted under deck
E	Phosphorus, amorphous, red (*RQ-1/.454*)	Flammable solid	UN1338	Flammable solid	None	173.169	Forbidden	11 pounds	1,2	1,2	
	Phosphorus bromide. *See* Phosphorus tribromide										
E	Phosphorus chloride. *See* Phosphorus trichloride										
	Phosphorus heptasulfide	Flammable solid	UN1339	Flammable solid	None	173.225	Forbidden	10 pounds	1,2	1	Separate from oxidizing materials
	Phosphorus oxybromide	Corrosive material	UN1939	Corrosive	None	173.271	Forbidden	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
E	Phosphorus oxychloride (*RQ-5000/2270*)	Corrosive material	UN1810	Corrosive	None	173.271	Forbidden	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels

§172.101 Hazardous Materials Table (cont'd)

(1) +/E/A/W	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class	(3A) Identification number	(4) Label(s) required (if not excepted)	(5) Packaging (a) Exceptions	(5) Packaging (b) Specific requirements	(6) Maximum net quantity in one package (a) Passenger carrying aircraft or railcar	(6) Maximum net quantity in one package (b) Cargo only aircraft	(7) Water shipments (a) Cargo vessel	(7) Water shipments (b) Passenger vessel	(7) Water shipments (c) Other requirements
	Phosphorus pentachloride, solid	Corrosive material	UN1806	Corrosive	None	173.191	Forbidden	5 pounds	1	1	Keep dry
E	Phosphorus pentasulfide (*RQ-1000/454*)	Flammable solid	UN1340	Flammable solid and Dangerous when wet	None	173.225	Forbidden	11 pounds	1,2	1,2	Separate from oxidizing material
	Phosphorus sesquisulfide	Flammable solid	UN1341	Flammable solid and Dangerous when wet	None	173.225	Forbidden	11 pounds	1,2	1	Separate from oxidizing materials
	Phosphorus tribromide	Corrosive material	UN1808	Corrosive	None	173.270	Forbidden	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
E	Phosphorus trichloride (*RQ-5000/2270*)	Corrosive material	UN1809	Corrosive	None	173.271	Forbidden	1 quart	11	1	Keep dry. Glass carboys not permitted on passenger vessels
	Phosphorus trisulfide	Flammable solid	UN1343	Flammable solid	None	173.225	Forbidden	10 pounds	1,2	1	Separate from oxidizing materials
E	Phosphorus, white *or* yellow, dry (*RQ-1/.454*)	Flammable solid	UN1381	Flammable solid and Poison	None	173.190	Forbidden	Forbidden	1,2	5	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
E	Phosphorus, white *or* yellow, in water (*RQ-1/.454*)	Flammable solid	UN1381	Flammable solid and Poison	None	173.190	Forbidden	25 pounds	1,2	5	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Phosphorus (white or red) and a chlorate, mixtures of	Forbidden									
E	Phosphoryl chloride. *See* Phosphorus oxychloride										
	Photographic film. See Film										
	Photographic flash powder. See Fireworks, special *or* Low explosive										
	Phthalimide derivative pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2774	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Phthalimide derivative pesticide (*compounds and preparations*), liquid	Poison B	UN2773	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Phthalimide derivative pesticide (*compounds and preparations*), solid	Poison B	UN2773	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Picrate, dry. See High explosive										
	Picrate of ammonia. See High explosive										
	Picric acid, dry. See High explosive										
	Picric acid, wet, with not less than 10% water	Flammable solid	NA1344	Flammable solid	173.192	173.193	1 pound	25 pounds	1	5	Under deck stowage permitted on cargo vessels if wet with more than 30% water. Stow away from heavy metals and their compounds
	Picric acid, wet with not less than 10% water, over 25 pounds. See High explosive										
	Pinane hydroperoxide, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2162								
	Pinane hydroperoxide solution *not over 45% peroxide.*	Organic peroxide	UN2162	Organic peroxide	173.153	173.224	1 quart	1 quart	1,2	4	
	Pinene	Flammable liquid	UN2368	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Pine oil	Combustible liquid	UN1272	None	173.118a	None	No limit	No limit	1,2	1,2	
	Pinwheels. *See* Fireworks, common										
	Pivaloyl chloride. *See* Trimethylacetyl chloride										
	Plastic solvent, n.o.s.	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Plastic solvent, n.o.s.	Flammable liquid	NA1993	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Plutonium nitrate solution	Radioactive material	NA9185	Radioactive (See 172.403)	173.393	173.396			1,2	1,2	
	Poisonous liquid *or* gas, n.o.s.	Poison A	NA9035	Poison gas	None	173.328	Forbidden	Forbidden	1	5	
	Poisonous liquid, n.o.s. *or* Poison B, liquid, n.o.s.	Poison B	NA2810	Poison	173.345	173.346	1 quart	55 gallons	1,2	1	
	Poisonous solid, corrosive, n.o.s.	Poison B	UN2928	Poison and Corrosive	173.364	173.365	25 pounds	100 pounds	1	4	
	Poisonous solid, n.o.s. *or* Poison B, solid, n.o.s.	Poison B	NA2811	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1	
	Polish, metal, stove, furniture *or* wood, liquid	Combustible liquid	NA1142	None	173.118a	None	No limit	No limit	1,2	1,2	
	Polish, metal, stove, furniture *or* wood, liquid	Flammable liquid	NA1142	Flammable liquid	173.118	173.129	1 quart	55 gallons	1,2	1	
E	Polychlorinated biphenyls (*RQ-10/4.54*)	ORM-E	UN2315	None	None	173.510	No limit	No limit	1,2	1,2	If stowedunder deck, must be stowed in a recoverable location.
	Polymerizable material. See 173.21										
E	Potassium arsenate, solid (*RQ-1000/454*)	Poison B	UN1677	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Potassium arsenite, solid (*RQ-1000/454*)	Poison B	UN1678	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Potassium bifluoride solution. *See* Potassium hydrogen fluoride solution										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Potassium bromate	Oxidizer	UN1484	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds. Stow away from powdered metals.
	Potassium carbonyl	Forbidden									
	Potassium chlorate (*potash chlorate*)	Oxidizer	UN1485	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds. Stow away from powdered metals.
E	Potassium chromate (*RQ-1000/454*)	ORM-E	NA9142	None	None	173.510	No limit	No limit	1,2	1,2	
E	Potassium cyanide, solid (*RQ-10/4.54*)	Poison B	UN1680	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
E	Potassium cyanide solution (*RQ-10/4.54*)	Poison B	UN1680	Poison	173.345	173.352	1 quart	55 gallons	1,2	1,2	Stow away from acids
	Potassium dichloro isocyanurate. See Potassium dichloro-s-triazinetrione										
	Potassium dichloro-s-triazinetrione, *dry (containing more than 39% available chlorine)*	Oxidizer	NA2465	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,2	1,2	
EA	Potassium dichromate (*RQ-1000/454*)	ORM-A	NA1479	None	173.505	173.510	No limit	No limit	1,2	1,2	
A	Potassium fluoride	ORM-B	UN1812	None	173.505	173.510	No limit	No limit			
	Potassium fluoride solution	Corrosive material	UN1812	Corrosive	173.244	173.249	1 quart	5 gallons	1,2	1,2	
E	Potassium hydrate. *See* Potassium hydroxide										
	Potassium hydrogen fluoride solution	Corrosive material	NA1811	Corrosive	173.244	173.249	1 quart	5 gallons	1,2	1,2	
A	Potassium hydrogen sulfate, solid	ORM-B	UN2509	None	173.505	173.800	25 pounds	100 pounds			
E	Potassium hydroxide, dry solid, flake, bead, *or* granular (*RQ-1000/454*)	Corrosive material	UN1813	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry. Do not stow with metals or alloys such as brass, copper, tin, zinc, aluminum, solder, or lead
E	Potassium hydroxide, liquid *or* solution (*RQ-1000/454*)	Corrosive material	UN1814	Corrosive	173.244	173.249	1 quart	10 gallons	1,2	1,2	
	Potassium hypochlorite solution. *See* Hypochlorite solutions containing more than 7% available chlorine by weight										
A	Potassium metabisulfite	ORM-B	NA2693	None	173.505	173.510	No limit	No limit			
	Potassium, metal *or* metallic	Flammable solid	UN2257	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Potassium, metal liquid alloy	Flammable solid	UN1420	Flammable solid and Dangerous when wet	None	173.202	Forbidden	1 pound	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Potassium nitrate	Oxidizer	UN1486	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
E	Potassium nitrate mixed (*fused*) with sodium nitrite. *See* Sodium nitrite mixed (*fused*) with potassium nitrate										
	Potassium nitrite	Oxidizer	UN1488	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and cyanides. Stow away from foodstuffs
	Potassium perchlorate	Oxidizer	UN1489	Oxidizer	173.153	173.219	25 pounds	100 pounds	1,3	1,3	Stow away from powdered metals
E	Potassium permanganate (*RQ-100/45.4*)	Oxidizer	UN1490	Oxidizer	173.153	173.154 173.194	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and hydrogen peroxide
	Potassium peroxide	Oxidizer	UN1491	Oxidizer	None	173.154	Forbidden	100 pounds	1,2	1,2	Keep dry
	Potassium sulfide	Flammable solid	UN1382	Flammable solid	173.153	173.207	25 pounds	300 pounds	1,2	1,2	Separate from liquid acids, flammable gases or liquids, oxidizing materials or organic peroxides
	Pressurized product. See Compressed gas, n.o.s.										
	Primer. See Cannon primer, Combination primer, *or* Small-arms primer										
	Primer, detonating. See Detonating primers										
	Projectile, explosive. See Explosive projectile										
	Projectile, gas, nonexplosive. See Chemical ammunition, nonexplosive (*containing a Poison A, Poison B or irritating material, as appropriate*)										
	Projectile, gas, smoke, or incendiary, with burster or booster with or without detonating fuze. See Explosive projectile										
	Projectile, illuminating, incendiary or smoke, with expelling charge but without bursting charge. See Fireworks, special										
	Projectile, sand-loaded, empty or solid. See 173.55										
	Propane *or* Liquefied petroleum gas. *See* Liquefied petroleum gas										
E	Propargite (*RQ-10/4.54*)	ORM-E	NA2765	None	None	173.510	No limit	No limit	1,2	1,2	
	Propargyl alcohol	Flammable liquid	NA1986	Flammable liquid and Poison	None	173.119	Forbidden	1 quart	1,2	5	
	Propellant explosive	Class A explosive		Explosive A	None	173.64	Forbidden	Forbidden	6	5	
	Propellant explosive in water (*smokeless powder*)	Class B explosive		Explosive B	None	173.93	Forbidden	Forbidden	1,3	5	Magazine stowage authorized

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Propellant explosive in water, unstable, condemned, *or* deteriorated (*smokeless powder*)	Class B explosive		Explosive B	None	173.93	Forbidden	Forbidden	1,3	5	Magazine stowage authorized
	Propellant explosive, liquid	Class B explosive		Explosive B	None	173.93	Forbidden	10 pounds	1,2	5	Magazine stowage authorized
	Propellant explosive, solid	Class B explosive		Explosive B	None	173.93	Forbidden	10 pounds	1,3	5	Magazine stowage authorized
	Propionaldehyde	Flammable liquid	UN1275	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	Propionic acid (*RQ-5000/2270*)	Corrosive material	UN1848	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	Separated by a complete compartment or hold from organic peroxides
E	Propionic acid solution (*RQ-5000/2270*)	Corrosive material	NA1848	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	Separated by a complete compartment or hold from organic peroxides
E	Propionic anhydride (*RQ-5000/2270*)	Corrosive material	UN2496	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1	Keep dry
	Propionyl peroxide, *not more than 28% in solution. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2132								
	Propionyl peroxide, more than 28% in solution	Forbidden									
	Propyl acetate	Flammable liquid	UN1276	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Propyl alcohol	Flammable liquid	UN1274	Flammable liquid	173.118	173.125	1 quart	10 gallons	1,2	1,2	
	Propylamine	Flammable liquid	UN1277	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
	Propyl chloride	Flammable liquid	UN1278	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
	Prepylene *or* Liquefied petroleum gas. *See* Liquefied petroleum gas										
	Propylenediamine	Flammable liquid	UN2258	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	Propylene dichloride (*RQ-5000/2270*)	Flammable liquid	UN1279	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Propyleneimine, inhibited	Flammable liquid	UN1921	Flammable liquid	None	173.139	Forbidden	5 pints	1,2	1	
E	Propylene oxide (*RQ-5000/2270*)	Flammable liquid	UN1280	Flammable liquid	173.118	173.119	Forbidden	1 gallon	1,3	4	
	Propyl formate	Flammable liquid	UN1281	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Propyl mercaptan	Flammable liquid	UN2704	Flammable liquid	None	173.141	Forbidden	10 gallons	1,2	5	
	Propyl trichlorosilane	Corrosive material	UN1816	Corrosive	None	173.280	Forbidden	10 gallons	1	1	Keep dry
	Prussic acid. See Hydrocyanic acid, as appropriate										
E	Pyrethrins (*RQ-1000/454*)	ORM-E	NA9184	None	None	173.510	No limit	No limit	1,2	1,2	
	Pyridine	Flammable liquid	UN1282	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Pyridine perchlorate	Forbidden									
	Pyrophoric liquid, n.o.s. *or* Pyroforic liquid, n.o.s.	Flammable liquid	UN2845	Flammable liquid	None	173.134	Forbidden	Forbidden	1	5	Shade from radiant heat. Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Pyrosulfuryl chloride	Corrosive material	UN1817	Corrosive	173.244	173.247	1 quart	1 quart	1	4	Keep dry. Glass carboys not permitted on passenger vessels
	Pyroxylin plastic scrap	Flammable solid	NA2006	Flammable solid	None	173.195	Forbidden	Forbidden	1	5	Shade from radiant heat
	Pyroxylin plastics, rods, sheets, rolls, *or* tubes	Flammable solid	NA2006	Flammable solid	173.197	173.197	50 pounds	350 pounds	1,3	1	
	Pyroxylin solution	Combustible liquid	NA2059	None	173.118a	None	No limit	No limit	1,3	1,2	
	Pyroxylin solution	Flammable liquid	NA2059	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Pyroxylin solvent, n.o.s.	Combustible liquid	NA2059	None	173.118a	None	No limit	No limit	1,2	1,2	
	Pyroxylin solvent, n.o.s.	Flammable liquid	NA2059	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Pyrrolidine	Flammable liquid	UN1922	Flammable liquid	173.118	173.119	Forbidden	10 gallons	1,2	1	
	Quebrachitol pentanitrate	Forbidden									
	Quicklime. *See* Calcium oxide										
E	Quinoline (*RQ-1000/454*)	ORM-E	UN2656	None	None	173.510	No limit	No limit	1,2	1,2	
	Radioactive device, n.o.s.	Radioactive material	UN2911	None	173.391				1,2	1,2	
	Radioactive material, fissile, n.o.s.	Radioactive material	UN2918	Radioactive	173.393	173.396			1,2	1,2	
	Radioactive material, limited quantity, n.o.s.	Radioactive material	UN2910	None	173.391				1,2	1,2	
	Radioactive material, low specific activity *or* LSA, n.o.s.	Radioactive material	UN2912	Radioactive	173.392	173.393			1,2	1,2	
	Radioactive material, n.o.s.	Radioactive material	NA9181	Radioactive	173.393	173.395			1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Radioactive material, special form, n.o.s.	Radioactive material	NA9182	Radioactive	173.393	173.394			1,2	1,2	
	Rags, oily	Flammable solid	UN1856	Flammable solid	None	173.199	Forbidden	Forbidden	1,2	1,2	Keep dry. Separate from flammable gases, or liquids, oxidizing materials, or organic peroxides
	Rags, wet	Flammable solid	NA1325	Flammable solid	None	173.200	Forbidden	Forbidden	1	1	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Railway Fusee. See Fusee										
	Railway torpedo. *See* Torpedo, railway										
	Range oil. *See* Fuel oil										
	Reducing compound, paint, varnish, lacquer, etc. See Compound, lacquer, paint *or* varnish, removing, reducing, *or* thinning, liquid										
	Refrigerant gas. *See* Dispersant Gas										
	Refrigerating machine	Nonflammable gas	UN2857	Nonflammable gas	173.306 173.307		No limit	No limit	1,3	1,3	
	Refrigerating machine	Flammable gas	NA1954	Flammable gas	173.306		No limit	No limit	1,3	1,3	
	Refrigerating machine	Flammable liquid	NA1993	Flammable liquid	173.130 173.306		No limit	No limit	1,2	1	
	Removing compound, paint, varnish, lacquer, etc. See Compound, lacquer, paint, *or* varnish, removing, reducing, *or* thinning, liquid										
	Resin solution (*resin compound, liquid*)	Combustible liquid	UN2868	None	173.118a	None	No limit	No limit	1,2	1,2	
	Resin solution (*resin compound, liquid*)	Flammable liquid	UN1866	Flammable liquid	173.118	173.119	1 quart	55 gallons	1,2	1	
E	Resorcinol (*RQ-5000/2270*)	ORM-E	UN2876	None	None	173.510	No limit	No limit	1,2	1,2	
	Rifle grenade. See Grenade, hand *or* rifle, explosive										
	Rifle powder. See Propellant explosive *or* Black powder										
	Road asphalt *or* tar, liquid *See* Asphalt, cut back										
	Road asphalt *or* tar (*when heated to or above its flash point*). *See* Asphalt										
	Road oil	Combustible liquid	NA1268	None	173.118a	None	No limit	No limit	1,2	1,2	
	Rocket ammunition with empty projectile	Class B explosive		Explosive B	None	173.90	Forbidden	Forbidden	1,3	5	
	Rocket ammunition with explosive projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
	Rocket ammunition with gas projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
	Rocket ammunition with illuminating projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
	Rocket ammunition with incendiary projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
	Rocket ammunition with inert loaded projectile	Class B explosive		Explosive B	None	173.90	Forbidden	Forbidden	1,3	5	
	Rocket ammunition with smoke projectile	Class A explosive		Explosive A	None	173.57	Forbidden	Forbidden	6	5	
	Rocket ammunition with solid projectile	Class B explosive		Explosive B	None	173.90	Forbidden	Forbidden	1,3	5	
	Rocket body, with electric primer or electric squib. See 173.55										
	Rocket engine, liquid	Class B explosive		Explosive B	None	173.95	Forbidden	Forbidden	1,2	5	Magazine stowage authorized
	Rocket fireworks. See Fireworks, common										
	Rocket head. *See* Explosive projectile										
	Rocket motor	Class A explosive		Explosive A	None	173.79	Forbidden	Forbidden	6	5	
	Rocket motor	Class B explosive		Explosive B	None	173.92	Forbidden	550 pounds	1,3	5	
	Roman candle. See Fireworks, common										
W	Rosin (*colaphony*) *or* Resin	ORM-C		None	173.505	173.1060			1,2	1,2	
	Rough ammoniate tankage (*7% or more moisture content*)	Flammable solid	NA1325	Flammable solid	None	173.210	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides. Temperature of tankage must not exceed 100 deg F
	Rough ammoniate tankage (*less than 7% moisture content*)	Flammable solid	NA1325	Flammable solid	None	173.210	Forbidden	Forbidden	1	5	
W	Rubber curing compound (*solid*)	ORM-C		None	173.505	173.1065			1,2	1,2	
	Rubber scrap *or* Rubber buffings	Flammable solid	NA1345	Flammable solid	173.153	173.201	10 pounds	10 pounds	1,2	1,2	
	Rubber shoddy *or* Rubber, regenerated *or* Rubber, reclaimed	Flammable solid	NA1345	Flammable solid	173.153	173.201	10 pounds	10 pounds	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1) +/E/A/W	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class	(3A) Identification number	(4) Label(s) required (if not excepted)	(5) Packaging (a) Exceptions	(5) Packaging (b) Specific requirements	(6) Maximum net quantity in one package (a) Passenger carrying aircraft or railcar	(6) Maximum net quantity in one package (b) Cargo only aircraft	(7) Water shipments (a) Cargo vessel	(7) Water shipments (b) Passenger vessel	(7) Water shipments (c) Other requirements
	Rubidium metal	Flammable solid	UN1423	Flammable solid and Dangerous when wet	None	173.206	Forbidden	225 pounds	1,2	5	Segregation same as for flammable solid labeled Dangerous When Wet
	Rubidium metal, in cartridges	Flammable solid	NA1423	Flammable solid and Dangerous when wet	173.206		1 pound	25 pounds	1,2	4	Segregation same as for flammable solid labeled Dangerous When Wet
	Rum, denatured	Flammable liquid	NA1986	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Rust preventive coating	Combustible liquid	NA1142	None	173.118a	None	No limit	No limit	1,2	1,2	
	Safety fuse. *See* Fuse, safety										
	Safety squib	Class C explosive		Explosive C	None	173.106	50 pounds	150 pounds	1,3	1,3	
	Salute. See Fireworks common *or* special										
	Sand acid. *See* Hydrofluorosilicic acid										
W	Sawdust (*when dry, clean, and free from oil*)	ORM-C		None	173.505	173.1070			1,2	1,2	Keep dry
	Selenic acid, liquid	Corrosive material	UN1905	Corrosive	None	173.245	Forbidden	5 pints	1,2	1,2	
	Selenium nitride	Forbidden									
E	Selenium oxide (*RQ-1000/454*)	Poison B	NA2811	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Self-lighting cigarette	Flammable solid	NA1325	Flammable solid	173.21		Fobidden	Forbidden	1,2	1,2	Keep dry
	Self propelled vehicle. *See* Motor vehicle										
	Shaped charge, commercial. See High explosive (*173.65(h)*)										
	Shaped charges (commercial) containing more than 8 ounces of explosives	Forbidden									
	Shellac. *See* Paint, Enamel, Lacquer, Stain, Shellac, Varnish; *etc.*										
	Shell, fireworks. *See* Fireworks, common *or* special										
	Ship, distress signal. See Fireworks, special										
	Signal flare	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,2	1,2	
	Silicofluoric acid. *See* Hydrofluorosilicic acid										
	Silicon chloride *or* Silicon tetrachloride	Corrosive material	UN1818	Corrosive	173.244	173.247	1 quart	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Silicon chrome, exothermic. *See* Ferrochrome, exothermic										
+	Silicon tetrafluoride	Nonflammable gas	UN1859	Nonflammable gas	173.306	173.302	Forbidden	300 pounds	1	4	Stow away from foodstuffs
	Silver acetylide (dry)	Forbidden									
	Silver azide (dry)	Forbidden									
	Silver chlorite (dry)	Forbidden									
+	Silver cyanide	Poison B	UN1684	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
	Silver fulminate (dry)	Forbidden									
E	Silver nitrate (*RQ-1/.454*)	Oxidizer	UN1493	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	Stow away from foodstuffs
	Silver oxalate (dry)	Forbidden									
	Silver picrate (dry)	Forbidden									
	Sisal. See Fibers										
	Sludge acid. *See* Acid, sludge										
	Small arms ammunition	Class C explosive		None	173.101		50 pounds	150 pounds	1,3	1,3	
	Small arms ammunition, irritating (*tear gas*) cartridge	Class C explosive		Irritant	None	173.101	Forbidden	150 pounds	1,3	1,3	
	Small arms primer	Class C explosive		None	None	173.107	50 pounds	150 pounds	1,3	1,3	
	Smoke candle	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,3	1,3	
	Smoke generator. See Chemical ammunition, nonexplosive (*containing a Poison A, Poison B, or irritating material, as appropriate*)										
	Smoke grenade	Class C explosive		Explosive C	None	173.108	50 pounds	150 pounds	1,3	1,3	
	Smokeless powder for cannon or small arms. See Propellant explosive, *Class A or B, as appropriate*										
	Smokeless powder for small arms (*100 pounds or less*)	Flammable solid	NA1325	Flammable solid	173.88	173.197a	Forbidden	Forbidden	1,3	1,3	Segregation same as for explosives
	Smoke pot	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,3	1,3	
	Smoke projectile with bursting charge. See Explosive projectile										
	Smoke projectile with expelling charge but without bursting charge. See Fireworks, special										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Smoke signal	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,3	1,3	
	Soda amatol. See High explosive										
	Soda lime, solid	Corrosive material	UN1907	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
	Sodium acid sulfate, solid *or* solution. *See appropriate* Sodium hydrogen sulfate *entry*										
A	Sodium aluminate, solid	ORM-B	UN2812	None	173.505	173.800	25 pounds	100 pounds			
	Sodium aluminate solution	Corrosive material	UN1819	Corrosive	173.244	173.249	1 quart	5 gallons	1,2	1,2	
	Sodium aluminum hydride	Flammable solid	UN2835	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Sodium amide	Flammable solid	UN1425	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
E	Sodium arsenate (*RQ-1000/454*)	Poison B	UN1685	Poison	173.364	173.365 173.368	50 pounds	200 pounds	1,2	1,2	
E	Sodium arsenite (*solution*), liquid (*RQ-1000/454*)	Poison B	UN1686	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
+	Sodium azide	Poison B	UN1687	Poison	173.364	173.375	50 pounds	100 pounds	1,2	1,2	Stow away from heavy metals, especially lead and its compounds. Stow separate from acids
E	Sodium bifluoride, solid (*RQ-5000/2270*)	Corrosive material	UN2439	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	
E	Sodium bifluoride, solution (*RQ-5000/2270*)	Corrosive material	UN2439	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	
	Sodium bisulfate, solid *or* solution. *See* Sodium hydrogen sulfate, solid *or* solution										
E	Sodium bisulfite, solid. *See* Sodium hydrogen sulfite, solid										
	Sodium bromate	Oxidizer	UN1494	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
	Sodium chlorate (*soda chlorate*)	Oxidizer	UN1495	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
	Sodium chlorite	Oxidizer	UN1496	Oxidizer	None	173.160	Forbidden	100 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
	Sodium chlorite solution (*not exceeding 42% sodium chlorite*)	Corrosive material	UN1908	Corrosive	173.244	173.263	1 quart	4 gallons	1,2	1	Glass carboys in hampers not permitted under deck
E	Sodium chromate (*RQ-1000/454*)	ORM-E	NA9145	None	None	173.510	No limit	No limit	1,2	1,2	
E	Sodium cyanide, solid (*RQ-10/4.54*)	Poison B	UN1689	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
E	Sodium cyanide solution (*RQ-10/4.54*)	Poison B	UN1689	Poison	173.345	173.352	1 quart	55 gallons	1,2	1,2	Stow away from acids
	Sodium dichloroisocyanurate. *See* Sodium dichloro-s-triazinetrione										
	Sodium dichloro-s-triazinetrione (*dry, containing more than 39% available chlorine*)	Oxidizer	UN2465	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,2	1,2	
EA	Sodium dichromate (*RQ-1000/454*)	ORM-A	NA1479	None	173.505	173.510	No limit	No limit	1,2	1,2	
E	Sodium dodecylbenzenesulfonate (*RQ-1000/454*)	ORM-E	NA9146	None	None	173.510	No limit	No limit	1,2	1,2	
EA	Sodium fluoride, solid (*RQ-5000/2270*)	ORM-B	UN1690	None	173.505	173.510	No limit	No limit	1,2	1,2	
E	Sodium fluoride solution (*RQ-5000/2270*)	Corrosive material	NA1690	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	Stow away from acids
E	Sodium hydrate. *See* Sodium hydroxide										
	Sodium hydride	Flammable solid	UN1427	Flammable solid and Dangerous when wet	None	173.198	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
A	Sodium hydrogen sulfate, solid	ORM-B	UN1821	None	173.505	173.800	25 pounds	100 pounds			
	Sodium hydrogen sulfate solution	Corrosive material	UN2837	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	
EA	Sodium hydrogen sulfite, solid (*RQ-5000/2270*)	ORM-B	NA2693	None	173.505	173.800	25 pounds	100 pounds	1,2	1,2	
E	Sodium hydrosulfide, solid (*RQ-5000/2270*)	Flammable solid	UN2318	Flammable solid	173.153	173.154	25 pounds	100 pounds	1,2	1,2	
E	Sodium hydrosulfide, solution (*RQ-5000/2270*)	Corrosive material	NA2922	Corrosive	173.244	173.245	1 quart	5 gallons	1,2	1,2	
	Sodium hydrosulfite (*sodium dithionite*)	Flammable solid	UN1384	Flammable solid	173.153	173.204	25 pounds	100 pounds	1,2	1,2	Keep dry. Below deck stowage in metal drums only. Separate from flammable gases, liquids, oxidizing materials, or organic peroxides
E	Sodium hydroxide, dry solid, flake, bead, *or* granular (*RQ-1000/454*)	Corrosive material	UN1823	Corrosive	173.244	173.245b	25 pounds	200 pounds	1,2	1,2	Keep dry
E	Sodium hydroxide, liquid *or* solution (*RQ-1000/454*)	Corrosive material	UN1824	Corrosive	173.244	173.249	1 quart	5 gallons	1,2	1,2	
E	*Sodium hypochlorite. See* Hypochlorite solution *or* Hypochlorite solution containing not more than 7% available chlorine										
A	Sodium metabisulfite	ORM-B	NA2693	None	173.505	173.510	No limit	No limit			

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
E	Sodium, metal *or* metallic (*RQ-1000/454*)	Flammable solid	UN1428	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
E	Sodium, metal dispersion in organic solvent (*RQ-1000/454*)	Flammable solid	UN1429	Flammable solid and Dangerous when wet	None	173.230	Forbidden	10 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
E	Sodium, metal liquid alloy (*RQ-1000/454*)	Flammable solid	NA1421	Flammable solid and Dangerous when wet	None	173.202	Forbidden	1 pound	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
E	Sodium methylate, alcohol mixture (*RQ-1000/454*)	Combustible liquid	NA1289	None	173.118a	None	No limit	No limit	1,2	1,2	
E	Sodium methylate, alcohol mixture (*RQ-1000/454*)	Flammable liquid	NA1289	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
E	Sodium methylate, alcohol mixture (*RQ-1000/454*)	Corrosive material	NA1289	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
E	Sodium methylate, dry (*RQ-1000/454*)	Flammable solid	UN1431	Flammable solid	173.153	173.154	25 pounds	100 pounds	1,2	1	Segregation same as for flammable solids labeled Dangerous When Wet
	Sodium monoxide, solid	Corrosive material	UN1825	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	Keep dry
	Sodium nitrate	Oxidizer	UN1498	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Sodium nitrate bags. See Bags, sodium nitrate, empty and unwashed										
E	Sodium nitrite (*RQ-100/45.4*)	Oxidizer	UN1500	Oxidizer	173.153	173.234	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds and cyanides. Bagged material not permitted on passenger vessels
E	Sodium nitrite mixed (*fused*) with potassium nitrate (*RQ-100/45.4*)	Oxidizer	UN1487	Oxidizer	173.153	173.183	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds and cyanides
E	Sodium nitrite mixture (*sodium nitrate, sodium nitrite, and potassium nitrate*) (*RQ-100/45.4*)	Oxidizer	NA1487	Oxidizer	173.153	173.234	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds and cyanides
A	Sodium pentachlorophenate	ORM-A	UN2567	None	173.505	173.510	No limit	No limit			
	Sodium perchlorate	Oxidizer	UN1502	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,3	1,3	Stow away from powdered metals
	Sodium permanganate	Oxidizer	UN1503	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and hydrogen peroxide
	Sodium peroxide	Oxidizer	UN1504	Oxidizer	None	173.187	Forbidden	100 pounds	1,2	1	Keep dry. Stow away from powdered metals, permanganates, combustible packing of other cargo, and combustible foodstuffs
	Sodium phenolate, solid	Corrosive material	UN2497	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	
E	Sodium phosphate, dibasic (*RQ-5000/2270*)	ORM-E	NA9147	None	None	173.510	No limit	No limit	1,2	1,2	
E	Sodium phosphate, tribasic (*RQ-5000/2270*)	ORM-E	NA9148	None	None	173.510	No limit	No limit	1,2	1,2	
	Sodium phosphide	Flammable solid	UN1432	Flammable solid and Dangerous when wet	None	173.154	Forbidden	25 pounds	1	5	
	Sodium picramate, wet (*with at least 20% water*)	Flammable solid	UN1349	Flammable solid	None	173.205	Forbidden	25 pounds	1,2	5	Stow away from heavy metals, especially lead, and its compounds
	Sodium picryl peroxide	Forbidden									
	Sodium potassium alloy (liquid)	Flammable solid	UN1422	Flammable solid and Dangerous when wet	None	173.202	Forbidden	25 pounds	1,2	5	Under deck stowage must be readily accessible. Segregation same as for flammable solid labeled Dangerous when wet.
	Sodium potassium alloy (solid)	Flammable solid	UN1422	Flammable solid and Dangerous when wet	None	173.206	Forbidden	25 pounds	1,2	5	Under deck stowage must be readily accessible. Segregation same as for flammable solids labeled Dangerous When Wet
E	Sodium selenite (*RQ-1000/454*)	Poison B	UN2630	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Sodium sulfide, anhydrous	Flammable solid	UN1385	Flammable solid	173.153	173.207	25 pounds	300 pounds	1,2	1,2	Stow separate from liquid acids. Separate from flammable gases or liquids, oxidizing materials or organic peroxides
	Sodium tetranitride	Forbidden									
	Solvent, n.o.s.	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Solvent, n.o.s.	Flammable liquid	NA1993	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Sparklers. See Fireworks, common										
	Spent iron mass. See Iron mass, spent										
	Spent iron sponge. See Iron sponge, spent										
	Spent mixed acid. See Nitrating acid, spent										
	Spent sulfuric acid. See Sulfuric acid, spent										
	Spirits of nitroglycerin, (*1 to 10%*)	Flammable liquid	NA1204	Flammable liquid	None	173.133	Forbidden	6 quarts	1,2	5	Segregation same as for explosives
	Spirits of nitroglycerin, not exceeding 1% nitroglycerin by weight	Flammable liquid	NA1204	Flammable liquid	173.118	173.133	1 quart	6 quarts	1,2	1	
E	Spirits of salt. *See* Hydrochloric acid										
	Sporting powder. See Black powder *or* Propellant explosive, solid										
	Spray starting fluid. See Engine starting fluid										
	Spreader cartridge. See Fireworks, special										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5)		(6)		(7)		
					Packaging		Maximum net quantity in one package		Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Squib, electric or safety. See Electric squib or Safety squib										
	Stain. See Paint, Enamel, Lacquer, Stain, Shellac, Varnish; *etc.*										
	Stannic phosphide	Flammable solid	UN1433	Flammable solid and Dangerous when wet	None	173.154	Forbidden	25 pounds	1	5	Segregation same as for flammable solid labeled Dangerous When Wet
A	Stannous chloride, solid	ORM-B	NA1759	None	173.505	173.510	No limit	No limit			
	Starter cartridge	Class B explosive		Explosive B	None	173.92	Forbidden	200 pounds	1,3	5	
	Starter cartridge	Class C explosive		Explosive C	None	173.102	50 pounds	150 pounds	1,3	1,3	
	Storage battery, wet. See Battery, electric storage, wet										
	Straw. *See* Hay										
	Strontium arsenite, solid	Poison B	UN1691	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Strontium chlorate	Oxidizer	UN1506	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
	Strontium chlorate, wet	Oxidizer	UN1506	Oxidizer	173.153	173.163	25 pounds	200 pounds	1,2	1,2	Stow separate from ammonium compounds. Stow away from powdered metals
E	Strontium chromate (*RQ-1000/454*)	ORM-E	NA9149	None	None	173.510	No limit	No limit	1,2	1,2	
	Strontium nitrate	Oxidizer	UN1507	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Strontium peroxide	Oxidizer	UN1509	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Keep dry
E	Strychnine salt, solid (*RQ-10/4.54*)	Poison B	UN1692	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Strychnine, solid	Poison B	UN1692	Poison	173.364	173.365	Forbidden	200 pounds	1,2	1,2	
	Styphnate of lead. See Initiating explosive										
E	Styrene monomer, inhibited (*RQ-1000/454*)	Flammable liquid	UN2055	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	Substituted nitrophenol pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2780	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Substituted nitrophenol pesticide (*compounds and preparations*), liquid	Poison B	UN2779	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Substituted nitrophenol pesticide (*compounds and preparations*), solid	Poison B	UN2779	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Succinic acid peroxide	Organic peroxide	UN2135	Organic peroxide	173.153	173.157 173.158	Forbidden	25 pounds	1	1	
	Succinic acid peroxide, *technically pure.* See Succinic acid peroxide.		UN2135								
	Sucrose octanitrate (dry)	Forbidden									
	Sulfur and chlorate, loose mixtures of	Forbidden									
E	Sulfur chloride (*mono and di*) (*RQ-1000/454*)	Corrosive material	UN1828	Corrosive	None	173.247	Forbidden	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Sulfur dioxide	Nonflammable gas	UN1079	Nonflammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	4	Stow away from living quarters
	Sulfur flower. *See* Sulfur, solid										
	Sulfur hexafluoride	Nonflammable gas	UN1080	Nonflammable gas	173.306	173.304	150 pounds	300 pounds	1,2	1,2	
E	Sulfuric acid (*For fuming sulfuric acid, see* Oleum) (*RQ-1000/454*)	Corrosive material	UN1830	Corrosive	173.244	173.272	1 quart	1 gallon	1	1	Keep dry. Under deck stowage is permitted on cargo vessels only in metal drums
E	Sulfuric acid, spent (*RQ-1000/454*)	Corrosive material	UN1832	Corrosive	None	173.248	Forbidden	1 quart	1	1	Under deck stowage is permitted on cargo vessels only in metal drums
	Sulfuric anhydride. *See* Sulfur trioxide										
	Sulfurous acid	Corrosive material	UN1833	Corrosive	173.244	173.245	2 gallons	2 gallons	1,2	1	Glass carboys in hampers not permitted under deck
W	Sulfur, solid	ORM-C	UN1350	None	173.505	173.1080			1,2	1,2	Protect from sparks and open flame. Stow separate from oxidizing materials. Segregation same as for flammable solids
	Sulfur trioxide	Corrosive material	UN1829	Corrosive	173.244	173.273	Forbidden	1 gallon	1,2	1,2	Keep dry. Glass bottles not permitted under deck
	Sulfuryl chloride	Corrosive material	UN1834	Corrosive	173.244	173.247	1 quart	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Sulfuryl fluoride	Nonflammable gas	UN2191	Nonflammable gas	173.306	173.304 173.314	150 pounds	300 pounds	1,3	1	
	Sulphur. *See* Sulfur, solid										
	Supplementary charge (explosive)	Class A explosive		Explosive A	None	173.69	Forbidden	Forbidden	6	5	
EA	2,4,5-T. *See* 2,4,5-Trichlorophenoxyacetic acid.										
E	2,4,5-T amine, ester, *or* salt. *See* 2,4,5-Trichlorophenoxyacetic acid, amine, ester, *or* salt										
	Tankage. See Garbage tankage										
	Tankage fertilizer	Flammable solid	NA1325	Flammable solid	None	173.209	Forbidden	Forbidden	1	5	Keep dry. Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Tankage, rough ammoniate	Flammable solid	NA1325	Flammable solid	None	173.210	Forbidden	Forbidden	1	5	Keep dry. Separate from flammable gases or liquids, oxidizing materials, or organic peroxides

§172.101 Hazardous Materials Table (cont'd)

(1) +/E/A/W	(2) Hazardous materials descriptions and proper shipping names	(3) Hazard class	(3A) Identification number	(4) Label(s) required (if not excepted)	(5) Packaging (a) Exceptions	(5) Packaging (b) Specific requirements	(6) Maximum net quantity in one package (a) Passenger carrying aircraft or railcar	(6) Maximum net quantity in one package (b) Cargo only aircraft	(7) Water shipments (a) Cargo vessel	(7) Water shipments (b) Passenger vessel	(7) Water shipments (c) Other requirements
	Tank car, containing residual phosphorus and filled with water or inert gas. See 173.190										
	Tank car, empty (*previously used for a hazardous material*). *See 173.29*										
	Tank car, empty (*previously used for a Poison A material*). *See 172.510 and 173.29*										
	Tank, portable, empty (*previously used for a hazardous material*). *See 172.510, 172.514 and 173.29*										
	Tank truck, empty. *See 172.510, 172.514 and 173.29*										
	Tar, liquid	Combustible liquid	UN1999	None	173.118a	None	No limit	No limit	1,2	1,2	
	Tar, liquid	Flammable liquid	UN1999	Flammable liquid	173.118	173.131	1 quart	10 gallons	1,2	1	
EA	TDE (*1,1-Dichloro-2,2-bis(p-chlorophenyl) ethane*) (*RQ-1/0.454*)	ORM-A	NA2761	None	173.505	173.510	50 pounds	No limit	1,2	1,2	
	Tear gas ammunition. See Chemical ammunition, nonexplosive *(containing an irritant material)*										
	Tear gas candle	Irritating material	UN1700	Irritant	None	173.385	Forbidden	75 pounds	1	5	Stow away from living quarters
	Tear gas cartridge. See Small arms ammunition, irritating (*tear gas*) cartridge										
	Tear gas grenade. See Grenade, tear gas										
	Tertiary alcohol. See Alcohol, n.o.s.										
	Tetraazido benzene quinone	Forbidden									
AW	Tetrachloroethane	ORM-A	UN1702	None	173.505	173.620	1 quart	10 gallons	1,2	1,2	
A	Tetrachloroethylene *or* Perchloroethylene	ORM-A	UN1897	None	173.505	173.605	10 gallons	55 gallons			
	Tetraethylammonium perchlorate (dry)	Forbidden									
	Tetraethyl dithiopyrophosphate and compressed gas mixture	Poison A	UN1703	Poison gas	None	173.334	Forbidden	Forbidden	1	5	Shade from radiant heat. Stow away from living quarters. Segregation same as for nonflammable gases
	Tetraethyl dithiopyrophosphate, liquid	Poison B	UN1704	Poison	None	173.358	Forbidden	1 quart	1	5	
	Tetraethyl dithiopyrophosphate mixture, dry	Poison B	UN1704	Poison	None	173.377	Forbidden	200 pounds	1	5	
	Tetraethyl dithiopyrophosphate mixture, liquid	Poison B	UN1704	Poison	None	173.359	Forbidden	1 quart	1	5	
E	Tetraethyl lead, liquid (*including flash point for export shipment by water*) (*RQ-100/45.4*)	Poison B	NA1649	Poison	None	173.354	Forbidden	55 gallons	1	5	If flash point is 141 deg F. or less, segregation must be the same as for flammable liquids
E	Tetraethyl pyrophosphate and compressed gas mixture (*RQ-100/45.4*)	Poison A	UN1705	Poison gas	None	173.334	Forbidden	Forbidden	1	5	Shade from radiant heat. Stow away from living quarters. Segregation same as for nonflammable gases
E	Tetraethyl pyrophosphate, liquid (*RQ-100/45.4*)	Poison B	NA2783	Poison	None	173.358	Forbidden	1 quart	1,2	5	
E	Tetraethyl pyrophosphate mixture, dry (*RQ-100/45.4*)	Poison B	NA2783	Poison	None	173.377	Forbidden	200 pounds	1,2	5	
E	Tetraethyl pyrophosphate mixture, liquid (*RQ-100/45.4*)	Poison B	NA2783	Poison	None	173.359	Forbidden	1 quart	1,2	5	
+	Tetrafluoroethylene, inhibited	Flammable gas	UN1081	Flammable gas	173.306	173.304	Forbidden	300 pounds	1,2	1,2	Stow away from living quarters
	1,2,3,6-Tetrahydrobenzaldehyde	Corrosive material	UN2498	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Tetrahydrofuran	Flammable liquid	UN2056	Flammable liquid	None	173.119	Forbidden	10 gallons	1,3	5	
	Tetralin hydroperoxide, *technically pure. See* Organic peroxide, solid, n.o.s.		UN2136								
	Tetramethylammonium hydroxide, liquid	Corrosive material	UN1835	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	1,1,3,3-Tetramethylbutyl hydroperoxide, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2160								
	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate, *technically pure. See* Organic peroxide, liquid *or* solution, n.o.s.		UN2161								
	Tetramethylene diperoxide dicarbamide	Forbidden									
A	Tetramethylmethylenediamine	ORM-A	NA9069	None	173.505	173.510	No limit	No limit			
	Tetranitro diglycerin	Forbidden									
	Tetranitromethane	Oxidizer	UN1510	Oxidizer	None	173.203	Forbidden	Forbidden	1	5	Shade from radiant heat. Stow away from foodstuffs
	2,3,4,6-Tetranitrophenol	Forbidden									
	2,3,4,6-Tetranitrophenyl methyl nitramine	Forbidden									
	2,3,4,6-Tetranitrophenylnitramine	Forbidden									
	Tetranitroresorcinol (dry)	Forbidden									
	2,3,5,6-Tetranitroso-1,4-dinitrobenzene	Forbidden									
	2,3,5,6-Tetranitroso nitrobenzene (dry)	Forbidden									
	Tetrazene (guanyl nitrosamino guanyltetrazene). See Initiating explosive										
	Tetrazine (dry)	Forbidden									

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Tetrazolyl azide (dry)	Forbidden									
	Tetryl. See High explosive										
	Textile treating compound *or* mixture, liquid	Corrosive material	NA1760	Corrosive	173.244	173.245 173.249a	1 quart	10 gallons	1,2	1,2	
	Textile waste. *See* Cotton waste										
	Textile waste, wet	Flammable solid	UN1857	Flammable solid	None	173.211	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Thallium salt, solid, n.o.s.	Poison B	NA1707	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Thallium sulfate, solid (*RQ-1000/454*)	Poison B	NA1707	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Thinner for rust preventive coating. *See* Rust preventive coating										
	Thinning compound, paint, varnish, lacquer, etc. See Compound, lacquer, paint *or* varnish, removing, reducing *or* thinning, liquid										
	Thiocarbonylchloride. See Thiophosgene										
	Thioglycolic acid	Corrosive material	UN1940	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	Glass carboys in hampers not permitted under deck
	Thionyl chloride	Corrosive material	UN1836	Corrosive	None	173.247	Forbidden	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
+	Thiophosgene	Poison B	UN2474	Poison	None	173.356	Forbidden	1 gallon	1	5	Shade from radiant heat
	Thiophosphoryl chloride	Corrosive material	UN1837	Corrosive	None	173.271	Forbidden	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
A	Thiram	ORM-A	NA2771	None	173.505	173.510	No limit	No limit			
	Thorium metal, pyrophoric	Radioactive material	NA9170	Radioactive and Flammable solid	173.226	173.226			1,2	1,2	
	Thorium nitrate	Radioactive material	NA9171	Radioactive and Oxidizer	173.392	173.393			1,2	1,2	Separate longitudinally by a complete hold or compartment from explosives
	Time fuze. See Fuze, time										
	Tin chloride, fuming. *See* Tin tetrachloride, anhydrous										
	Tinning flux. *See* Zinc chloride solution										
	Tin perchloride. *See* Tin tetrachloride, anhydrous										
	Tin tetrachloride, anhydrous	Corrosive material	UN1827	Corrosive	173.244	173.247	1 quart	1 quart	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Titanium metal powder, dry *or* wet *with less than 20% water*	Flammable solid	NA2546	Flammable solid	None	173.208	Forbidden	75 pounds	1,2	5	
	Titanium metal powder, wet with 20% or more water	Flammable solid	NA1352	Flammable solid	None	173.208	Forbidden	150 pounds	1,2	5	
	Titanium sulfate solution *containing not more than 45% sulfuric acid*	Corrosive material	NA1760	Corrosive	173.244	173.297	1 quart	1 gallon	1	4	Shade from radiant heat. Keep dry
	Titanium tetrachloride	Corrosive material	UN1838	Corrosive	173.244	173.247	1 quart	10 gallons	1	1	Keep dry. Glass carboys not permitted on passenger vessels
E	Toluene (*toluol*) (*RQ-1000/454*)	Flammable liquid	UN1294	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
A	Toluenediamine	ORM-A	NA1709	None	173.505	173.510	No limit	No limit			
+	Toluene diisocyanate	Poison B	UN2078	Poison	173.345	173.346	Forbidden	55 gallons	1,3	1,3	Shade from radiant heat
	Toluene sulfonic acid, liquid	Corrosive material	NA2584	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Torch. See Fireworks, common										
	Torpedo, railway	Class B explosive		Explosive B	None	173.91	Forbidden	200 pounds	1,2	1,2	Passenger vessels in metal lockers only
EA	Toxaphene (*RQ-1/0.454*)	ORM-A	NA2761	None	173.505	173.510	25 pounds	100 pounds	1,2	1,2	
	Toy caps	Class C explosive		Explosive C	None	173.100 173.109	50 pounds	150 pounds	1,3	1,3	
	Toy propellant device	Class C explosive		Explosive C	None	173.111	50 pounds	150 pounds	1,3	1,3	
	Toy smoke device	Class C explosive		Explosive C	None	173.111	50 pounds	150 pounds	1,3	1,3	
	Toy torpedo. See Fireworks, special										
E	2,4,5-TP. *See* 2,4,5-Trichlorophenoxypropionic acid										
E	2,4,5-TP ester. *See* 2,4,5-Trichlorophenoxypropionic acid ester										
	Tracer	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
	Tracer fuze	Class C explosive		Explosive C	None	173.105	50 pounds	150 pounds	1,3	1,3	
	Tractor. *See* Motor vehicle										
	Trailer *or* truck body with refrigeration *or* heating equipment. *See* Motor vehicle										
	Treated paper (*manufactured article properly dried to prevent spontaneous heating*). *See* Oiled material										
	Treated textile (*manufactured article properly dried to prevent spontaneous heating*). *See* Oiled material.										

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Triazine pesticide (*compounds and preparations*), liquid	Flammable liquid	UN2764	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
	Triazine pesticide (*compounds and preparations*), liquid	Poison B	UN2763	Poison	173.345	173.346	1 quart	55 gallons	1,2	1,2	
	Triazine pesticide (*compounds and preparations*), solid	Poison B	UN2763	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Tri-(b-nitroxyethyl)ammonium nitrate	Forbidden									
EA	Trichlorfon (*RQ-1000/454*)	ORM-A	NA2783	None	173.505	173.510	50 pounds	200 pounds	1,2	1,2	
	Trichloroacetic acid, solid	Corrosive material	UN1839	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1	
	Trichloroacetic acid solution	Corrosive material	UN2564	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	Glass carboys in hampers not permitted under deck
A	1,1,1-Trichloroethane	ORM-A	UN2831	None	173.505	173.510	10 gallons	55 gallons			
EA	Trichloroethylene (*RQ-1000/454*)	ORM-A	UN1710	None	173.505	173.605	10 gallons	55 gallons	1,2	1,2	
	Trichloromethyl perchlorate	Forbidden									
EA	Trichlorophenol (*RQ-10/4.54*)	ORM-A	NA2020	None	173.505	173.510	100 pounds	No limit	1,2	1,2	
EA	2,4,5-Trichlorophenoxyacetic acid (*RQ-100/45.4*)	ORM-A	NA2765	None	173.505	173.510	50 pounds	No limit	1,2	1,2	
E	2,4,5-Trichlorophenoxyacetic acid amine, ester, *or* salt (*RQ-100/45.4*)	ORM-E	NA2765	None	None	173.510	No limit	No limit	1,2	1,2	
EA	2,4,5-Trichlorophenoxypropionic acid (*RQ-100/45.4*)	ORM-A	NA2765	None	173.505	173.510	50 pounds	No limit	1,2	1,2	
E	2,4,5-Trichlorophenoxypropionic acid ester (*RQ-100/45.4*)	ORM-E	NA2765	None	None	173.510	No limit	No limit	1,2	1,2	
	Trichlorosilane	Flammable liquid	UN1295	Flammable liquid	None	173.136	Forbidden	10 gallons	1	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Trichloro-s-triazinetrione *dry, containing over 39% available chlorine*	Oxidizer	UN2468	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,3	1,3	Keep dry
	(mono-(Trichloro) tetra-(monopotassium dichloro)-penta-s-triazinetrione, dry (*containing over 39% available chlorine*)	Oxidizer	NA2468	Oxidizer	173.153	173.217	50 pounds	100 pounds	1,3	1,3	Keep dry
	Trick matches	Class C explosive		Explosive C	None	173.111	Forbidden	Forbidden	1,3	1,3	
	Trick noise maker, explosive	Class C explosive		Explosive C	None	173.111	50 pounds	150 pounds	1,3	1,3	
E	Triethanolamine dodycylbenzenesulfonate (*RQ-1000/454*)	ORM-E	NA9151	None	None	173.510	No limit	No limit	1,2	1,2	
E	Triethylamine (*RQ-5000/2270*)	Flammable liquid	UN1296	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
+	Trifluorochlorethylene	Flammable gas	UN1082	Flammable gas	173.306	173.304 173.314	Forbidden	10 gallons	1,2	1	
	Triformoxime trinitrate	Forbidden									
	1,3,5-Trimethyl-2,4,6-trinitrobenzene	Forbidden									
	Trimethylacetyl chloride	Corrosive material	UN2438	Corrosive	173.244	173.247	1 quart	1 quart	1,2	1,2	
E	Trimethylamine, anhydrous (*RQ-1000/454*)	Flammable gas	UN1083	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1	4	
E	Trimethylamine, aqueous solution (*RQ-1000/454*)	Flammable liquid	UN1297	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	Stow away from mercury and mercury compounds
	Trimethylchlorosilane	Flammable liquid	UN1298	Flammable liquid	None	173.135	Forbidden	10 gallons	1,2	1	
	Trimethylene glycol diperchlorate	Forbidden									
	Trimethylol nitromethane trinitrate	Forbidden									
	2,4,6-Trinitro-1,3,5-triazido benzene (dry)	Forbidden									
	2,4,6-Trinitro-1,3-diazobenzene	Forbidden									
	Trinitroacetic acid	Forbidden									
	Trinitroacetonitrile	Forbidden									
	Trinitroamine cobalt	Forbidden									
	Trinitrobenzene, dry. See High explosive										
	Trinitrobenzene, wet *containing at least 10% water*	Flammable solid	UN1354	Flammable solid	173.212		1 pound	1 pound	1	4	Stow away from heavy metals and their compounds
	Trinitrobenzene, wet, containing at least 10% water, over 16 ounces in one outside packaging. See High explosive										
	Trinitrobenzoic acid, dry. See High explosive										
	Trinitrobenzoic acid, wet, *containing at least 10% water*	Flammable solid	UN1355	Flammable solid	173.192	173.193	1 pound	25 pounds	1	5	Stow away from heavy metals and their compounds
	Trinitrobenzoic acid, wet, containing at least 10% water, over 25 pounds in one outside packaging. See High explosives										
	Trinitroethanol	Forbidden									
	Trinitroethylnitrate	Forbidden									
	Trinitromethane	Forbidden									
	1,3,3-Trinitronaphthalene	Forbidden									
	2,4,6-Trinitrophenyl guanidine (dry)	Forbidden									
	2,4,6-Trinitrophenyl nitramine	Forbidden									
	2,4,6-Trinitrophenyl trimethylol methyl nitramine trinitrate (dry)	Forbidden									

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Trinitroresorcinol. See High explosive										
	2,4,6-Trinitroso-3-methyl nitraminoanisole	Forbidden									
	Trinitrotetramine cobalt nitrate	Forbidden									
	Trinitrotoluene, dry. See High explosive										
	Trinitrotoluene, wet *containing at least 10% water*	Flammable solid	UN1356	Flammable solid	173.212		1 pound	1 pound	1	4	Stow away from heavy metals and their compounds
	Trinitrotoluene, wet, containing at least 10% water, over 16 ounces in one outside packaging. See High explosive										
	Tris-(1-aziridinyl) phosphine oxide	Corrosive material	UN2501	Corrosive	173.244	173.299a	1 quart	1 gallon	1	1	Keep dry. Glass carboys not permitted on passenger vessels
	Tris, bis-bifluoroamino diethoxy propane (TVOPA)	Forbidden									
	Tungsten hexafluoride	Corrosive material	UN2196	Corrosive	None	173.284	Forbidden	110 pounds	1	5	Segregation same as for nonflammable gases.
	Turpentine	Combustible liquid	UN1299	None	173.118a	None	No limit	No limit	1,2	1,2	
	Turpentine	Flammable liquid	UN1299	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1,2	
	Turpentine substitute	Combustible liquid	UN1300	None	173.118a	None	No limit	No limit	1,2	1,2	
	Turpentine substitute	Flammable liquid	UN1300	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
W	Twisted jute packing (*rope*) (*treated or untreated*). *See* Oakum										
	Uranium hexafluoride, fissile (*containing more than 0.7% U-235*)	Radioactive material	NA9173	Radioactive and Corrosive	173.393	173.396			1,2	1,2	
	Uranium hexafluoride, low specific activity (*containing 0.7% or less U-235*)	Radioactive material	NA9174	Radioactive and Corrosive	173.392	173.393			1,2	1,2	
	Uranium metal, pyrophoric	Radioactive material	NA9175	Radioactive and Flammable solid	173.392	173.393 173.396			1,2	1,2	
E	Uranyl acetate (*RQ-5000/2270*)	Radioactive material	NA9180	Radioactive material	173.391	173.395			1,2	1,2	
E	Uranyl nitrate hexahydrate solution	Radioactive material	NA9178	Radioactive and Corrosive	173.392	173.393 173.395 173.396			1,2	1,2	
E	Uranyl nitrate, solid (*RQ-5000/2270*)	Radioactive material	NA9177	Radioactive and Oxidizer	173.392	173.393 173.396			1,2	1,2	Separate longitudinally by an intervening hold or compartment from explosives
	Urea nitrate, dry. See High explosive										
	Urea nitrate, wet *with 10% or more water*	Flammable solid	NA1357	Flammable solid	173.192	173.193	1 pound	25 pounds	1,2	1,2	
	Urea nitrate, wet with 10% or more water, over 25 pounds in one outside packaging. See High explosive										
	Urea peroxide	Organic peroxide	NA1511	Organic peroxide	173.153	173.227	2 pounds	25 pounds	1	4	Keep dry. Shade from radiant heat
	Valeric acid	Corrosive material	NA1760	Corrosive	173.244	173.245	1 quart	10 gallons	1,2	1,2	
	Valeryl chloride	Corrosive material	UN2502	Corrosive	173.244	173.245	1 quart	1 gallon	1,2	1,2	
	Vanadium oxytrichloride	Corrosive material	UN2443	Corrosive	173.244	173.247a	Forbidden	1 quart	1	4	Shade from radiant heat
	Vanadium oxytrichloride and titanium tetrachloride mixture	Corrosive material	NA2443	Corrosive	None	173.245 173.245a	Forbidden	1 quart	1	4	Shade from radiant heat
E	Vanadium pentoxide (*RQ-1000/454*)	ORM-E	UN2862	None	None	173.510	No limit	No limit	1,2	1,2	
	Vanadium tetrachloride	Corrosive material	UN2444	Corrosive	173.244	173.247a	Forbidden	1 quart	1	4	Shade from radiant heat
E	Vanadyl sulfate (*RQ-1000/454*)	ORM-E	NA9152	None	None	173.510	No limit	No limit	1,2	1,2	
	Varnish. *See* Paint, Enamel, Lacquer, Stain, Shellac, Varnish; *etc.*										
	Varnish drier. See Paint drier, liquid										
	Varnish remover or reducer. See Compound, lacquer, paint *or* varnish, removing, reducing, *or* thinning, liquid										
	Varnish thinning compound. See Compound, lacquer, paint, *or* varnish, removing, reducing, *or* thinning, liquid										
	Very signal cartridge	Class C explosive		Explosive C	None	173.108	50 pounds	200 pounds	1,3	1,3	
E	Vinyl acetate (*RQ-1000/454*)	Flammable liquid	UN1301	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
+	Vinyl chloride	Flammable gas	UN1086	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1,2	4	Stow away from living quarters
	Vinyl ethyl ether, inhibited	Flammable liquid	UN1302	Flammable liquid	None	173.119	Forbidden	1 gallon	1,3	5	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Vinyl fluoride, inhibited	Flammable gas	UN1860	Flammable gas	173.306	173.304 173.314 173.315	Forbidden	300 pounds	1	4	
E	Vinylidene chloride, inhibited (*RQ-5000/2270*)	Flammable liquid	UN1303	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,3	4	
	Vinyl isobutyl ether	Flammable liquid	UN1304	Flammable liquid	173.118	173.119	1 quart	10 gallons	1,2	1	
+	Vinyl methyl ether	Flammable gas	UN1087	Flammable gas	173.306	173.304 173.314	Forbidden	20 pounds	1,2	1	Stow away from living quarters
	Vinyl nitrate polymer	Forbidden									
	Vinyl trichlorosilane	Flammable liquid	UN1305	Flammable liquid	None	173.135	Forbidden	10 gallons	1,2	1	
	Vitriol, oil of. See Sulfuric acid										
	War head. See Explosive projectile										
	Waste, hazardous. See Hazardous waste, liquid *or* solid, n.o.s.										
	Waste paper, wet	Flammable solid	NA1325	Flammable solid	None	173.186	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Waste textile, wet	Flammable solid	UN1857	Flammable solid	None	173.211	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Waste wool, wet	Flammable solid	UN1387	Flammable solid	None	173.213	Forbidden	Forbidden	1,2	1,2	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
	Water pump system *tank charged with compressed air or nitrogen*	Nonflammable gas	NA1956	None	173.306		Forbidden	Forbidden	1,2	1,2	
	Water reactive solid, n.o.s.	Flammable solid	UN2813	Flammable solid and Dangerous when wet	173.153	173.154	Forbidden	25 pounds	1,2	4	Segregation same as for flammable solids labeled Dangerous When Wet
	Water treatment compounds, liquid	Corrosive material	NA1760	Corrosive	173.244	173.249	1 quart	10 gallons	1	1	
	Wax, liquid	Combustible liquid	NA1993	None	173.118a	None	No limit	No limit	1,2	1,2	
	Wet hair. See Hair, wet										
	Wet textile waste. *See* Waste textile, wet										
E	White acid (*ammonium bifluoride and hydrofluoric acid mixture*) (*RQ-5000/2270*)	Corrosive material	NA1760	Corrosive	173.244	173.264	1 quart	1 gallon	1	1	
	Wood filler, liquid. *See* Paint, Enamel, Lacquer, Stain, Shellac, Varnish; *etc.*										
	Wood shavings (*when dry, clean and free from oil*). *See* Sawdust										
	Wool waste. *See* Cotton waste										
	Wool waste, wet. See Waste wool, wet										
	Xenon	Nonflammable gas	UN2036	Nonflammable gas	173.306	173.302	150 pounds	300 pounds	1,2	1,2	
	X-ray film. *See* Film										
E	Xylene (*xylol*) (*RQ-1000/454*)	Flammable liquid	UN1307	Flammable liquid	173.118	173.119	1 quart	1 quart	1,2	1,2	
EA	Xylenol (*RQ-1000/454*)	ORM-A	UN2261	None	173.505	173.510	100 pounds	No limit	1,2	1,2	
	Xylyl bromide	Irritating material	UN1701	Irritant	None	173.382	Forbidden	75 pounds	1	5	Stow away from living quarters
	p-Xylyl diazide	Forbidden									
A	Yeast, active, *in liquid or pressed form*	ORM-C		None	None	173.1085	No limit	No limit			
E	Zinc acetate (*RQ-1000/454*)	ORM-E	NA9153	None	None	173.510	No limit	No limit	1,2	1,2	
E	Zinc ammonium chloride (*RQ-5000/2270*)	ORM-E	NA9154	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc ammonium nitrite	Oxidizer	UN1512	Oxidizer	None	173.228	25 pounds	100 pounds	1,3	5	This material may be forbidden in water transportation by certain countries
	Zinc arsenate	Poison B	UN1712	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
	Zinc arsenite, solid	Poison B	UN1712	Poison	173.364	173.365	50 pounds	200 pounds	1,2	1,2	
E	Zinc borate (*RQ-1000/454*)	ORM-E	NA9155	None	None	173.510	No limit	No limit	1,2	1,2	
E	Zinc bromide (*RQ-5000/2270*)	ORM-E	NA9156	None	None	173.510	No limit	No limit	1,2	1,2	
E	Zinc carbonate (*RQ-1000/454*)	ORM-E	NA9157	None	None	173.510	No limit	No limit	1,2	1,2	
	Zinc chlorate	Oxidizer	UN1513	Oxidizer	173.153	173.163	25 pounds	100 pounds	1,2	1,2	Stow separate from ammonium compounds and away from powdered metals
E	Zinc chloride, solid (*RQ-5000/2270*)	ORM-E	UN2331	None	None	173.510	No limit	No limit	1,2	1,2	
E	Zinc chloride solution (*RQ-5000/2270*)	Corrosive material	UN1840	Corrosive	173.244	173.245	1 quart	1 quart	1,2	1,2	
E	Zinc cyanide (*RQ-10/4.54*)	Poison B	UN1713	Poison	173.370	173.370	25 pounds	200 pounds	1,2	1,2	Stow away from acids
	Zinc ethyl. See Pyrophoric liquid, n.o.s.										
E	Zinc fluoride (*RQ-1000/454*)	ORM-E	NA9158	None	None	173.510	No limit	No limit	1,2	1,2	
E	Zinc formate (*RQ-1000/454*)	ORM-E	NA9159	None	None	173.510	No limit	No limit	1,2	1,2	
EA	Zinc hydrosulfite (*RQ-1000/454*)	ORM-A	UN1931	None	173.505	173.510	50 pounds	100 pounds	1,2	1,2	Keep dry. Stow away from acids and oxidizers
E	Zinc muriate solution. *See* Zinc chloride solution										
E	Zinc nitrate (*RQ-5000/2270*)	Oxidizer	UN1514	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Zinc permanganate	Oxidizer	UN1515	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Separate from ammonium compounds and hydrogen peroxide
	Zinc peroxide	Oxidizer	UN1516	Oxidizer	173.153	173.154	25 pounds	100 pounds	1,2	1,2	Keep dry
E	Zinc phenolsulfonate (*RQ-5000/2270*)	ORM-E	NA9160	None	None	173.510	No limit	No limit	1,2	1,2	

§172.101 Hazardous Materials Table (cont'd)

(1)	(2)	(3)	(3A)	(4)	(5) Packaging		(6) Maximum net quantity in one package		(7) Water shipments		
+/E/A/W	Hazardous materials descriptions and proper shipping names	Hazard class	Identification number	Label(s) required (if not excepted)	(a) Exceptions	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
E	Zinc phosphide (*RQ-1000/454*)	Poison B	UN1714	Poison	173.364	173.365	25 pounds	100 pounds	1,2	1,2	Stow away from acids and oxidizers
E	Zinc silicofluoride (*RQ-5000/2270*)	ORM-E	UN2855	None	None	173.510	No limit	No limit	1,2	1,2	
E	Zinc sulfate (*RQ-1000/454*)	ORM-E	NA9161	None	None	173.510	No limit	No limit	1,2	1,2	
	Zirconium hydride	Flammable solid	UN1437	Flammable solid and Dangerous when wet	None	173.206	Forbidden	150 pounds	1,2	5	Segregation same as for flammable solids labeled Dangerous When Wet
	Zirconium metal, dry, *chemically produced, finer than 20 mesh particle size*	Flammable solid	UN2008	Flammable solid	None	173.214	Forbidden	75 pounds	1	5	Separate from flammable gases or liquids, oxidizing materials or organic peroxides
	Zirconium metal, dry, *mechanically produced, finer than 270 mesh particle size*	Flammable solid	UN2008	Flammable solid	None	173.214	Forbidden	75 pounds	1	5	Separate from flammable gases or liquids, oxidizing materials or organic peroxides
	Zirconium, metal, liquid, suspensions	Flammable liquid	UN1308	Flammable liquid	None	173.140	Forbidden	5 gallons	1	5	
	Zirconium metal, wet, *chemically produced, finer than 20 mesh particle size*	Flammable solid	UN1358	Flammable solid	None	173.214	Forbidden	150 pounds	1,2	5	
	Zirconium metal, wet, *mechanically produced, finer than 270 mesh particle size*	Flammable solid	UN1358	Flammable solid	None	173.214	Forbidden	150 pounds	1,2	5	
E	Zirconium nitrate (*RQ-5000/2270*)	Oxidizer	UN2728	Oxidizer	173.153	173.182	25 pounds	100 pounds	1,2	1,2	
	Zirconium picramate, wet *with at least 20% of water*	Flammable solid	UN1517	Flammable solid	None	173.216	Forbidden	25 pounds	1	1	Stow away from heavy metals and their salts
E	Zirconium potassium fluoride (*RQ-5000/2270*)	ORM-E	NA9162	None	None	173.510	No limit	No limit	1,2	1,2	
	Zirconium scrap (*borings, clippings, shavings, sheets, or turnings*)	Flammable solid	UN1932	Flammable solid	173.153	173.220	Forbidden	Forbidden	1	4	Separate from flammable gases or liquids, oxidizing materials, or organic peroxides
EA	Zirconium sulfate (*RQ-5000/2270*)	ORM-B	NA9163	None	None	173.510	100 pounds	No limit	1,2	1,2	
E	Zirconium tetrachloride, solid (*RQ-5000/2270*)	Corrosive material	UN2503	Corrosive	173.244	173.245b	25 pounds	100 pounds	1,2	1,2	

13. A new § 172.102 in association with the Optional Hazardous Materials Table is added to read as follows:

§ 172.102 Purpose and use of the optional hazardous materials table.

(a) The Optional Hazardous Materials Table (Optional Table) set forth in this section provides description, classification, labeling and vessel stowage requirements which may be used as an alternative to the corresponding requirements in § 172.101 under conditions set forth in this section. The provisions of this section do not apply to materials designated as hazardous materials under this subchapter that are not subject to the requirements of the IMCO Code. This section does not designate materials as hazardous materials. Such designations are made only in § 172.101. A number of materials listed in the Optional Table may not be subject to the requirements of this subchapter, but they are subject to regulation under widely applied international standards and are listed in this section in the interest of providing consistency with those standards and to alert persons offering or accepting these materials for transportation that the materials may be subject to regulation in international transport.

(b) The requirements of § 172.101 notwithstanding, a hazardous material (other than Class A or B explosives and Radioactive materials) may be classed, labeled, or described in accordance with this section provided the material conforms to all additional defining or limiting conditions prescribed for the description in the appropriate schedule of the IMCO Code.

(c) When a material is transported by aircraft, motor vehicle, or rail transport vehicle under the description and IMCO class or division provided in the Optional Table, the shipping paper required by § 172.202(a) must include the class name from Part 173 of this subchapter which most closely corresponds to the IMCO class indicated for the material in the Optional Table. For example, the IMCO proper shipping name, class and identification number for Ethylene oxide are "Ethylene oxide, 2.1, UN1040". While Ethylene oxide would be classed as a Flammable liquid under § 172.101, the class in Part 173 of this subchapter that most closely corresponds to the IMCO class provided in the Optional Table is "Flammable gas". The proper shipping paper description would be "Ethylene oxide, 2.1, Flammable gas, UN 1040".

(d) When appropriate, the entries "IMCO" or "IMCO Class" may be entered immediately before or immediately following the class entry in the basic description. For example: "Ethylene oxide, IMCO Class 2.1, Flammable gas, UN 1040."

(e) If a hazardous material that is a hazardous substance is offered, accepted or transported under an acceptable shipping name from the Optional Table that does not contain the name of the hazardous substance, the name of the hazardous substance shall be entered in association with the proper shipping name.

(f) Column 1 contains the letter "N" immediately adjacent to certain entries. The letter "N" means that the entry is not an acceptable alternative and the material must be transported under the appropriate entry in § 172.101.

(g) Column 2 lists the optional proper shipping names for hazardous materials. Proper shipping names are limited to those shown in Roman type (not italics). In the selection of a proper shipping name to describe a particular material, if the correct technical name is not shown, or is not appropriate, selection must be made from the general description or "n.o.s." entries corresponding to the specific hazard class of the material being shipped. The name that most appropriately describes the material must be used; e.g., an alcohol not listed by name in the Optional Table must be shipped as an "Alcohol n.o.s." rather than "Flammable liquid n.o.s." unless the technical name of the alcohol is listed, e.g., Methanol. Some mixtures may be more appropriately described by their application, such as "Paint" or "Cleaning compound".

(1) Shipping names may be entered in either upper or lower case letters.

(2) The words in italics are not part of the proper shipping name but may be used in addition to the proper shipping name. The word "or" in italics indicates that any terms in the sequence may be used as the proper shipping name, as appropriate.

(3) When one entry references another entry by use of a "*see*" and both names are in Roman type, either name may be used as a proper shipping name (e.g., Methyl alcohol. *See* Methanol).

(4) If not included in the proper shipping name in the Optional Table, the proper shipping name for a hazardous material that is a hazardous waste must include the word "Waste" preceding the name of the material. For example: Waste turpentine.

(h) Column 3 contains the hazard class or division designated for the material in the IMCO Code. In the case of explosives, a letter designating the "compatibility group" of the substance or article is also included immediately following the division. Detailed definitions of the classes, divisions, and compatibility groups are provided in the IMCO Code. Basic definitions of the IMCO classes and divisions (with corresponding DOT classes shown in parentheses) are follows:

(1) Class 1—Explosives.

(i) Division 1.1—Substances and articles which have a mass explosion hazard. (*Explosive A*)

(ii) Division 1.2—Substances and articles which have a projection hazard but not a mass explosion hazard. (*Explosive A* or *B*)

(iii) Division 1.3—Substances and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard. (*Explosive B*)

(iv) Division 1.4—Substances and articles which present no significant hazard. (*Explosive C*)

(v) Division 1.5—Very insensitive substances. (*Blasting Agent*)

(2) Class 2—Gases (compressed, liquefied or dissolved under pressure).

(i) Division 2.1—Flammable gases. (*Flammable gas*)

(ii) Division 2.2—Nonflammable gases. (*Nonflammable gas*)

(iii) Division 2.3—Poison gases. (*Poison A*)

(3) Class 3—Flammable liquids.

(i) Division 3.1—Low flash point group (liquids with flash points below 0°F.). (*Flammable liquid*)

(ii) Division 3.2—Intermediate flash point group (liquids with flash points of 0°F. or above but less than 73°F.). (*Flammable liquid*)

(iii) Division 3.3—High flash point group (liquids with flash points of 73°F. or above but less than 141°F.). (*Flammable liquid* or *Combustible liquid*)

(4) Class 4—Flammable solids or substances.

(i) Division 4.1—Flammable solids. (*Flammable solid*)

(ii) Division 4.2—Substances liable to spontaneous combustion. (*Flammable solid* or, for pyroforic liquids, *Flammable liquid*)

(iii) Division 4.3—Substances emitting flammable gases when wet. (*Flammable solid*)

(5) Class 5—Oxidizing substances.

(i) Division 5.1—Oxidizing substances or agents. (*Oxidizer*)

(ii) Division 5.2—Organic peroxides. (*Organic peroxide*)

(6) Class 6— Poisonous and infectious substances.

(i) Division 6.1—Poisonous substances. (*Poison B*)

(ii) Division 6.2—Infectious substances. (*Etiologic agent*)

(7) Class 7—Radioactive substances. (*Radioactive material*)

(8) Class 8—Corrosives. (*Corrosive material*)

(9) Class 9—Miscellaneous dangerous substances. (*Other regulated material*)

(i) Column 4 contains the United Nations number listed for the substance or article in the IMCO Code. A number of substances or articles have no UN number provided for them in the IMCO Code. For some of these entries, the UN number of the article or substance which most appropriately corresponds to that particular entry is shown in parentheses.

(j) Column 5 specifies the labels to be applied to each package. Specifications for labels for domestic and export shipments shall be either as provided in this subchapter or as provided in the IMCO Code, except that color shall be as prescribed in § 172.407(d). The label referred to as the "St. Andrews Cross" label is the "Harmful-Stow Away From Foodstuffs" label provided by IMCO for materials of Class 6.1 Packaging Group III.

(k) Column 6 provides the packaging group specified for the material in the IMCO Code.

(l) Column 7 specifies each of the authorized stowage locations on board cargo vessels and passenger vessels and certain additional requirements for shipments of listed hazardous materials. Section 176.63 of this subchapter sets forth the physical requirements for each of the authorized stowage locations listed in Column 7. The authorized stowage locations are defined as follows:

(1) "1" means the material must be stowed "on deck."

(2) "2" means the material must be stowed "under deck."

(3) "3" means the material must be stowed "under deck away from heat."

(4) "1,2" means the material may be stowed either "on deck" or "under deck"; however, "under deck" stowage should be used if available.

(5) "1,3" means the material may be stowed either "on deck" or "under deck away from heat"; however, "under deck away from heat" stowage should be used if it is available.

(6) "5" means the material is forbidden and may not be offered or accepted for transportation by vessel.

(7) "6" means the material is authorized to be transported in a magazine subject to the requirements of §§ 176.135 through 176.144 of this subchapter.

172.102 Optional Hazardous Materials Table

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Acetal	3.1	UN 1088	Flammable Liquid	II	1,3	5	Keep cool
	Acetaldehyde	3.1	UN 1089	Flammable Liquid	I	1,3	5	Keep cool
	Acetaldehyde oxime	3.3	UN 2332	Flammable Liquid	II	1,2	1,2	
	Acetic acid, *solution containing not less than 80% of acid*	3.3	UN 1842	Flammable Liquid, Corrosive	II	1,2	1,2	
	Acetic anhydride	8	UN 1715	Corrosive	II	1,2	1,2	Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Acetone	3.1	UN 1090	Flammable Liquid	II	1,3	5	
	Acetone cyanohydrin, *stablilized*	6.1	UN 1541	Poison	I	1	5	Shade from radiant heat. Stow 'away from' acids and alkalis
	Acetone oils	3.2	UN 1091	Flammable Liquid	II	1,2	1'	
	Acetonitrile. *See* Methyl cyanide							
	Acetyl acetone peroxide, *maximum concentration 40% in solution*	5.2	UN 2080	Organic Peroxide	II	1	5	
	Acetyl benzoyl peroxide, *maximum concentration 45% in solution*	5.2	UN 2081	Organic Peroxide	II	1	5	
	Acetyl bromide	8	UN 1716	Corrosive	I	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Acetyl chloride	8	UN 1717	Corrosive, Flammable Liquid	I	1	1	Keep dry. Shade from radiant heat. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Acetyl cyclohexane sulphonyl peroxide, *maximum concentration 82%, wetted with minimum 12% water*	5.2	UN 2082	Organic Peroxide	I	1	5	Maximum transport temperature -10 degrees C
	Acetyl cyclohexane sulphonyl peroxide, *maximum concentration 32% in solution*	5.2	UN 2083	Organic Peroxide	II	1	5	Maximum transport temperature -10 degrees C
	Acetylene, *dissolved*	2.1	UN 1001	Flammable Gas	--	1	1	Shade from radiant heat. Stow 'separated from' chlorine
	Acetylene tetrabromide	6.1	UN 2504	St. Andrews Cross	III	1,2	1,2	
	Acetyl iodide	8	UN 1898	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Acetyl methyl carbinol	3.3	UN 2621	Flammable Liquid	III	1,2	1,2	
	Acetyl peroxide, *maximum concentration 27% in solution*	5.2	UN 2084	Organic Peroxide	II	1	5	
	Acid butyl phosphate	8	UN 1718	Corrosive	III	1,2	1,2	Glass carboys in hampers prohibited under deck
	Acid mixtures, *hydrofluoric and sulphuric*	8	UN 1786	Corrosive	I	1	5	Stow 'away from' fluorides
	Acid mixtures, *nitrating acid*	8	UN 1796	Corrosive	I/II	1	5	Stow 'away from' fluorides
	Acid mixtures, *spent*	8	UN 1826	Corrosive	I/II	1	5	Stow 'away from' fluorides
	Acids, liquid, n.o.s.. *See* Corrosive liquids, n.o.s							
	Acrolein dimer, *stabilized*	3.3	UN 2607	Flammable Liquid	II	1,2	1,2	
	Acrolein, *inhibited*	3.1	UN 1092	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Acrylamide	6.1	UN 2074	St. Andrews Cross	III	1,2	1,2	Keep cool. Shade from radiant heat
	Acrylamide	6.1	UN 2074	St. Andrews Cross	III	1,2	1,2	Shade from radiant heat. Keep cool
	Acrylic acid, *inhibited*	8	UN 2218	Corrosive	II	1	1	Shade from radiant heat. Keep cool. Glass carboys prohibited on passenger vessels
	Acrylonitrile, *inhibited*	3.1	UN 1093	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Activated carbon. *See* Carbon, *activated*							
	Activated charcoal. *See* Carbon, *activated*							
	Adhesives, n.o.s.. *See* Cement, adhesive, *containing a flammable liquid*							
	Adiponitrile	6.1	UN 2205	St. Andrews Cross	III	1,2	1,2	Shade from radiant heat
	Aerosol dispensers, *with a capacity below 1400 cubic cm.:*							
	(1) more than 10% by weight of total contents consisting of flammable gas	2.1	UN 1950	Flammable Gas	--	1,3	1,3	
	(2) internal pressure greater than 160 psig at 130 deg F.	2.2	UN 1950	Nonflammable Gas	--	1,3	1,3	
	(3) more than 45% by weight of total contents consisting of flammable liquid. This limit is reduced to 35% if there is any flammable gas present.	3.1 3.2 3.3	UN 1950 UN 1950 UN 1950	Flammable Liquid Flammable Liquid Flammable Liquid	-- -- --	1,3 1,3 1,3	1,3 1,3 1,3	
	(4) more than 10% by weight of toxic substances in the liquid concentrate	6.1 6.1	UN 1950	Poison St. Andrews Cross	I/II III	1,3 1,3	1,3 1,3	
	(5) more than 5% by weight of corrosive substances in the liquid concentrate	8	UN 1950	Corrosive	--	1,3	1,3	
	(6) as specified under Group 2 on page 9011 of IMCO Code	9	UN 1950	None	--			
N	Aerosol dispensers, *with a capacity of 1400 cubic cm. or more*	2	UN 1950		--			
	Aerosols *or* aerosol product. *See* Aerosol dispensers							
	Agents, blasting, Type B. *See* Explosives, blasting, Type B							
	Agents, blasting, Type E. *See* Explosives, blasting, Type E							
	Air, *compressed*	2.2	UN 1002	Nonflammable Gas	--	1,2	1,2	
	Air, *liquid*	2.2	UN 1003	Nonflammable Gas, Oxidizer	--	1,3	1,3	Stow 'separated from' acetylene. Do not overstow
	Alarm devices, explosive	1.4 S	UN 0001	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Alcohol, *denatured*	3.2 3.3	UN 1095 UN 1095	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Alcohol, *industrial*	3.2 3.3	UN 1096 UN 1096	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Alcohols, *(non-toxic)*, n.o.s.	3.2 3.3	UN 1987 UN 1987	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Alcohols, *(toxic)*, n.o.s.	3.2	UN 1986	Flammable Liquid, Poison	II	1,2	1	
		3.3	UN 1986	Flammable Liquid, Poison	II	1,2	1	
	Aldehydes, *(non-toxic)*, n.o.s.	3.2	UN 1989	Flammable Liquid	II	1,2	1	
		3.3	UN 1989	Flammable Liquid	II	1,2	1,2	
	Aldehydes, *(toxic)*, n.o.s.	3.2	UN 1988	Flammable Liquid, Poison	II	1,2	1	
		3.3	UN 1988	Flammable Liquid, Poison	II	1,2	1,2	
	Aldrin *and its mixtures*	6.1	UN 1542	Poison	II/III	1,2	1,2	
	Alkali metal amalgams, n.o.s.	4.3	UN 1389	Dangerous When Wet	I	1,2	1,2	
	Alkali metal amides, n.o.s.	4.3	UN 1390	Dangerous When Wet	II	1,2	5	
	Alkali metal dispersions, n.o.s.	4.3	UN 1391	Dangerous When Wet	I	1,2	5	
	Alkali metals, *liquid alloys of*	4.3	UN 1421	Dangerous When Wet	I	1,2	5	
	Alkaline caustic liquids, n.o.s.. *See* Caustic alkali liquids, n.o.s							
	Alkaline corrosive liquids, n.o.s.	8	UN 1760	Corrosive	II	1,2	1,2	
	Alkaline earth metal amalgams, n.o.s.	4.3	UN 1382	Dangerous When Wet	I	1,2	1,2	
	Alkaloids, *(poisonous), and their salts*, n.o.s.	6.1	UN 1544	Poison	I/II	1,2	1,2	
		6.1	UN 1544	St. Andrews Cross	III	1,2	1,2	
	Alkanesulphonic acids	8	UN 1899	Corrosive	II	1,2	1	
	Alkylamines and polyamines, *flashpoint below 23 deg C and boiling point above 35 deg C but not more than 200 deg C*, n.o.s.	3.2	UN 2733	Flammable Liquid, Corrosive	II	1,2	1	
		3.3	UN 2733	Flammable Liquid, Corrosive	II	1,2	1,2	
	Alloys of alkaline earth metals, *(non-pyrophoric)*, n.o.s.	4.3	UN 1393	Dangerous When Wet	II	1,2	5	
	Allyl acetate	3.2	UN 2333	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Allyl alcohol	3.2	UN 1098	Flammable Liquid, Poison	I	1,2	1	
	Allylamine	3.1	UN 2334	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Allyl bromide	3.2	UN 1099	Flammable Liquid	I	1,2	1	
	Allyl chloride	3.1	UN 1100	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Allyl chlorocarbonate. *See* Allyl chloroformate							
	Allyl chloroformate	8	UN 1722	Corrosive	I	1	5	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Allyl ethyl ether	3.2	UN 2335	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Allyl formate	3.2	UN 2336	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Allyl glycidyl ether	3.3	UN 2219	Flammable Liquid	III	1,2	1,2	
	Allyl iodide	8	UN 1723	Corrosive	I	1	5	Keep dry
	Allyl isothiocyanate, *stabilized*	6.1	UN 1545	Poison	II	1	5	Shade from radiant heat
	Allyl trichlorosilane, *stabilized*	8	UN 1724	Corrosive	II	1	1	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Aluminium alkylchlorides	4.2	UN 2003	Spontaneously Combustible	I	1	1	
	Aluminium alkyl halides, in solution	4.2	UN 2220	Spontaneously Combustible	II	1	1	
	Aluminium alkyl halides, *pure*	4.2	UN 2221	Spontaneously Combustible	I	1	1	
	Aluminium alkyls	4.2	UN 2003	Spontaneously Combustible	I	1	1	
	Aluminium bromide, *(anhydrous or solutions)*	8	UN 1725	Corrosive	II	1,2	1,2	Keep dry
	Aluminium carbide	4.3	UN 1394	Dangerous When Wet	II	1,2	1,2	
	Aluminium chloride, *(anhydrous or solutions)*	8	UN 1726	Corrosive	II	1,2	1,2	Keep dry
	Aluminium ferrosilicon, *powder*	4.3	UN 1395	Dangerous When Wet	II	1,2	1,2	
	Aluminium hydride	4.2	UN 2463	Spontaneously Combustible	I	1,2	5	
	Aluminium nitrate	5.1	UN 1438	Oxidizer	III	1,2	1,2	
	Aluminium phosphide	6.1	UN 1397	Poison, Dangerous When Wet	I	1,2	1,2	Stow 'away from' acids and oxidizing substances
	Aluminium, *powder, coated*	4.1	UN 1309	Flammable Solid	III	1,2	1,2	Keep dry. Stow 'away from' nonflammable gases and poisons
	Aluminium, *powder, pyrophoric. See* Pyrophoric metals							
	Aluminium, *powder, uncoated, non-pyrophoric*	4.3	UN 1396	Dangerous When Wet	II	1,2	1,2	Keep dry. Stow 'away from' nonflammable gases and poisons
	Aluminium silicon, *powder, uncoated*	4.3	UN 1398	Dangerous When Wet	III	1,2	1,2	
	Aluminium tributyl	4.2	UN 2003	Spontaneously Combustible	I	1	1	
	Aluminium triethyl	4.2	UN 1102	Spontaneously Combustible	I	1	1	
	Aluminium trimethyl	4.2	UN 1103	Spontaneously Combustible	I	1	1	
	Aminophenols (*o*-, *m*-, *p*-)	6.1	UN 2512	St. Andrews Cross	III	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Ammonia, *anhydrous, liquefied, and ammonia solutions below S.G. 0.88 at 15 degrees C. ammonia liquid and ammonia solutions in water containing over 50% of ammonia.*	2.3	UN 1005	Poison Gas	--	1,2	5	Stow 'separated from' chlorine
	Ammonia, *solutions below S.G. 0.88 at 15 degrees C. containing more than 35% and not above 50% ammonia.*	2.2	UN 2073	Nonflammable Gas	--	1,2	5	Stow 'separated from' chlorine
	Ammonia solutions *having a density (specific gravity) between 0.880 and 0.957 at 15 deg C, in water, containing more than 10% and not more than 35% by weight ammonia.*	8	UN 2672	Corrosive	III	1,2	1,2	Stow 'away from' living quarters
	Ammonium arsenate	6.1	UN 1546	Poison	II	1,2	1,2	Stow 'away from' alkalis
	Ammonium bifluoride. *See* Ammonium hydrogen fluoride							
	Ammonium dichromate	5.1	UN 1439	Oxidizer	II	1,2	1,2	Stow 'away from' foodstuffs
	Ammonium dinitro-o-cresolate	9	UN 1843	None	II	1,2	1,2	Stow 'away from' heavy metals, 'separated from' flammable substances and 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Ammonium fluoride	6.1	UN 2505	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Ammonium hydrogen fluoride	8	UN 1727	Corrosive	II	1,2	1,2	Keep dry
	Ammonium metavanadate	6.1	UN 2859	Poison	II	1,2	1,2	
	Ammonium nitrate, *containing more than 0.2% by weight of combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance*	1.1 D	UN 0222	Explosive (1.1D)	--	1,2	1,2	
	Ammonium nitrate, *containing not more than 0.2% of combustible material (including organic material calculated as carbon) and free from any other added matter*	5.1	UN 1942	Oxidizer	III	1,2	1,2	
	Ammonium nitrate fertilizer, *containing ammonium nitrate,* n.o.s.	5.1	UN 2072	Oxidizer	III	1,2	1,2	
	Ammonium nitrate fertilizers, *of the same composition as defined in class 5.1 on pages 5015 and 5016 of the IMCO Code but containing greater amounts of organic and/or combustible material than specified in these entries*	1.1 D	UN 0223	Explosive (1.1D)	--	1,2	1,2	
	Ammonium nitrate fertilizers, *Type A*							
	(1) Uniform non-segregating mixtures of ammonium nitrate with added matter which is inorganic and chemically inert towards ammonium nitrate, containing not less than 90% of ammonium nitrate and not more than 0.2% of combustible material (including organic material calculated as carbon), or containing less than 90% but more than 70% of ammonium nitrate and not more than 0.4% of total combustible material	5.1	UN 2067	Oxidizer	III	1,2	1,2	
	(2) Uniform non-segrating mixtures of ammonium nitrate with calcium carbonate and/or dolomite, containing more than 80% but less than 90% of ammonium nitrate and not more than 0.4% of total combustible material	5.1	UN 2068	Oxidizer	III	1,2	1,2	
	(3) Uniform non-segregating mixtures of ammonium nitrate/ammonium sulphate, containing more than 45% but not more than 70% of ammonium nitrate and containing not more than 0.4% of total combustible material	5.1	UN 2069	Oxidizer	III	1,2	1,2	
	(4) Uniform non-segregating mixtures of nitrogen/phosphate or nitrogen/potash types or complete fertilizers of nitrogen/phosphate/potash type, containing more than 70% but less than 90% of ammonium nitrate and not more than 0.4% of total combustible material	5.1	UN 2070	Oxidizer	III	1,2	1,2	
	Ammonium nitrate fertilizers, *Type B. Uniform non-segregating mixtures of nitrogen/phosphate or nitrogen/potash types or complete fertilizers of nitrogen/phosphate/potash type, containing not more than 70% of ammonium nitrate and not more than 0.4% of total added combustible material or containing not more than 45% of ammonium nitrate with unrestricted combustible material*	9	UN 2071	None	III	1,2	1,2	
	Ammonium perchlorate	5.1	UN 1442	Oxidizer	II	1,2	5	Stow 'away from' powdered metals
	Ammonium persulphate	5.1	UN 1444	Oxidizer	III	1,2	1,2	
N	Ammonium picrate, *dry or containing, by weight, less than 10% water*	1.1D	UN 0004	Explosive (1.1D)	--	--	--	
	Ammonium picrate, *wetted with not less than 10% water*	4.1	UN 1310	Flammable Solid	I	1	5	Stow 'away from' heavy metals
	Ammonium picrate, *wetted with not less than 33⅓% of water*	4.1	UN 1310	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals
	Ammonium polyvanadate	6.1	UN 2861	Poison	II	1,2	1,2	
	Ammunition, illuminating, *with or without burster, expelling charge or propelling charge*	1.4 G	UN 0297	Explosive (1.4G)	--	1,3	1,3	
N	Ammunition, illuminating, *with or without burster, expelling charge or propelling charge*	1.2G	UN 0171	Explosive (1.2G)	--	--	--	
N	Ammunition, illuminating, *with or without burster, expelling charge or propelling charge*	1.3G	UN 0254	Explosive (1.3G)	--	--	--	
N	Ammunition, incendiary, *liquid or gel, with burster, expelling charge or propelling charge*	1.3J	UN 0247	Explosive (1.3J)	--	--	--	
	Ammunition, incendiary *(other than water-activated ammunition), without white phosphorus or phosphides, with or without burster, expelling charge or propelling charge*	1.4 G	UN 0300	Explosive *(1.4G)*	--	1,3	1,3	
N	Ammunition, incendiary *(other than water-activated ammunition), without white phosphorus or phosphides, with or without burster, expelling charge or propelling charge*	1.2G	UN 0009	Explosive (1.2G)	--	--	--	
N	Ammunition, incendiary *(other than water-activated ammunition), without white phosphorus or phosphides, with or without burster, expelling charge or propelling charge*	1.3G	UN 0010	Explosive (1.3G)	--	--	--	
N	Ammunition, incendiary, white phosphorus, *with burster, expelling charge or propelling charge*	1.2H	UN 0243	Explosive (1.2H)	--	--	--	
N	Ammunition, incendiary, white phosphorus, *with burster, expelling charge or propelling charge*	1.3H	UN 0244	Explosive (1.3H)	--	--	--	
	Ammunition, practice	1.4G	UN 0362	Explosive (1.4G)	--	1,3	1,3	
	Ammunition, proof	1.4G	UN 0363	Explosive (1.4G)	--	1,3	1,3	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
N	Ammunition, smoke *(other than water-activated ammunition) with or without burster, expelling charge or propelling charge*	1.2G	UN 0015	Explosive (1.2G), Corrosive	--	--	--	
N	Ammunition, smoke *(other than water-activated ammunition) with or without burster, expelling charge or propelling charge*	1.3G	UN 0016	Explosive (1.3G), Corrosive	--	--	--	
N	Ammunition, smoke *(other than water-activated ammunition) with or without burster, expelling charge or propelling charge*	1.4G	UN 0303	Explosive (1.4G), Corrosive	--	--	--	
N	Ammunition, smoke, white phosphorus *(other than water-activated ammunition), with burster, expelling charge or propelling charge*	1.2H	UN 0245	Explosive (1.2H)	--	--	--	
N	Ammunition, smoke, white phosphorus *(other than water-activated ammunition), with burster, expelling charge or propelling charge*	1.3H	UN 0246	Explosive (1.3H)	--	--	--	
	Ammunition, *(tear producing), non-explosive, with neither burster nor expelling charge, non-fuzed*	6.1	UN 2017	Poison	II	1,2	5	Keep dry
N	Ammunition, tear producing, *with burster, expelling charge or propelling charge*	1.2G	UN 0018	Explosive (1.2G), Poison, Corrosive	--	--	--	
N	Ammunition, tear producing, *with burster, expelling charge or propelling charge*	1.3G	UN 0019	Explosive (1.3G), Poison, Corrosive	--	--	--	
	Ammunition, tear-producing, *with burster, expelling charge or propelling charge*	1.4 G	UN 0301	Explosive (1.4G), Poison, Corrosive	--	1,3	1,3	
	Ammunition, *(toxic), non-explosive, with neither burster nor expelling charge, non-fuzed*	6.1	UN 2016	Poison	II	1,2	5	Keep dry
N	Ammunition, toxic *(other than water-activated ammunition) with burster, expelling charge or propelling charge*	1.2K	UN 0020	Explosive (1.2K), Poison	--	--	--	
N	Ammunition, toxic *(other than water-activated ammunition) with burster, expelling charge or propelling charge*	1.3K	UN 0021	Explosive (1.3K), Poison	--	--	--	
	Amorces	1.4 S	UN 0022	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Amyl acetates	3.2	UN 1104	Flammable Liquid	II	1,2	1	
		3.3	UN 1104	Flammable Liquid	II	1,2	1,2	
	Amyl alcohols	3.2	UN 1105	Flammable Liquid	II	1,2	1	
		3.3	UN 1105	Flammable Liquid	II	1,2	1,2	
	Amylamine	3.2	UN 1106	Flammable Liquid	II	1,2	1	
	Amyl chloride	3.2	UN 1107	Flammable Liquid	II	1,2	1	
	n-Amylene	3.1	UN 1108	Flammable Liquid	I	1,2	5	
	Amyl formates	3.3	UN 1109	Flammable Liquid	II	1,2	1,2	
	Amyl hydride. *See* Pentane							
	Amyl mercaptan	3.2	UN 1111	Flammable Liquid	II	1,2	1	
	Amyl methyl ketone	3.3	UN 1110	Flammable Liquid	III	1,2	1,2	
	Amyl nitrate	3.3	UN 1112	Flammable Liquid	II	1,3	5	
	Amyl nitrite	3.1	UN 1113	Flammable Liquid	II	1,2	5	Keep cool
	Amyl trichlorosilane	8	UN 1728	Corrosive	II	1	1	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Aniline	6.1	UN 1547	Poison	II	1,2	1,2	Stow 'away from' acids and oxidizers
	Aniline hydrochloride	6.1	UN 1548	St. Andrews Cross	III	1,2	1,2	Stow 'away from' alkalis
	Aniline oil. *See* Aniline							
	o-Anisidine	6.1	UN 2431	St. Andrews Cross	III	1,2	1,2	
	Anisole	3.3	UN 2222	Flammable Liquid	III	1,2	1,2	
	Anisoyl chloride	8	UN 1729	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Anti-freeze. *See* Flammable liquid preparations, n.o.s							
	Antimony chloride. *See* Antimony trichloride, *liquid or solid*							
	Antimony compounds, *(inorganic)*, n.o.s.	6.1	UN 1549	Poison	I/II	1,2	1,2	
		6.1	UN 1549	St. Andrews Cross	III	1,2	1,2	
	Antimony lactate	6.1	UN 1550	St. Andrews Cross	III	1,2	1,2	
	Antimony pentachloride, *liquid*	8	UN 1730	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Antimony pentachloride, *solutions*	8	UN 1731	Corrosive	II	1	1	Glass carboys prohibited on passenger vessels
	Antimony pentafluoride	8	UN 1732	Corrosive, Poison	II	1	5	Keep dry
	Antimony potassium tartrate	6.1	UN 1551	St. Andrews Cross	III	1,2	1,2	
	Antimony trichloride, *liquid*	8	UN 1733	Corrosive	II	1	1	Keep dry
	Antimony trichloride, *solid*	8	UN 1733	Corrosive	II	1,2	1,2	Keep dry
	Argon, *compressed*	2.2	UN 1006	Nonflammable Gas	--	1,3	1,3	
	Argon, *liquid*	2.2	UN 1951	Nonflammable Gas	--	1,3	1,3	
	Arsenic acid, *liquid*	6.1	UN 1553	Poison	I	1,2	1,2	
	Arsenic acid, *solid*	6.1	UN 1554	Poison	II	1,2	1,2	
	Arsenical dust	6.1	UN 1562	Poison	II	1,2	1,2	
	Arsenical flue dust. *See* Arsenical dust							
	Arsenic bromide	6.1	UN 1555	Poison	II	1,2	1,2	
	Arsenic chloride. *See* Arsenic trichloride							
	Arsenic compounds, *(liquid)*, n.o.s.	6.1	UN 1556	Poison	I/II	1,2	1,2	
		6.1	UN 1556	St. Andrews Cross	III	1,2	1,2	
	Arsenic compounds, *(solid)*, n.o.s.	6.1	UN 1557	Poison	I/II	1,2	1,2	Keep dry.
		6.1	UN 1557	St. Andrews Cross	III	1,2	1,2	Keep dry
	Arsenic, metallic	6.1	UN 1558	Poison	II	1,2	1,2	
	Arsenic pentoxide	6.1	UN 1559	Poison	II	1,2	1,2	
	Arsenic sulphides, *(solid)*, n.o.s. *See* Arsenic compounds, *(solid)*, n.o.s							
	Arsenic trichloride	6.1	UN 1560	Poison	I	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Arsenic trioxide	6.1	UN 1561	Poison	II	1,2	1,2	
	Arsine	2.3	UN 2188	Poison Gas, Flammable Gas	–	1	5	Stow 'away from' living quarters
	Articles, explosive, n.o.s.	1.4B	UN 0350	Explosive (1.4B)	–	1,3	1,3	
	Articles, explosive, n.o.s.	1.4C	UN 0351	Explosive (1.4C)	–	1,3	1,3	
	Articles, explosive, n.o.s.	1.4D	UN 0352	Explosive (1.4D)	–	1,3	1,3	
	Articles, explosive, n.o.s.	1.4G	UN 0353	Explosive (1.4G)	–	1,3	1,3	
	Articles, explosive, n.o.s.	1.4S	UN 0349	None. Package to be marked '1.4S'	–	1,3	1,3	
N	Articles, explosive, n.o.s.	1.1L	UN 0354	Explosive (1.1L)	–	–	–	
N	Articles, explosive, n.o.s.	1.2L	UN 0355	Explosive (1.2L)	–	–	–	
N	Articles, explosive, n.o.s.	1.3L	UN 0356	Explosive (1.3L)	–	–	–	
N	Articles, pyrophoric	1.2L	UN 0380	Explosive (1.2L)	–	–	–	
	Asbestos, blue	9	UN 2212	None	II	1,2	1,2	
	Asbestos, white	9	UN 2590	None	III	1,2	1,2	
	Asphalt cut-backs. *See* Cut-backs, *asphalt or bitumen*							
	Bags, *(empty and unwashed), having contained* Potassium nitrate *or* sodium nitrate	4.1	UN 1359	Flammable Solid	III	1,2	5	
	Barium, *alloys, non-pyrophoric*	4.3	UN 1399	Dangerous When Wet	II	1,2	5	
	Barium alloys *pyrophoric*	4.2	UN 1854	Spontaneously Combustible	II	1	5	
	Barium azide, *containing at least 50% water or alcohol*	6.1	UN 1571	Poison	II	1,2	1,2	Stow 'away from' heavy metals
N	Barium azide, *dry or containing, by weight, less than 50% water or alcohol*	1.1A	UN 0224	Explosive (1.1A), Poison	–	–	–	
	Barium chlorate	5.1	UN 1445	Oxidizer, Poison	II	1,2	1,2	Stow 'away from' foodstuffs and powdered metals, 'separated from' Ammonium compounds
	Barium compounds, n.o.s.	6.1	UN 1564	Poison	I/II	1,2	1,2	
		6.1	UN 1564	St. Andrews Cross	III	1,2	1,2	
	Barium cyanide	6.1	UN 1565	Poison	I	1,2	1,2	Stow 'away from' acids
	Barium, *metal, non-pyrophoric*	4.3	UN 1400	Dangerous When Wet	II	1,2	5	
	Barium nitrate	5.1	UN 1446	Oxidizer, Poison	II	1,2	1,2	Stow 'away from' foodstuffs
	Barium oxide	6.1	UN 1884	St. Andrews Cross	III	1,2	1,2	
	Barium perchlorate	5.1	UN 1447	Oxidizer, Poison	II	1,2	1,2	Stow 'away from' powdered metals and foodstuffs
	Barium permanganate	5.1	UN 1448	Oxidizer, Poison	II	1,2	1,2	Stow 'away from' foodstuffs and 'separated from' ammonium compounds and hydrogen peroxide
	Barium peroxide	5.1	UN 1449	Oxidizer, Poison	II	1,2	1,2	Keep dry. Stow 'away from' foodstuffs
	Batteries, *electric, storage, wet or filled*	8	UN 1734	Corrosive	III	1,2	1,2	
	Battery fluid, *acid*	8	UN 1735	Corrosive	II	1,2	1,2	Glass carboys in hampers prohibited under deck
	Battery fluid, *alkaline corrosive*	8	UN 1735	Corrosive	II	1,2	1,2	
	Battery fluid, *alkaline corrosive, with storage battery*	8	UN 1735	Corrosive	II	1,2	1,2	
	Benzaldehyde	3.3	UN 1990	Flammable Liquid	III	1,2	1,2	
	Benzene	3.2	UN 1114	Flammable Liquid	II	1,2	1	
	Benzene sulphonyl chloride	6.1	UN 2225	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids and alkalis
	Benzidine	6.1	UN 1885	Poison	II	1,2	1,2	
	Benzine	3.1	UN 1115	Flammable Liquid	II	1,2	5	
		3.2	UN 1115	Flammable Liquid	II	1,2	1	
		3.3	UN 1115	Flammable Liquid	II	1,2	1,2	
	Benzonitrile	6.1	UN 2224	Poison	II	1,2	1,2	Stow 'away from' acids
	Benzotrichloride	8	UN 2226	Corrosive	II	1,2	1,2	Stow 'away from' living quarters
	Benzotrifluoride	3.2	UN 2338	Flammable Liquid	II	1,2	1	
	Benzoyl chloride	8	UN 1736	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Benzoyl peroxide, *in a concentration of more than 80% but less than 95% with water*	5.2	UN 2088	Organic Peroxide	I	1	5	
	Benzoyl peroxide, *in a concentration of more than 72% but less than 95% as a paste*	5.2	UN 2086	Organic Peroxide	I	1	5	
	Benzoyl peroxide, *in a concentration of not more than 72% as a paste*	5.2	UN 2087	Organic Peroxide	II	1	5	
	Benzoyl peroxide, *in a concentration of not more than 55% as a paste*	5.2	UN 2087	Organic Peroxide	II	1	5	
	Benzoyl peroxide, *in a concentration of not more than 80% with water*	5.2	UN 2090	Organic Peroxide	II	1	5	
	Benzoyl peroxide, *in concentrations from 30% to maximum 52% with inert solid*	5.2	UN 2089	Organic Peroxide	II	1	5	
	Benzoyl peroxide, *technical pure or in a concentration of more than 52% with inert solid*	5.2	UN 2085	Organic Peroxide	I	1	5	
	Benzyl bromide	8	UN 1737	Corrosive	II	1	5	Keep dry
	Benzyl chloride	8	UN 1738	Corrosive	II	1	5	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Benzyl chloroformate	8	UN 1739	Corrosive	I	1	5	Keep dry
	Benzyl cyanide, *liquid*	6.1	UN 2470	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Benzyl dimethylamine	3.3	UN 2619	Flammable Liquid	III	1,2	1,2	
	Benzylidene chloride	6.1	UN 1886	Poison	II	1	5	
	Beryllium compounds	6.1	UN 1566	Poison	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Beryllium, *metal powder*	6.1	UN 1567	Poison, Flammable Solid	II	1,2	1,2	Segregation same as for flammable solids
	Beryllium nitrate	5.1	UN 2464	Oxidizer, Poison	II	1,2	1,2	Keep cool. If packaged in a liner within a wooden barrel, fiber drum or plywood drum or in plastic bags within a fiberboard box, stow 'away from' sources of heat
	Bhusa	4.1	UN 1327	None	III	1,2	1,2	Stow 'away from' animal or vegetable oils
	Bifluorides, n.o.s.	8	UN 1740	Corrosive	II	1,2	1,2	Keep dry
	Bis-(4-tert-butyl cyclohexyl) perdicarbonate, *technical pure*	5.2	UN 2154	Organic Peroxide	II	1	5	Maximum transport temperature 30 deg C
	2,2-Bis-(tert-butylperoxy) butane, *maximum concentration 55% in solution*	5.2	UN 2111	Organic Peroxide	II	1	5	
	1,1-Bis-(tert-butylperoxy) cyclohexane, *maximum concentration 77% in solution*	5.2	UN 2180	Organic Peroxide	II	1	5	
	1,2-Bis-(tert-butylperoxy) cyclohexane, *maximum concentration 77% in solution*	5.2	UN 2181	Organic Peroxide	II	1	5	
	1,1-Bis-(tert-butylperoxy) cyclohexane, *technical pure*	5.2	UN 2179	Organic Peroxide	II	1	5	
	1,4-Bis-(2-tert-butylperoxy isopropyl) benzene, *or* ,1,3-bis-(2-tert-butylperoxy isopropyl) benzene, *and mixtures thereof, (including technical pure or in a concentration of more than 40% with inert solid)*	5.2	UN 2112	Organic Peroxide	II	1	5	
	1,1-Bis-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane, *technical pure*	5.2	UN 2145	Organic Peroxide	II	1	5	
	1,1-Bis-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane, *maximum concentration 57% in solvent*	5.2	UN 2146	Organic Peroxide	II	1	5	
	1,1-Bis-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane, *maximum concentration 58% with inert solid*	5.2	UN 2147	Organic Peroxide	II	1	5	
	2,2-Bis-(4,4-di-tert-butylperoxy cyclohexyl) propane, *maximum concentration 42% with inert solid*	5.2	UN 2168	Organic Peroxide	II	1	5	
	Bis-(1-hydroxy cyclohexyl) peroxide, *technical pure*	5.2	UN 2148	Organic Peroxide	II	1	5	
	Bis-(2-methylbenzoyl)peroxide, *with at least 15% water*	5.2	UN 2593	Organic Peroxide	I	1	5	Maximum transport temperature 30 deg C
	Bis-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide, *as a paste with at least 50% phlegmatizer*	5.2	UN 2597	Organic Peroxide	II	1	5	Maximum transport temperature 30 deg C
N	Black powder, compressed	1.1D	UN 0028	Explosive (1.1D)	--	--	--	
N	Black powder, *granular or as meal*	1.1D	UN 0027	Explosive (1.1D)	--	--	--	
	Blasting cap assemblies, non electric	1.4B	UN 0361	Explosive (1.4B)	--	1,3	1,3	
N	Blasting cap assemblies, non-electric	1.1B	UN 0360	Explosive (1.1B)	--	--	--	
	Blasting caps, electric	1.4 B	UN 0255	Explosive (1.4B)	--	1,2	5	Portable magazine or metal locker. Do not handle blasting caps with any high explosive. Do not handle blasting caps at the same time high explosives are being loaded
N	Blasting caps, electric	1.1B	UN 0030	Explosive (1.1B)	--	--	--	
	Blasting caps, non-electric	1.4 B	UN 0267	Explosive (1.4B)	--	1,2	5	Portable magazine or metal locker. Do not handle blasting caps with any high explosive. Do not handle blasting caps at the same time high explosives are being loaded
N	Blasting caps, non-electric	1.1B	UN 0029	Explosive (1.1B)	--	--	--	
	Bleaching powder. *See* Calcium hypochlorite *mixtures, dry, containing 39% or less, but more than 10% available chlorine*							
	Blue asbestos. *See* Asbestos, blue							
N	Bombs, photo-flash	1.1D	UN 0038	Explosive (1.1D)	--	--	--	
N	Bombs, photo-flash	1.1F	UN 0037	Explosive (1.1F)	--	--	--	
N	Bombs, photo-flash	1.2G	UN 0039	Explosive (1.2G)	--	--	--	
N	Bombs, photo-flash	1.3G	UN 0299	Explosive (1.3G)	--	--	--	
	Bombs, smoke, *containing a corrosive liquid, non-explosive, without initiating device*	8	UN 2028	Corrosive	II	1,2	5	Keep dry. Stow 'away from' living quarters
N	Bombs, *with bursting charge*	1.1D	UN 0034	Explosive (1.1D)	--	--	--	
N	Bombs, *with bursting charge*	1.2D	UN 0035	Explosive (1.2D)	--	--	--	
N	Bombs, *with bursting charge*	1.1F	UN 0033	Explosive (1.1F)	--	--	--	
N	Bombs, *with bursting charge*	1.2F	UN 0291	Explosive (1.2F)	--	--	--	
N	Boosters, with detonator	1.1B	UN 0225	Explosive (1.1B)	--	--	--	
N	Boosters, with detonator	1.2B	UN 0268	Explosive (1.2B)	--	--	--	
N	Boosters, *without detonator*	1.1D	UN 0042	Explosive (1.1D)	--	--	--	
N	Boosters, *without detonator*	1.2D	UN 0283	Explosive (1.2D)	--	--	--	
	Borate and chlorate, *mixtures*	5.1	UN 1458	Oxidizer	II	1,2	5	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Bordeaux arsenites, *liquid*	6.1	UN 1568	Poison	I	1,2	1,2	
	Bordeaux arsenites, *solid*	6.1	UN 1568	Poison	II	1,2	1,2	
	Borneol	4.1	UN 1312	None. Package to be marked 'Class 4.1'	III	1,2	1,2	
	Boron trichloride	2.3	UN 1741	Poison Gas, Corrosive	--	1	5	Shade from radiant heat. Stow 'away from' foodstuffs and living quarters
	Boron trifluoride	2.3	UN 1008	Poison Gas	--	1	5	Stow 'away from foodstuffs and living quarters
	Boron trifluoride acetic acid complex	8	UN 1742	Corrosive	II	1,2	1,2	
	Boron trifluoride diethyl etherate	8	UN 2604	Corrosive	II	1,2	1	Segregation same as for flammable liquids
	Boron trifluoride propionic acid complex	8	UN 1743	Corrosive	II	1,2	1,2	
	Box toe gum. *See* Nitrocellulose							
	Brake fluid, hydraulic	3.2	UN 1118	Flammable Liquid	II	1,2	1	
	Bromates, *(inorganic)*, n.o.s.	5.1	UN 1450	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Bromine, *(and solutions)*	8	UN 1744	Corrosive, Poison	I	1	5	Keep cool

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Bromine pentafluoride	8	UN 1745	Corrosive, Poison, Oxidizer	I	1	5	Shade from radiant heat. Stow 'away from' all other corrosives
	Bromine trifluoride	8	UN 1746	Corrosive, Poison	I	1	5	Shade from radiant heat
	Bromoacetic acid, *solid*	8	UN 1938	Corrosive	II	1,2	1,2	Keep dry
	Bromoacetic acid, *solution*	8	UN 1938	Corrosive	II	1,2	1,2	Glass carboys in hampers not permitted under deck
	Bromoacetone	6.1	UN 1569	Poison	II	1	5	Segregation same as for flammable liquids
	Bromoacetyl bromide	8	UN 2513	Corrosive	II	1	1	Glass carboys prohibited on passenger vessels
	Bromobenzene	3.3	UN 2514	Flammable Liquid	III	1,2	1,2	
	Bromobenzyl cyanide	6.1	UN 1694	Poison	I	1	5	Keep cool
	2-Bromobutane	3.2	UN 2339	Flammable Liquid	II	1,2	1	
	Bromochloromethane	9	UN 1887	None	III	1,2	1,2	Stow 'away from' foodstuffs
	1-Bromo-2,3-epoxypropane	6.1	UN 2558	Poison	I	1	5	
	2-Bromoethyl ethyl ether	3.2	UN 2340	Flammable Liquid	II	1,2	1	
	Bromoform	6.1	UN 2515	St. Andrews Cross	III	1,2	1,2	
	1-Bromo-3-methylbutane	3.2	UN 2341	Flammable Liquid	II	1,2	1	
	Bromomethylpropanes	3.2	UN 2342	Flammable Liquid	II	1,2	1	
	Bromomethylpropanes	3.3	UN 2342	Flammable Liquid	II	1,2	1,2	
	2-Bromopentane	3.2	UN 2343	Flammable Liquid	II	1,2	1	
	Bromopropanes	3.2	UN 2344	Flammable Liquid	II	1,2	1	
	Bromopropanes	3.3	UN 2344	Flammable Liquid	II	1,2	1,2	
	3-Bromopropyne	3.2	UN 2345	Flammable Liquid	II	1,2	1	
	Bromotrifluoromethane	2.2	UN 1009	Nonflammable Gas	--	1,2	1,2	
	Brucine	6.1	UN 1570	Poison	II	1,2	1,2	
N	Bursters, *explosive*	1.1D	UN 0043	Explosive (1.1D)	--	--	--	
	Butadiene, *inhibited*	2.1	UN 1010	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Butanedione	3.2	UN 2346	Flammable Liquid	II	1,2	1	
	Butane *or butane mixtures*	2.1	UN 1011	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Butane-1-thiol	3.2	UN 2347	Flammable Liquid	II	1,2	1	
	sec-Butanol	3.3	UN 1121	Flammable Liquid	II	1,2	1,2	
	tert-Butanol	3.2	UN 1122	Flammable Liquid	II	1,2	1	
	Butanol	3.3	UN 1120	Flammable Liquid	II	1,2	1,2	
	Butoxyl	3.3	UN 2708	Flammable Liquid	III	1,2	1,2	
	sec-Butyl acetate	3.2	UN 1124	Flammable Liquid	II	1,2	1	
	n-Butyl acetate	3.2	UN 1123	Flammable Liquid	II	1,2	1	
	Butylacrylate, *inhibited*	3.3	UN 2348	Flammable Liquid	II	1,2	1,2	
	Butyl alcohol. *See* Butanol							
	sec-Butyl alcohol. *See* sec-Butanol							
	tert-Butyl alcohol. *See* tert-Butanol							
	n-Butylamine	3.2	UN 1125	Flammable Liquid	II	1,2	1	
	Butyl benzenes	3.3	UN 2709	Flammable Liquid	III	1,2	1,2	
	n-Butyl-4,4-bis-(tert-butyl-peroxy) valerate, *maximum concentration 52% with inert solid*	5.2	UN 2141	Organic Peroxide	II	1	5	
	n-Butyl-4,4-bis-(tert-butyl-peroxy) valerate, *technical pure*	5.2	UN 2140	Organic Peroxide	II	1	5	
	n-Butyl bromide	3.3	UN 1126	Flammable Liquid	II	1,2	1,2	
	n-Butyl chloride	3.2	UN 1127	Flammable Liquid	II	1,2	1	
	tert-Butyl cumene peroxide. *See* tert-Butyl cumyl peroxide							
	tert-Butyl cumyl peroxide, *technical pure*	5.2	UN 2091	Organic Peroxide	II	1	5	
	tert-Butyl diperoxyphthalate. *See* tert-Butyl diperphthalate							
	tert-Butyl diperphthalate, *maximum concentration 55% as a paste*	5.2	UN 2108	Organic Peroxide	II	1	5	
	tert-Butyl diperphthalate, *maximum concentration 55% in solution*	5.2	UN 2107	Organic Peroxide	II	1	5	
	tert-Butyl diperphthalate, *technical pure*	5.2	UN 2106	Organic Peroxide	II	1	5	
	Butylene	2.1	UN 1012	Flammable Gas	--	1,2	1	Stow 'away from living quarters
	Butyl ether. *See* Dibutyl ethers							
	n-Butyl formate	3.2	UN 1128	Flammable Liquid	II	1,2	1	
	tert-Butyl hydroperoxide, *in a concentration over 72% to maximum 90% with water*	5.2	UN 2094	Organic Peroxide	I	1	5	
	tert-Butyl hydroperoxide, *maximum concentration 80% in di-tert-butyl peroxide and/or solvent*	5.2	UN 2092	Organic Peroxide, Flammable Liquid (only if flashpoint of solvent is 23 deg C. or below)	I	1	5	
	tert-Butyl hydroperoxide, *maximum concentration 72% with water*	5.2	UN 2093	Organic Peroxide	II	1	5	
	tert-Butyl isocyanate	3.2	UN 2484	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	n-Butyl isocyanate	3.2	UN 2485	Flammable Liquid, Poison	II	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	n-Butyl methacrylate	3.3	UN 2227	Flammable Liquid	III	1,2	1,2	
	Butyl methyl ether	3.2	UN 2350	Flammable Liquid	II	1,2	1	
	tert-Butyl monoperoxyphthalate. *See* tert-Butyl monoperphthalate							
	tert-Butyl monoperphthalate, *technical pure*	5.2	UN 2105	Organic Peroxide	II	1	5	
	Butyl nitrite	3.2	UN 2351	Flammable Liquid	II	1,2	1	
	tert-Butyl peracetate, *in a concentration of more than 52% to a maximum concentration of 76% in solution*	5.2	UN 2095	Organic Peroxide	II	1	5	
	tert-Butyl peracetate, *maximum concentration 52% in solution*	5.2	UN 2096	Organic Peroxide	II	1	5	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	tert-Butyl perbenzoate, *maximum concentration 75% in solution*	5.2	UN 2098	Organic Peroxide	II	1	5	
	tert-Butyl perbenzoate, *technical pure or in a concentration of more than 75% in solution*	5.2	UN 2097	Organic Peroxide	II	1	5	
	tert-Butyl percrotonate, *maximum concentration 76% in solution*	5.2	UN 2183	Organic Peroxide	II	1	5	
	n-Butyl perdicarbonate, *in a concentration of more than 27% to a maximum concentration of 52% in solution*	5.2	UN 2169	Organic Peroxide	II	1	5	Maximum transport temperature -10 deg C
	n-Butyl perdicarbonate, *maximum concentration 27% in solution*	5.2	UN 2170	Organic Peroxide	II	1	5	Maximum transport temperature 0 deg C
	tert-Butyl perdiethylacetate, *(in a maximum concentration of 33%),* with tert-butyl perbenzoate, *(in a maximum concentration of 33%), and solvent*	5.2	UN 2551	Organic Peroxide	II	1	5	
	tert-Butyl perdiethylacetate, *technical pure*	5.2	UN 2144	Organic Peroxide	II	1	5	
	tert-Butyl per-(2-ethyl) hexanoate, *technical pure*	5.2	UN 2143	Organic Peroxide	II	1	5	Maximum transport temperature 20 deg C
	tert-Butyl perisobutyrate, *in a concentration of more than 52% to a maximum concentration of 77% in solution*	5.2	UN 2142	Organic Peroxide	II	1	5	Maximum transport temperature 15 deg C
	tert-Butyl perisobutyrate, *maximum concentration 52% in solution*	5.2	UN 2562	Organic Peroxide	II	1	5	Maximum transport temperature 15 deg C
	tert-Butyl permaleate, *maximum concentration 55% as a paste*	5.2	UN 2101	Organic Peroxide	II	1	5	
	tert-Butyl permaleate, *maximum concentration 55% in solution*	5.2	UN 2100	Organic Peroxide	II	1	5	
	tert-Butyl permaleate, *technical pure*	5.2	UN 2099	Organic Peroxide	II	1	5	
	tert-Butyl per-neodecanoate, *maximum concentration 77% in solution*	5.2	UN 2177	Organic Peroxide	II	1	5	Maximum transport temperature 5 deg C
	tert-Butylperneodecanoate, *technical pure*	5.2	UN 2594	Organic Peroxide	II	1	5	Maximum transport temperature -5 deg C
	tert-Butyl peroxide, *technical pure*	5.2	UN 2102	Organic Peroxide, Flammable Liquid	II	1	5	
	tert-Butyl peroxyacetate. *See* tert-Butyl peracetate							
	tert-Butyl peroxybenzoate. *See* tert-Butyl perbenzoate							
	tert-Butyl peroxycrotonate. *See* tert-Butyl percrotonate							
	n-Butyl peroxydicarbonate. *See* n-Butyl perdicarbonate							
	tert-Butyl peroxydiethylacetate. *See* tert-Butyl perdiethylacetate							
	tert-Butyl peroxydiethylacetate with tert-butyl peroxybenzoate. *See* tert-Butyl perdiethylacetate with tert-butyl perbenzoate							
	tert-Butyl peroxy-(2-ethyl) hexanoate. *See* tert-Butyl per-(2-ethyl) hexanoate							
	tert-Butyl peroxyisobutyrate. *See* tert-Butyl perisobutyrate							
	tert-Butyl peroxy isopropyl carbonate, *technical pure*	5.2	UN 2103	Organic Peroxide	II	1	5	
	tert-Butyl peroxymaleate. *See* tert-Butyl permaleate							
	tert-Butyl peroxy-neodecanoate. *See* tert-Butyl per-neodecanoate							
	3-tert-Butylperoxy-3-phenyl phthalide, *technical pure*	5.2	UN 2596	Organic Peroxide	II	1	5	
	tert-Butyl peroxypivalate. *See* tert-Butyl perpivalate							
	tert-Butyl peroxy-3,5,5-trimethyl hexanoate, *technical pure*	5.2	UN 2104	Organic Peroxide	II	1	5	
	tert-Butyl perpivalate, *maximum concentration 77% in solution*	5.2	UN 2110	Organic Peroxide	II	1	5	Maximum transport temperature 0 deg C
	Butylphenols, *liquid*	6.1	UN 2228	St. Andrews Cross	III	1,2	1,2	
	Butylphenols, *solid*	6.1	UN 2229	St. Andrews Cross	III	1,2	1,2	
	Butyl phosphoric acid. *See* Acid butyl phosphate							
	Butyl propionate	3.3	UN 1914	Flammable Liquid	II	1,2	1,2	
	Butyl trichlorosilane	8	UN 1747	Corrosive	II	1	1	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Butyl vinyl ether	3.2	UN 2352	Flammable Liquid	II	1,2	1	
	Butyraldehyde	3.2	UN 1129	Flammable Liquid	II	1,2	1	
	Butyrone	3.3	UN 2710	Flammable Liquid	III	1,2	1,2	
	Butyronitrile	3.2	UN 2411	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Butyryl chloride	3.2	UN 2353	Flammable Liquid, Poison	II	1	1	Keep dry. Shade from radiant heat
	Cacodylic acid	6.1	UN 1572	Poison	II	1,2	5	Stow 'away from' acids
	Cadmium compounds	6.1	UN 2570	St. Andrews Cross	III	1,2	1,2	
	Caesium, *metal*	4.3	UN 1407	Dangerous When Wet	I	1,2	5	
	Caesium nitrate	5.1	UN 1451	Oxidizer	III	1,2	1,2	
	Caesium, *powdered.* *See* Pyrophoric metals							
	Calcium arsenate	6.1	UN 1573	Poison	II	1,2	1,2	
	Calcium arsenate and arsenite, *solid mixtures*	6.1	UN 1574	Poison	II	1,2	1,2	
	Calcium bisulphite, *solution.* *See* Calcium hydrogen sulphite, *solution*							
	Calcium carbide	4.3	UN 1402	Dangerous When Wet	II	1,2	1,2	Stow 'away from' copper, its alloys and its salts
	Calcium chlorate	5.1	UN 1452	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Calcium chlorate, *aqueous solution*	5.1	UN 2429	Oxidizer	II	1,2	1	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Calcium chlorite	5.1	UN 1453	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals and cyanides, 'separated from' ammonium compounds
	Calcium cyanamide, *containing more than 0.1% of calcium carbide*	4.3	UN 1403	Dangerous When Wet	III	1,2	1,2	
	Calcium cyanide	6.1	UN 1575	Poison	I	1,2	1,2	Stow 'away from' acids
	Calcium dithionite	4.2	UN 1923	Spontaneously Combustible	III	1,2	5	Keep dry
	Calcium hydride	4.3	UN 1404	Dangerous When Wet	I	1,2	5	
	Calcium hydrogen sulphite, *solution*	8	UN 1901	Corrosive	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Calcium hypochlorite, *dry, including mixtures containing more than 39% available chlorine (8.8% available oxygen)*	5.1	UN 1748	Oxidizer	II	1,2	1,2	
	Calcium hypochlorite mixtures, *dry containing 39% or less, but more than 10% available chlorine*	9	UN 2208	None	III	1,2	1,2	Stow 'separated from' flammable liquids and acids, 'away from' combustible materials
	Calcium, *metal and alloys, non-pyrophoric*	4.3	UN 1401	Dangerous When Wet	II	1,2	5	
	Calcium nitrate	5.1	UN 1454	Oxidizer	III	1,2	1,2	
	Calcium perchlorate	5.1	UN 1455	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals
	Calcium permanganate	5.1	UN 1456	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Calcium peroxide	5.1	UN 1457	Oxidizer	II	1,2	1,2	Keep dry
	Calcium phosphide	4.3	UN 1360	Dangerous When Wet	I	1	5	
	Calcium, *powdered*	4.2	UN 1855	Spontaneously Combustible	II	1	5	
	Calcium resinate, *fused*	4.1	UN 1314	Flammable Solid	III	1,2	1,2	
	Calcium resinate, *technical pure*	4.1	UN 1313	Flammable Solid	III	1,2	1,2	
	Calcium silicide	4.3	UN 1405	Dangerous When Wet	II	1,2	1,2	
	Calcium silicon	4.3	UN 1406	Dangerous When Wet	III	1,2	1,2	
	Camphor oil	3.3	UN 1130	Flammable Liquid	III	1,3	1,3	
	Capryloyl peroxide. *See* n-Octanoyl peroxide							
	Caps, blasting. *See* Blasting caps							
	Caps, percussion	1.4 S	UN 0044	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Caps, toy. *See* Amorces							
	Carbolic acid. *See* Phenol							
	Carbon, activated	4.2	UN 1362	Spontaneously Combustible	III	1,3	1,3	Keep cool
	Carbon bisulphide. *See* Carbon disulphide							
	Carbon dioxide	2.2	UN 1013	Nonflammable Gas	--	1,2	1,2	
	Carbon dioxide and nitrous oxide, *mixtures*	2.2	UN 1015	Nonflammable Gas	--	1,2	1,2	
	Carbon dioxide and oxygen, *mixtures*	2.2	UN 1014	Nonflammable Gas	--	1,2	1,2	
	Carbon disulphide	3.1	UN 1131	Flammable Liquid, Poison	I	1	5	Keep cool. Not permitted on any vessel carrying explosives
	Carbon monoxide	2.1	UN 1016	Flammable Gas, Poison Gas	--	1	5	Stow 'away from' living quarters
	Carbon, non-activated, *of animal or vegetable origin*	4.2	UN 1361	Spontaneously Combustible	III	1,3	1,3	Keep cool. Stow 'away from' oily matter
	Carbon paper. See Paper, *treated with unsaturated oils, incompletely dried*							
	Carbon remover, *liquid*	3.2	UN 1132	Flammable Liquid	II	1,2	1	
	Carbon sulphide. *See* Carbon disulphide							
	Carbon tetrabromide	6.1	UN 2516	St. Andrews Cross	III	1,2	1,2	Shade from radiant heat
	Carbon tetrachloride	6.1	UN 1846	Poison	II	1,2	1,2	
	Carbonyl chloride. See Phosgene							
	Carbonyl fluoride	2.3	UN 2417	Poison Gas	--	1	5	Stow 'away from' living quarters
	Carbonyl sulfide	2.3	UN 2204	Poison Gas, Flammable Gas	--	1	5	Stow 'away from' living quarters
N	Cartouche	2.1	UN 2037	Flammable Gas	--			
	Cartridge cases, empty, with primer. *See* Cases, cartridges, empty, with primer							
N	Cartridges, flash	1.1G	UN 0049	Explosive (1.1G)	--	--	--	
N	Cartridges, flash	1.3G	UN 0050	Explosive (1.3G)	--	--	--	
	Cartridges for weapons, blank	1.4 C	UN 0338	Explosive (1.4C)	--	1,3	1,3	
	Cartridges for weapons, blank	1.4 S	UN 0014	None. Package to be marked '1.4 S'	--	1,3	1,3	
N	Cartridges for weapons, blank	1.1C	UN 0326	Explosive (1.1C)	--	--	--	
N	Cartridges for weapons, blank	1.3C	UN 0327	Explosive (1.3C)	--	--	--	
	Cartridges for weapons, *other than blank*	1.4 S	UN 0012	None. Package to be marked '1.4 S'	--	1,3	1,3	
N	Cartridges for weapons, *with bursting charge*	1.1E	UN 0006	Explosive (1.1E)	--	--	--	
N	Cartridges for weapons, *with bursting charge*	1.2E	UN 0321	Explosive (1.2E)	--	--	--	
N	Cartridges for weapons, *with bursting charge*	1.1F	UN 0005	Explosive (1.1F)	--	--	--	
N	Cartridges for weapons, *with bursting charge*	1.2F	UN 0007	Explosive (1.2F)	--	--	--	
N	Cartridges for weapons, *with bursting charge*	1.4F	UN 0348	Explosive (1.4F)	--	--	--	
	Cartridges for weapons, with inert projectile	1.4 C	UN 0339	Explosive (1.4C)	--	1,3	1,3	
N	Cartridges for weapons, with inert projectile	1.2C	UN 0328	Explosive (1.2C)	--	--	--	
	Cartridges, oil well	1.4 C	UN 0278	Explosive (1.4C)	--	1,3	1,3	
N	Cartridges, oil well	1.3C	UN 0277	Explosive (1.3C)	--	--	--	
	Cartridges, power device	1.4 C	UN 0276	Explosive (1.4C)	--	1,3	1,3	
	Cartridges, power device	1.4 S	UN 0323	None. Package to be marked '1.4 S'	--	1,3	1,3	
N	Cartridges, power device	1.2C	UN 0381	Explosive (1.2C)	--	--	--	
N	Cartridges, power device	1.3C	UN 0275	Explosive (1.3C)	--	--	--	
	Cartridges, safety. *See* Cartidges for weapons, *other than blank (UN 0012)* or Cartridges for weapons, blank *(UN 0014)*							
	Cartridges, signal	1.4 G	UN 0312	Explosive (1.4G)	--	1,3	1,3	
N	Cartridges, signal	1.3G	UN 0054	Explosive (1.3G)	--	--	--	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Cases, cartridge, empty, with primer	1.4C	UN 0379	Explosive (1.4C)	--	1,3	1,3	
	Cases, cartridges, empty, with primer	1.4 S	UN 0055	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Casinghead gasoline	3.1	UN 1257	Flammable Liquid	II	1,2	5	
	Caustic alkali liquids, n.o.s.	8	UN 1719	Corrosive	II	1,2	1,2	
	Caustic potash. *See* Potassium hydroxide, *solution*							
	Caustic potash, solid. *See* Potassium hydroxide, *solid*							
	Celluloid, *in blocks, rods, rolls, sheets, tubes, etc. (scrap excluded)*	4.1	UN 2000	Flammable Solid	III	1,2	1,2	
	Celluloid, *scrap*	4.2	UN 2002	Spontaneously Combustible	II	1	5	
	Cement, adhesive, *(containing a flammable liquid)*, n.o.s.	3.2	UN 1133	Flammable Liquid	II	1,2	1	
		3.3	UN 1133	Flammable Liquid	II	1,2	1,2	
	Cement, *(liquid)*, n.o.s.. *See* Cement, adhesive, *(containing a flammable liquid)*, n.o.s							
	Charcoal, activated. *See* Carbon, activated							
	Charcoal, non-activated, of animal or vegetable origin. See Carbon, non-activated							
N	Charges, demolition	1.1D	UN 0048	Explosive (1.1D)	--	--	--	
N	Charges, depth	1.1D	UN 0056	Explosive (1.1D)	--	--	--	
N	Charges, propelling, for cannon	1.1C	UN 0279	Explosive (1.1C)	--	--	--	
N	Charges, propelling, for cannon	1.3C	UN 0242	Explosive (1.3C)	--	--	--	
N	Charges, propelling, for rocket motors	1.1C	UN 0271	Explosive (1.1C)	--	--	--	
N	Charges, propelling, for rocket motors	1.3C	UN 0272	Explosive (1.3C)	--	--	--	
N	Charges, propelling, for rocket motors, *composite mixture*	1.1C	UN 0273	Explosive (1.1C)	--	--	--	
N	Charges, propelling, for rocket motors, *composite mixture*	1.3C	UN 0274	Explosive (1.3C)	--	--	--	
N	Charges, shaped, *commercial, without detonator*	1.1D	UN 0059	Explosive (1.1D)	--	--	--	
	Charges, shaped, flexible, linear, *metal clad*	1.4 D	UN 0237	Explosive (1.4D)	--	1,3	1,3	
N	Charges, shaped, flexible, linear, *metal clad*	1.1D	UN 0288	Explosive (1.1D)	--	--	--	
N	Charges, supplementary, explosive	1.1D	UN 0060	Explosive (1.1D)	--	--	--	
	Chloral, *anhydrous, inhibited*	6.1	UN 2075	Poison	II	1	5	
	Chlorate and borate, mixtures. See Borate and chlorate *mixtures*							
	Chlorate and magnesium chloride, *mixtures*	5.1	UN 1459	Oxidizer	II	1,2	5	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Chlorates, *(inorganic)*, n.o.s.	5.1	UN 1461	Oxidizer	II	1,2	5	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Chlorinated anthracene oil	6.1	UN 2230	Poison	II	1,3	1,3	Stow 'away from' sources of heat. Segregation same as for flammable liquids
	Chlorine	2.3	UN 1017	Poison Gas, Oxidizer	--	1	5	Stow 'away from' living quarters and organic materials, 'separated from' acetylene, ammonia, diborane and hydrogen
	Chlorine trifluoride	2.3	UN 1749	Poison Gas, Oxidizer, Corrosive	--	1,2	5	Stow 'away from' food stuffs and living quarters
	Chlorites, *(inorganic)*, n.o.s.	5.1	UN 1462	Oxidizer	II	1,2	5	Stow 'away from' powdered metals and cyanides, 'separated from' ammonium compounds
	Chloroacetaldehyde	6.1	UN 2232	Poison	II	1	5	
	Chloroacetic acid, *liquid*	8	UN 1750	Corrosive	II	1,2	1,2	Glass carboys in hampers not permitted under deck
	Chloroacetic acid, *solid*	8	UN 1751	Corrosive	II	1,2	1,2	Keep dry
	Chloroacetone, *stabilized*	6.1	UN 1695	Poison	II	1	5	
	Chloroacetophenone	6.1	UN 1697	Poison	II	1	5	
	Chloroacetyl chloride	8	UN 1752	Corrosive	II	1	5	Keep dry
	Chloroanilines, *liquid*	6.1	UN 2019	Poison	II	1,2	1,2	
	Chloroanilines, *solid*	6.1	UN 2018	Poison	II	1,2	1,2	
	Chlorobenzene	3.3	UN 1134	Flammable Liquid	II	1,3	1,3	
	Chlorobenzotrifluorides	3.3	UN 2234	Flammable Liquid	III	1,2	1,2	
	p-Chlorobenzoyl peroxide, *maximum concentration 52% as a paste*	5.2	UN 2114	Organic Peroxide	II	1	5	
	p-Chlorobenzoyl peroxide, *maximum concentration 52% in solution*	5.2	UN 2115	Organic Peroxide	II	1	5	
	p-Chlorobenzoyl peroxide, *maximum concentration 75% with water*	5.2	UN 2113	Organic Peroxide	II	1	5	
	p-Chlorobenzyl chloride	6.1	UN 2235	St. Andrews Cross	III	1,2	1,2	
	Chlorodifluorobromomethane	2.2	UN 1974	Nonflammable Gas	--	1,2	1,2	
	Chlorodifluoromethane	2.2	UN 1018	Nonflammable Gas	--	1,2	1,2	
	Chlorodifluoromethane and chloropentafluoroethane, *mixture with a fixed boiling point containing about 49% of chlorodifluoromethane*	2.2	UN 1973	Nonflammable Gas	--	1,2	1,2	
	Chlorodinitrobenzene	6.1	UN 1577	Poison	II	1,2	1,2	
	2-Chloroethanol	3.3	UN 1135	Flammable Liquid	II	1,2	1,2	
	Chloroform	6.1	UN 1888	Poison	II	1,2	1,2	
	Chloromethyl ethyl ether	3.2	UN 2354	Flammable Liquid, Poison	II	1,3	5	Keep cool
	3-Chloro-4-methylphenyl isocyanate	6.1	UN 2236	Poison	II	1,2	1,2	Shade from radiant heat
	Chloronitroanilines	6.1	UN 2237	St. Andrews Cross	III	1,2	1,2	
	Chloronitrobenzenes *(o-, m-, p-)*	6.1	UN 1578	Poison	II	1,2	1,2	
	p-Chloro-o-anisidine	6.1	UN 2233	St. Andrews Cross	III	1,2	1,2	
	Chloro-o-nitrotoluene	6.1	UN 2433	St. Andrews Cross	III	1,2	1,2	
	4-Chloro-o-toluidine hydrochloride	6.1	UN 1579	St. Andrews Cross	III	1,2	1,2	
	Chloropentafluoroethane	2.2	UN 1020	Nonflammable Gas	--	1,2	1,2	
	m-Chloroperoxybenzoic acid, *maximum concentration 86%*	5.2	UN 2755	Organic Peroxide	II	1	5	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Chlorophenates, *liquid*	6.1	UN 2021	St. Andrews Cross	III	1,2	1,2	
	Chlorophenates, *solid*	6.1	UN 2020	St. Andrews Cross	III	1,2	1,2	
	Chlorophenols, *liquid*	6.1	UN 2021	St. Andrews Cross	III	1,2	1,2	
	Chlorophenols, *solid*	6.1	UN 2020	St. Andrews Cross	III	1,2	1,2	
	Chlorophenyl trichlorosilane	8	UN 1753	Corrosive	II	1	1	Keep dry
	Chloropicrin	6.1	UN 1580	Poison	I	1	5	
	Chloropicrin and methyl bromide, *mixtures*	6.1	UN 1581	Poison	--	1	5	Shade from radiant heat
	Chloropicrin and methyl chloride, *mixtures*	6.1	UN 1582	Poison	--	1	5	
	Chloropicrin mixtures, n.o.s.	6.1	UN 1583	Poison	I/II	1	5	
		6.1	UN 1583	St. Andrews Cross	III	1,2	1,2	
	Chloroplatinic acid, *solid*	8	UN 2507	Corrosive	III	1,2	1,2	
	Chloroprene, *inhibited*	3.2	UN 1991	Flammable Liquid	I	1,2	1	
	2-Chloropropane	3.1	UN 2356	Flammable Liquid	I	1,3	5	Keep cool
	2-Chloropropene	3.1	UN 2456	Flammable Liquid	I	1,3	5	Keep cool
	Chloropropionic acid	8	UN 2511	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	Chlorosulphonic acid, *with or without sulphur trioxide*	8	UN 1754	Corrosive	I	1	1	Glass carboys prohibited on passenger vessels
	Chlorotetrafluoroethane	2.2	UN 1021	Nonflammable Gas	--	1,2	1,2	
	Chlorotoluenes *(o-, m-, p-)*	3.3	UN 2238	Flammable Liquid	III	1,2	1,2	
	Chlorotoluidines	6.1	UN 2239	St. Andrews Cross	III	1,2	1,2	
	Chlorotrifluoroethane. See Trifluorochloroethane							
	Chlorotrifluoroethylene. See Trifluorochloroethylene							
	Chlorotrifluoromethane	2.2	UN 1022	Nonflammable Gas	--	1,2	1,2	
	Chromic acid, *solid. See* Chromium trioxide, *anhydrous*							
	Chromic acid, *solution*	8	UN 1755	Corrosive	II	1	1	
	Chromic anhydride. *See* Chromium trioxide, *anhydrous*							
	Chromic fluoride, *solid*	8	UN 1756	Corrosive	II	1,2	1,2	
	Chromic fluoride, *solution*	8	UN 1757	Corrosive	II	1,2	1,2	
	Chromium oxychloride	8	UN 1758	Corrosive	I	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Chromium trioxide, *anhydrous*	5.1	UN 1463	Oxidizer, Corrosive	II	1,2	1,2	Stow 'away from' foodstuffs
	Chromosulphuric acid	8	UN 2240	Corrosive	I	1,2	1	Carboys not permitted on passenger vessels and permitted only on deck on cargo vessels
	Chrysotile. See Asbestos, white							
	Cigarettes, *self-lighting*	4.1	UN 1867	Flammable Solid	III	1,2	1,2	Keep dry
	Cleaning compound. *See* Flammable liquid preparations, n.o.s							
	Cleaning compounds, *liquid, corrosive*	8	UN 1759	Corrosive	II	1,2	1,2	
	Coal gas	2.1	UN 1023	Flammable Gas, Poison Gas	--	1	5	Stow 'away from' living quarters
	Coal tar distillate	3.2	UN 1136	Flammable Liquid	--	1,2	1	
		3.3	UN 1136	Flammable Liquid	--	1,2	1,2	
	Coal tar light oil	3.2	UN 1137	Flammable Liquid	--	1,2	1	
		3.3	UN 1137	Flammable Liquid	--	1,2	1,2	
	Coal tar naphtha	3.2	UN 2553	Flammable Liquid	II	1,2	1	
	Coal tar oil. *See* Coal tar distillate							
	Coating solution	3.2	UN 1139	Flammable Liquid	II	1,2	1	
		3.3	UN 1139	Flammable Liquid	II	1,2	1,2	
	Cobalt naphthenates, *powder*	4.1	UN 2001	Flammable Solid	III	1,2	1,2	
	Cobalt resinate, *precipitated*	4.1	UN 1318	Flammable Solid	III	1,2	1,2	
	Cocculus, *solid*	6.1	UN 1584	Poison	II	1,2	1,2	
	Cologne spirits. *See* Ethanol							
	Columbian spirits. *See* Methanol							
	Components, explosive train, n.o.s.	1.4B	UN 0383	Explosive (1.4B)	--	1,3	1,3	
	Components, explosive train, n.o.s.	1.4S	UN 0384	None. Package to be marked '1.4S'	--	1,3	1,3	
N	Components, explosive train, n.o.s.	1.2B	UN 0382	Explosive (1.2B)	--	--	--	
	Compressed *or* liquefied gases, *(flammable, non-toxic)*, n.o.s.	2.1	UN 1954	Flammable Gas	--	1	5	Stow 'away from' living quarters
	Compressed *or* liquefied gases, *(flammable, toxic)*, n.o.s.	2.1	UN 1953	Flammable Gas, Poison Gas	--	1	5	Stow 'away from' living quarters
	Compressed *or* liquefied gases, *(non-flammable, non-toxic)*, n.o.s.	2.2	UN 1956	Nonflammable Gas	--	1,2	1,2	
	Compressed *or* liquefied gases, *(non-flammable, toxic)*, n.o.s.	2.3	UN 1955	Poison Gas	--	1	5	Stow 'away from' living quarters
N	Contrivances, water-activated, *with burster, expelling charge or propelling charge*	1.2L	UN 0248	Explosive (1.2L), Dangerous When Wet	--	--	--	
N	Contrivances, water-activated, *with burster, expelling charge or propelling charge*	1.3L	UN 0249	Explosive (1.3L), Dangerous When Wet	--	--	--	
	Copper acetoarsenite	6.1	UN 1585	Poison	II	1,2	1,2	
	Copper arsenite	6.1	UN 1586	Poison	II	1,2	1,2	
	Copper cyanide	6.1	UN 1587	Poison	II	1,2	1,2	Stow 'away from' acids
	Copra	4.2	UN 1363	None. Package to be marked 'Class 4.2'	III	1,2	1,2	Keep dry. Protect from sparks and open flame
	Cord, detonating, *flexible*	1.4 D	UN 0289	Explosive (1.4D)	--	1,3	1,3	
N	Cord, detonating, *flexible*	1.1D	UN 0065	Explosive (1.1D)	--	--	--	
N	Cord, detonating, *metal clad*	1.1D	UN 0290	Explosive (1.1D)	--	--	--	
N	Cord, detonating, *metal clad*	1.2D	UN 0102	Explosive (1.2D)	--	--	--	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Cord, detonating, mild effect, *metal clad*	1.4 D	UN 0104	Explosive (1.4D)	--	1,3	1,3	
	Cord, igniter	1.4 G	UN 0066	Explosive (1.4G)	--	1,3	1,3	
	Corrosive liquids, n.o.s.	8	UN 1760	Corrosive	II	1	5	For a material that meets only the corrosion to skin criteria of 49 CFR 173.240(a)(1), 'under deck' stowage is also authorized if the description includes the additional entry specified in Sec. 172.203(i)(3)
	Corrosive solids, n.o.s.	8	(UN 1759)	Corrosive	I/II/III	1	5	For a material that meets only the corrosion to skin criteria of 49 CFR 173.240(a)(1), 'under deck' stowage is also authorized if the description includes the additional entry specified in Sec. 172.203(i)(3)
	Cosmetics, n.o.s. *See* Perfumery products							
	Cotton, dry. *See* Fibres, *vegetable, dry*							
	Cotton waste, *oily*	4.2	UN 1364	Spontaneously Combustible	III	1,2	1,2	Keep dry. Stow 'separated from' explosives, animal oils or vegetable oils
	Cotton, *wet or contaminated*	4.2	UN 1365	Spontaneously Combustible	III	1,2	1,2	Keep dry
	Cresols *(o-, m-, p-)*	6.1	UN 2076	Poison	II	1,2	1,2	
	Cresylic acid	6.1	UN 2022	Poison	II	1,2	1,2	
	Crocidolite. *See* Asbestos, blue							
	Crotonaldehyde, *inhibited*	3.2	UN 1143	Flammable Liquid	I	1,2	1	
	Crotonylene	3.1	UN 1144	Flammable Liquid	I	1,3	5	Keep cool
	Cumene hydroperoxide, *technical pure*	5.2	UN 2116	Organic Peroxide	I	1	5	
	Cupric cyanide. See Copper cyanide							
	Cupriethylenediamine, *solution*	8	UN 1761	Corrosive, Poison	II	1,2	1,2	
	Cut-backs, *asphalt or bitumen*	3.2	UN 1999	Flammable Liquid	II	1,2	1	
		3.3	UN 1999	Flammable Liquid	II	1,2	1,2	
	Cutters, cable, explosive	1.4 S	UN 0070	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Cyanide mixtures. *See* Cyanides, *(inorganic)*, n.o.s							
	Cyanides, *(inorganic)*, n.o.s.	6.1	UN 1588	Poison	I/II	1,2	1,2	Stow 'away from' acids.
		6.1	UN 1588	St. Andrews Cross	III	1,2	1,2	
	Cyanides, *solutions*	6.1	UN 1935	Poison	I	1,2	1,2	Stow 'away from' acids
	Cyanogen	2.3	UN 1026	Poison Gas, Flammable Gas	--	1	5	Stow 'away from' foodstuffs and living quarters
	Cyanogen bromide	6.1	UN 1889	Poison, Corrosive	I	1	5	Shade from radiant heat. Segregation same as for corrosives
	Cyanogen chloride, *inhibited*	2.3	UN 1589	Poison Gas	--	1	5	
	Cyanuric chloride (*cyanuric trichloride*)	8	UN 2670	Corrosive	II	1,2	1,2	Keep dry
	1,5,9-Cyclododecatriene	8	UN 2518	Corrosive	III	1	5	Stow 'away from' living quarters
	Cycloheptane	3.2	UN 2241	Flammable Liquid	II	1,2	1	
	Cycloheptatriene	3.2	UN 2603	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Cycloheptene	3.2	UN 2242	Flammable Liquid	II	1,2	1	
	Cyclohexane	3.1	UN 1145	Flammable Liquid	II	1,2	5	
	Cyclohexanone	3.3	UN 1915	Flammable Liquid	III	1,2	1,2	
	Cyclohexanone peroxide. *See* 1-Hydroxy-1'-hydroperoxy dicyclohexyl peroxide *and mixtures, etc.*							
	Cyclohexene	3.1	UN 2256	Flammable Liquid	II	1,3	5	Keep cool
	Cyclohexene	3.2	UN 2256	Flammable Liquid	II	1,2	1	
	Cyclohexenyl trichlorosilane	8	UN 1762	Corrosive	II	1	1	Keep dry
	Cyclohexyl acetate	3.3	UN 2243	Flammable Liquid	III	1,2	1,2	
	Cyclohexylamine	3.2	UN 2357	Flammable Liquid, Poison	II	1,2	1	
	Cyclohexylamine	3.3	UN 2357	Flammable Liquid, Corrosive	II	1,2	1,2	
	Cyclohexyl isocyanate	6.1	UN 2488	Poison	II	1	5	Shade from radiant heat. Stow 'away from' sources of heat
	Cyclohexyl trichlorosilane	8	UN 1763	Corrosive	II	1	1	Keep dry
	Cyclooctadienes	3.3	UN 2520	Flammable Liquid	II	1,2	1,2	
	Cyclooctatetraene	3.2	UN 2358	Flammable Liquid	II	1,2	1	
	Cyclopentane	3.1	UN 1146	Flammable Liquid	II	1,2	5	
	Cyclopentanol	3.3	UN 2244	Flammable Liquid	III	1,2	1,2	
	Cyclopentanone	3.3	UN 2245	Flammable Liquid	II	1,2	1,2	
	Cyclopentene	3.1	UN 2246	Flammable Liquid	II	1,3	5	Keep cool
	Cyclopropane	2.1	UN 1027	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
N	Cyclotetramethylenetetranitramine, *containing, by weight, at least 15% water or at least 10% phlegmatizer*	1.1D	UN 0226	Explosive (1.1D)	--	--	--	
N	Cyclotrimethylenetrinitramine, *containing, by weight, at least 15% water or at least 10% phlegmatizer*	1.1D	UN 0072	Explosive (1.1D)	--	--	--	
N	Cyclotrimethylenetrinitramine mixed with cyclotetramethylenetetranitramine, *containing, by weight, at least 15% water or at least 10% phlegmatizer*	1.1D	UN 0391	Explosive (1.1D)	--	--	--	
	p-Cymene	3.3	UN 2046	Flammable Liquid	II	1,2	1,2	
	Decaborane	4.1	UN 1868	Flammable Solid, Poison	II	1,2	1,2	
	Decahydronaphthalene	3.3	UN 1147	Flammable Liquid	II	1,2	1,2	
	Decalin. See Decahydronaphthalene							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	n-Decane	3.3	UN 2247	Flammable Liquid	III	1,2	1,2	
	Decanoyl peroxide, *technical pure*	5.2	UN 2120	Organic Peroxide	II	1	5	Maximum transport temperature 15 deg C
N	Deflagrating metal salts of aromatic nitro-derivatives, n.o.s.	1.3C	UN 0132	Explosive (1.3C)	--	--	--	
	Detonators for ammunition	1.4B	UN 0365	Explosive (1.4B)	--	1,3	1,3	
	Detonators for ammunition	1.4S	UN 0366	None. Package to be marked '1.4S'	--	1,3	1,3	
N	Detonators for ammunition	1.1B	UN 0073	Explosive (1.1B)	--	--	--	
N	Detonators for ammunition	1.2B	UN 0364	Explosive (1.2B)	--	--	--	
	Deuterium	2.1	UN 1957	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Diacetone alchohol	3.2	UN 1148	Flammable Liquid	II	1,2	1	
		3.3	UN 1148	Flammable Liquid	II/III	1,2	1,2	
	Diacetone alcohol peroxides, *maximum 57% in solution with maximum 9% hydrogen peroxide, minimum 26% diacetone alcohol and minimum 9% water; total active oxygen content maximum 10%*	5.2	UN 2163	Organic Peroxide	I	1	5	Maximum transport temperature 25 deg C
	Diallylamine	3.2	UN 2359	Flammable Liquid	II	1,2	1	
	Diallylether	3.2	UN 2360	Flammable Liquid, Poison	II	1,3	5	Keep cool
N	Diazodinitrophenol, *containing, by weight, at least 40% water or mixture of alcohol and water*	1.1A	UN 0074	Explosive (1.1A)	--	--	--	
	Dibenzyldichlorosilane	8	UN 2434	Corrosive	II	1	1	Keep dry
	Dibenzyl perdicarbonate, *maximum concentration 87% with water*	5.2	UN 2149	Organic Peroxide	I	1	5	Maximum transport temperature 25 deg C
	Dibenzyl peroxydicarbonate. *See* Dibenzyl perdicarbonate							
	Diborane	2.1	UN 1911	Flammable Gas, Poison Gas	--	1	5	Stow 'away from' foodstuffs and living quarters, 'separated from' chlorine
	Dibromobenzene	3.3	UN 2711	Flammable Liquid	III	1,2	1,2	
	Dibutyl ethers	3.3	UN 1149	Flammable Liquid	III	1,2	1,2	
	Di-sec-butyl perdicarbonate, *maximum concentration 52% in solution*	5.2	UN 2151	Organic Peroxide	II	1	5	Maximum transport temperature -10 deg C
	Di-sec-butyl perdicarbonate, *technical pure*	5.2	UN 2150	Organic Peroxide	I	1	5	Maximum transport temperature -20 deg C
	Di-sec-butyl peroxydicarbonate. *See* Di-sec-butyl perdicarbonate							
	Dicetyl perdicarbonate, *technical pure*	5.2	UN 2164	Organic Peroxide	II	1	5	Maximum transport temperature 20 deg C
	Dicetyl peroxydicarbonate. *See* Dicetyl perdicarbonate							
	Dichloroacetic acid	8	UN 1764	Corrosive	II	1,2	1,2	Glass carboy in hampers not permitted under deck
	Dichloroacetyl chloride	8	UN 1754	Corrosive	II	1	5	Keep dry
	Dichloroanilines	6.1	UN 1590	Poison	II	1,2	1,2	Stow 'away from' acids
	p-Dichlorobenzene	9	UN 1592	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Dichlorobenzenes *(o-, m-)*	6.1	UN 1591	St. Andrews Cross	III	1,2	1,2	
	2,4-Dichlorobenzoyl peroxide, *maximum concentration 75% with water*	5.2	UN 2137	Organic Peroxide	II	1	5	
	2,4-Dichlorobenzoyl peroxide, *maximum concentration 52% as a paste*	5.2	UN 2138	Organic Peroxide	II	1	5	
	2,4-Dichlorobenzoyl peroxide, *maximum concentration 52% in solution*	5.2	UN 2139	Organic Peroxide	II	1	5	
	Dichlorodifluoromethane	2.2	UN 1028	Nonflammable Gas	--	1,2	1,2	
	sym-Dichlorodimethyl ether	6.1	UN 2249	Poison	I	1	5	
	1,1-Dichloroethane	3.2	UN 2362	Flammable Liquid	II	1,2	1	
	Dichloroethylene	3.2	UN 1150	Flammable Liquid	II	1,2	1	
	Dichloroethyl ether	3.3	UN 1916	Flammable Liquid, Poison	II	1,2	1,2	
	Dichloroisocyanuric acid, *dry or* dichloroisocyanuric acid salts	5.1	UN 2465	Oxidizer	II	1,2	1,2	
	Dichloroisopropyl ether	6.1	UN 2490	Poison	II	1,2	1	
	Dichloromethane	6.1	UN 1593	St. Andrews Cross	III	1,2	1,2	
	Dichloromonofluoromethane	2.2	UN 1029	Nonflammable Gas	--	1,2	1,2	
	Dichloropentanes	3.3	UN 1152	Flammable Liquid	II	1,2	1,2	
	Dichlorophenyl isocyanates	6.1	UN 2250	Poison	II	1,3	1,3	Shade from radiant heat. Stow 'away from' sources of heat
	Dichlorophenyl trichlorosilane	8	UN 1766	Corrosive	II	1	1	Keep dry
	Dichloropropene	3.3	UN 2047	Flammable Liquid	II	1,2	1,2	
	Dichlorosilane	2.3	UN 2189	Poison Gas, Flammable Gas	--	1	5	Stow 'away from' living quarters
	Dichlorotetrafluoroethane	2.2	UN 1958	Nonflammable Gas	--	1,2	1,2	
	Dichromates, *(inorganic)*, n.o.s.	5.1	UN 1464	Oxidizer	II	1,2	1,2	Stow 'away from' foodstuffs
	Dicumyl peroxide, *technical pure or in a mixture with inert solid*	5.2	UN 2121	Organic Peroxide	II	1	5	
	Dicyclohexylamine	8	UN 2565	Corrosive	III	1	5	Keep dry
	Dicyclohexyl perdicarbonate, *maximum concentration 91% with water*	5.2	UN 2153	Organic Peroxide	I	1	5	Maximum transport temperature 5 deg C
	Dicyclohexyl perdicarbonate, *technical pure*	5.2	UN 2152	Organic Peroxide	I	1	5	Mazimum transport temperature 5 deg C
	Dicyclohexyl peroxydicarbonate. *See* Dicyclohexyl perdicarbonate							
	Dicyclopentadiene	3.3	UN 2048	Flammable Liquid	II	1,2	1,2	
	Didymium nitrate	5.1	UN 1465	Oxidizer	III	1,2	1,2	
	1,2-Diethoxyethane	3.3	UN 1153	Flammable Liquid	III	1,2	1,2	
	Diethoxymethane	3.1	UN 2373	Flammable Liquid	II	1,3	5	Keep cool
	Diethylaluminium chloride	4.2	UN 1101	Spontaneously Combustible	I	1	1	
	Diethylamine	3.1	UN 1154	Flammable Liquid	II	1,3	5	Keep cool
	Diethylaminoethanol	3.3	UN 2686	Flammable Liquid	III	1,2	1,2	
	N,N-Diethylaniline	6.1	UN 2432	St. Andrews Cross	III	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Diethylbenzene	3.3	UN 2049	Flammable Liquid	II	1,2	1,2	
	Diethylcarbinol	3.3	UN 2706	Flammable Liquid	II	1,2	1,2	
	Diethyl carbonate	3.3	UN 2366	Flammable Liquid	II	1,2	1,2	
	Diethyl dichlorosilane	8	UN 1767	Corrosive	II	1	1	Keep dry. Separate longitudinally by an intervening compartment or hold from explosives
N	Diethyleneglycol dinitrate, *containing by weight, at least 25% nonvolatile water-insoluble phlegmatizer*	1.1D	UN 0075	Explosive (1.1D)	--	--	--	
	Diethylenetriamine	8	UN 2079	Corrosive	II	1,2	1,2	Stow 'away from' acids, copper and copper alloys, and living quarters; 'separated from' nitric acid
	Diethyl ether	3.1	UN 1155	Flammable Liquid	I	1,3	5	Keep cool
	Di-(2-ethylhexyl) perdicarbonate, *maximum concentration 67% in solution*	5.2	UN 2123	Organic Peroxide	II	1	5	Maximum transport temperature -15 deg C
	Di-(2-ethylhexyl) perdicarbonate, *technical pure*	5.2	UN 2122	Organic Peroxide	II	1	5	Maximum transport temperature -20 deg C
	Di-(2-ethylhexyl) peroxydicarbonate. *See* Di-(2-ethylhexyl) perdicarbonate							
	Diethyl ketone	3.2	UN 1156	Flammable Liquid	II	1,2	1	
	Diethylmagnesium	4.2	UN 1367	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives
	Diethyl perdicarbonate, *maximum concentration 27% in solution*	5.2	UN 2175	Organic Peroxide	II	1	5	Maximum transport temperature -10 deg C
	Diethyl peroxydicarbonate. *See* Diethyl perdicarbonate							
	Diethyl-p-nitrosoaniline	4.2	--	Spontaneously Combustible	--	1,2	5	
	Diethyl sulfide	3.2	UN 2375	Flammable Liquid, Poison	II	1,3	5	Keep cool and dry
	Diethyl sulphate	6.1	UN 1594	Poison	II	1	1	
	Diethylzinc	4.2	UN 1366	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives
	1,1-Difluoroethane	2.1	UN 1030	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	1,1-Difluoroethylene	2.1	UN 1959	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Difluoromonochloroethane	2.1	UN 1031	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Difluorophosphoric acid, *anhydrous*	8	UN 1768	Corrosive	II	1,2	1,2	
	2,2-Dihydroperoxy propane, *maximum concentration 25% with inert organic solid*	5.2	UN 2178	Organic Peroxide	II	1	5	
	2,3-Dihydropyran	3.2	UN 2376	Flammable Liquid	II	1,2	1	
	Diisobutylamine	3.3	UN 2361	Flammable Liquid	II	1,2	1,2	
	Diisobutylene, *(isomeric compounds)*	3.2	UN 2050	Flammable Liquid	II	1,2	1	
	Diisobutyl ketone	3.3	UN 1157	Flammable Liquid	III	1,2	1,2	
	Diisooctyl acid phosphate	8	UN 1902	Corrosive	III	1,2	1,2	Glass carboys in hampers not permitted under deck
	Diisopropylamine	3.2	UN 1158	Flammable Liquid	II	1,2	1	
	Diisopropylbenzene hydroperoxide, *maximum concentration 72% in solution*	5.2	UN 2171	Organic Peroxide	I	1	5	
	Diisopropyl ether	3.1	UN 1159	Flammable Liquid	II	1,3	5	Keep cool
	Diisopropyl perdicarbonate, *technical pure*	5.2	UN 2133	Organic Peroxide	II	1	5	Maximum transport temperature -15 deg C
	Diisopropyl perdicarcbonate, *maximum concentration 52% in solution*	5.2	UN 2134	Organic Peroxide	II	1	5	Maximum transport temperature -10 deg C
	Diketene, *inhibited*	3.3	UN 2521	Flammable Liquid	II	1,2	1,2	
	1,1-Dimethoxyethane	3.2	UN 2377	Flammable Liquid	III	1,2	1	
	1,2-Dimethoxyethane	3.2	UN 2252	Flammable Liquid	II	1,2	1	
	Dimethylamine, *anhydrous*	2.1	UN 1032	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Dimethylamine, *solution*	3.2	UN 1160	Flammable Liquid	II	1,2	1	
	Dimethylaminoethyl methacrylate	6.1	UN 2522	Poison	II	1,2	1	
	N,N-Dimethylaniline	6.1	UN 2253	Poison	II	1,3	1,3	Stow 'away from' sources of heat
	2,5-Dimethyl-2,5-bis-(benzoylperoxy) hexane, *maximum concentration 82% with inert solid*	5.2	UN 2173	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-bis-(benzoylperoxy) hexane, *technical pure*	5.2	UN 2172	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-bis-(tert-butylperoxy) hexane, *maximum concentration 52% with inert solid*	5.2	UN 2156	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-bis-(tert-butylperoxy) hexane, *technical pure*	5.2	UN 2155	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-bis-(tert-butylperoxy) hexyne-3, *maximum concentration 52% with inert solid*	5.2	UN 2159	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-bis-(tert-butylperoxy) hexyne-3, *technical pure*	5.2	UN 2158	Organic Peroxide	II	1	5	
	2,5-Dimethyl-2,5-bis-(2-ethylhexanoylperoxy) hexane, *technical pure*	5.2	UN 2157	Organic Peroxide	II	1	5	Maximum transport temperature 20 deg C
	Dimethylbutane	3.1	UN 2457	Flammable Liquid	II	1,2	5	
	1,3-Dimethylbutylamine	3.2	UN 2379	Flammable Liquid	II	1,2	1	
	Dimethyl carbonate	3.2	UN 1161	Flammable Liquid	II	1,2	1	
	Dimethylcyclohexanes	3.2	UN 2263	Flammable Liquid	II	1,2	1	
	Dimethyldichlorosilane	3.2	UN 1162	Flammable Liquid, Corrosive	I	1,2	1	
	Dimethyldiethoxysilane	3.2	UN 2380	Flammable Liquid	II	1,2	1	
	2,5-Dimethyl-2,5-dihydroperoxy hexane, *maximum concentration 82% with water*	5.2	UN 2174	Organic Peroxide	I	1	5	
	3,5-Dimethyl-3,5-dihydroxydioxolane-1,2. *See* Acetyl acetone peroxide, *maximum concentration 40% in solution*							
	Dimethyldioxanes	3.2	UN 2707	Flammable Liquid	II	1,2	1	
	Dimethyldioxanes	3.3	UN 2707	Flammable Liquid	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Dimethyl disulfide	3.2	UN 2381	Flammable Liquid	II	1,2	1	
	Dimethylethanolamine	3.3	UN 2051	Flammable Liquid	II	1,3	1,3	
	Dimethyl ether	2.1	UN 1033	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	N,N-Dimethylformamide	6.1	UN 2265	St. Andrews Cross	III	1,3	1,3	Stow 'away from' sources of heat and halogenated hydrocarbons
	2,5-Dimethylhexane-2,5-dihydroperoxide. *See* 2,5-Dimethyl-2,5-dihydroxy hexane							
	Dimethylhydrazine, *symmetrical*	3.2	UN 2382	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Dimethylhydrazine, *unsymmetrical*	3.2	UN 1163	Flammable Liquid	I	1,2	1	Stow 'separated from' corrosive liquids and oxidizers
	Dimethylmagnesium	4.2	UN 1368	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives
	Dimethyl-p-nitrosoaniline	4.2	UN 1369	Spontaneously Combustible	II	1,2	5	Stow 'away from' foodstuffs
	2,2-Dimethylpropane	2.1	UN 2044	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Dimethyl-N-propylamine	3.2	UN 2266	Flammable Liquid, Corrosive	II	1,2	1	
	Dimethyl sulphate	6.1	UN 1595	Poison	I	1	5	
	Dimethyl sulphide	3.1	UN 1164	Flammable Liquid	I	1,3	5	Keep cool
	Dimethyl thiophosphoryl chloride	8	UN 2267	Corrosive	III	1,2	1	Keep dry. Shade from radiant heat. Glass carboys prohibited on passenger vessels
	Dimethylzinc	4.2	UN 1370	Spontaneously Combustible	I	1	5	Prohibited on any ship carrying explosives
	Dimyristylperoxydicarbonate, *technical pure*	5.2	UN 2595	Organic Peroxide	II	1	5	Maximum transport temperature 20 deg C
	Di-(n-butyl)amine	8	UN 2248	Corrosive, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids
	Dinitroanilines	6.1	UN 1596	Poison	II	1,2	1,2	
	Dinitrobenzenes *(o-, m-, p-)*	6.1	UN 1597	Poison	II	1,2	1,2	
	Dinitrogen tetroxide. *See* Nitrogen dioxide							
	4,6-Dinitro-o-cresol	6.1	UN 1598	Poison	II	1,2	1,2	
N	Dinitrophenates *(alkali metals), dry or containing, by weight, less than 15% water*	1.3C	UN 0077	Explosive (1.3C), Poison	--	--	--	
	Dinitrophenolates, *wetted with not less than 15% of water*	4.1	UN 1321	Flammable Solid, Poison	I	1,2	5	Stow 'away from' heavy metals and their compounds
N	Dinitrophenol, *dry or containing, by weight, less than 15% water*	1.1D	UN 0076	Explosive (1.1D), Poison	--	--	--	
	Dinitrophenol, *solution in water or flammable liquid*	6.1	UN 1599	Poison	II	1,2	5	Stow 'away from' heavy metals and their compounds. Segregation same as for flammable liquids if flash point below 61 deg C
	Dinitrophenol, *wetted with not less than 15% of water*	4.1	UN 1320	Flammable Solid, Poison	I	1,2	5	Stow 'away from' heavy metals and their compounds and sodium compounds
N	Dinitroresorcinol, *dry or containing, by weight, less than 15% water*	1.1D	UN 0078	Explosive (1.1D)	--	--	--	
	Dinitroresorcinols, *wetted with not less than 33 1/3% of water*	4.1	UN 1322	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
	Dinitrotoluenes, *liquid*	6.1	UN 1600	Poison, Flammable Liquid	II	1,2	1,2	Segregation same as for flammable liquids
	Dinitrotoluenes, *solid*	6.1	UN 2038	Poison	II	1,2	1,2	
	Di-n-propyl perdicarbonate. *See* Di-n-propyl peroxydicarbonate							
	Di-n-propyl peroxydicarbonate, *technical pure*	5.2	UN 2176	Organic Peroxide	I	1	5	Maximum transport temperature -25 deg C
	Dioxane	3.2	UN 1165	Flammable Liquid	II	1,2	1	
	Dioxolane	3.2	UN 1166	Flammable Liquid	II	1,2	1	
	Dipentene	3.3	UN 2052	Flammable Liquid	II	1,2	1,2	
	Diphenylaminechloroarsine	6.1	UN 1698	Poison	I	1	5	
	Diphenylchloroarsine	6.1	UN 1699	Poison	I	1	5	
	Diphenyl dichlorosilane	8	UN 1769	Corrosive	II	1	1	Keep dry
	Diphenylmethane diisocyanate *(M.D.I.)*	9	UN 2489	None	III	1,3	1,3	Stow 'away from' foodstuffs
	Diphenylmethyl bromide	8	UN 1770	Corrosive	II	1	5	
	Dipropylamine	3.2	UN 2383	Flammable Liquid	II	1,2	1	
	Dipropylene triamine	8	UN 2269	Corrosive	III	1,2	1,2	
	Dipropyl ether	3.1	UN 2384	Flammable Liquid	II	1,3	5	Keep cool
	Disinfectants, *corrosive, liquid*	8	UN 1903	Corrosive	II	1,2	1,2	
	Disinfectants, *(poisonous)*, n.o.s.	6.1	UN 1601	Poison	I/II	1,2	1,2	Stow 'separated from' foodstuffs.
		6.1	UN 1601	St. Andrews Cross	III	1,2	1,2	Stow 'separated from' foodstuffs.
		9	UN 1601	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Distearylperoxydicarbonate, *with 15% of stearyl alcohol*	5.2	UN 2592	Organic Peroxide	II	1	5	
	Disuccinic acid peroxide. *See* Succinic acid peroxide							
	Divinyl ether, *inhibited*	3.1	UN 1167	Flammable Liquid	II	1,3	5	Keep cool
	Dodecyl trichlorosilane	8	UN 1771	Corrosive	II	1	1	Keep dry
	Dressing, leather. *See* Flammable liquid preparations, n.o.s							
	Driers, *(paint or varnish, liquid)*, n.o.s.	3.2	UN 1168	Flammable Liquid	II	1,2	1	
		3.3	UN 1168	Flammable Liquid	II	1,2	1,2	
	Driers, *(paint or varnish, solid)*, n.o.s.	4.1	UN 1371	Flammable Solid	III	1,2	1,2	
	Dye intermediates, *(poisonous, liquid or solid)*, n.o.s.	6.1	UN 1602	Poison	I/II	1,2	1,2	
		6.1	UN 1602	St. Andrews Cross	III	1,2	1,2	
	Electrolyte, *acid. See* Battery fluid, *acid*							
	Electrolyte, *alkaline. See* Battery fluid, *alkaline corrosive*							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Enamels. *See* Paints, *etc.*							
	Endrin, *mixtures, dry or liquid*	6.1	UN 2065	Poison	I/II	1,2	1,2	If flashpoint below 61 deg C segregation same as for flammable liquids.
		6.1	UN 2065	St. Andrews Cross	III	1,2	1,2	If flashpoint below 61 deg C. segregation same as for flammable liquids
	Engine starting fluid, *with flammable gas*	2.1	UN 1960	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Epibromohydrin. *See* 1-Bromo-2,3-epoxypropane							
	Epichlorohydrin	6.1	UN 2023	Poison, Flammable Liquid (only if flashpoint is below 23 deg C.)	II	1,2	1,2	Separation same as for flammable liquids
	1,2-Epoxy-3-ethyloxy propane	3.3	UN 2752	Flammable Liquid	III	1,2	1,2	
	Eradicators, *paint or grease, liquid. To be classified and labeled according to the principle hazardous constituent*	--	UN 1850		--	1,2	1	
	Essences. *See* Extracts, *aromatic, liquid*							
	Ethane, *compressed*	2.1	UN 1035	Flammable Gas	--	1,2	5	
	Ethane, *liquid*	2.1	UN 1961	Flammable Gas	--	1,2	5	
	Ethanol	3.2	UN 1170	Flammable Liquid	II	1,2	1	
	Ethanolamine, *and solutions thereof*	8	UN 2491	Corrosive	III	1,2	1,2	Stow 'away from' copper, copper alloys, copper compounds and rubber products
	Ether. *See* Diethyl ether							
	2-Ethoxyethanol	3.3	UN 1171	Flammable Liquid	III	1,2	1,2	
	2-Ethoxyethyl acetate	3.3	UN 1172	Flammable Liquid	III	1,2	1,2	
	Ethyl acetate	3.2	UN 1173	Flammable Liquid	II	1,2	1	
	Ethyl acrylate, *inhibited*	3.2	UN 1917	Flammable Liquid	II	1,2	1	
	Ethyl alcohol. *See* Ethanol							
	Ethyl aldehyde. *See* Acetaldehyde							
	Ethyl aluminium dichloride	4.2	UN 1924	Spontaneously Combustible	I	1	1	
	Ethyl aluminium sesquichloride	4.2	UN 1925	Spontaneously Combustible	I	1	1	
	Ethylamine	2.1	UN 1036	Flammable Gas	--	1,2	5	
	Ethylamine solution *in water, concentrations up to 70%*	3.1	UN 2270	Flammable Liquid	II	1,3	5	Keep cool
	Ethylamine solution, *in water, concentrations up to 70%*	3.2	UN 2270	Flammable Liquid	II	1,2	1	
		3.3	UN 2270	Flammable Liquid	II	1,2	1,2	
	Ethyl amyl ketone	3.3	UN 2271	Flammable Liquid	III	1,2	1,2	
	N-Ethylaniline	6.1	UN 2272	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	2-Ethylaniline	6.1	UN 2273	St. Andrews Cross	III	1,2	1,2	
	Ethylbenzene	3.3	UN 1175	Flammable Liquid	II	1,2	1,2	
	Ethyl-3,3-bis-(tert-butylperoxy) butyrate, *maximum concentration 77% in solution*	5.2	UN 2185	Organic Peroxide	II	1	5	
	Ethyl-3,3-bis-(tert-butylperoxy) butyrate, *technical pure*	5.2	UN 2184	Organic Peroxide	II	1	5	
	Ethyl-3,3-bis(tert-butylperoxy)butyrate, *with at least 50% inert, inorganic solid*	5.2	UN 2598	Organic Peroxide	II	1	5	
	Ethyl borate	3.2	UN 1176	Flammable Liquid	II	1,2	1	
	Ethyl bromide	9	UN 1891	None	II	1,2	1,2	Stow 'away from' foodstuffs and living quarters
	Ethyl bromoacetate	6.1	UN 1603	Poison	II	1	5	
	2-Ethylbutanol	3.3	UN 2275	Flammable Liquid	III	1,2	1,2	
	Ethylbutyl acetate	3.3	UN 1177	Flammable Liquid	III	1,2	1,2	
	Ethyl butyl ether	3.2	UN 1179	Flammable Liquid	II	1,2	1	
	2-Ethylbutyraldehyde	3.2	UN 1178	Flammable Liquid	II	1,2	1	
	Ethyl butyrate	3.3	UN 1180	Flammable Liquid	II	1,2	1,2	
	Ethyl chloride	2.1	UN 1037	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Ethyl chloroacetate	3.3	UN 1181	Flammable Liquid	II	1,2	1,2	
	Ethyl chlorocarbonate. *See* Ethyl chloroformate							
	Ethyl chloroformate	3.2	UN 1182	Flammable Liquid, Poison, Corrosive	I	1,2	1	
	Ethyl crotonate	3.2	UN 1862	Flammable Liquid	II	1,2	1	
	Ethyl dichloroarsine	6.1	UN 1892	Poison	I	1	5	
	Ethyldichlorosilane	3.2	UN 1183	Flammable Liquid	II	1,2	1	
	Ethylene chlorohydrin. *See* 2-Chloroethanol							
	Ethylene, *compressed*	2.1	UN 1962	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Ethylenediamine	8	UN 1604	Corrosive	II	1,2	1,2	Stow 'away from' oxidizers. Segregation same as for flammable liquids
	Ethylene dibromide	6.1	UN 1605	Poison	II	1,2	1,2	
	Ethylene dichloride	3.2	UN 1184	Flammable Liquid	II	1,2	1	
	Ethylene glycol diethyl ether. *See* 1,2-Diethoxyethane							
	Ethylene glycol monobutyl ether	6.1	UN 2369	St. Andrews Cross	III	1,3	1,3	Stow 'away from' sources of heat. Segregation same as for flammable liquids
	Ethylene glycol monoethyl ether acetate. *See* 2-Ethoxyethyl acetate							
	Ethylene glycol monoethyl ether. *See* 2-Ethoxyethanol							
	Ethylene glycol monomethyl ether	3.3	UN 1188	Flammable Liquid	III	1,2	1,2	
	Ethylene glycol monomethyl ether acetate	3.3	UN 1189	Flammable Liquid	III	1,2	1,2	
	Ethyleneimine, *inhibited*	3.2	UN 1185	Flammable Liquid, Poison	I	1,2	1	
	Ethylene, *liquid*	2.1	UN 1038	Flammable Gas	--	1,2	5	Stow 'away from' living quarters

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Ethylene oxide and carbon dioxide, *mixtures containing not more than 10% carbon dioxide*	2.1	UN 1041	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Ethylene oxide and carbon dioxide, *mixtures containing not more than 17% of ethylene oxide*	2.1	UN 1952	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Ethylene oxide, *containing not more than 0.2% of nitrogen*	2.1	UN 1040	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Ethyl ether. See Diethyl ether							
	Ethyl formate	3.1	UN 1190	Flammable Liquid	II	1,3	5	Keep cool
	Ethyl hexaldehyde	3.3	UN 1191	Flammable Liquid	III	1,2	1,2	
	2-Ethylhexylamine	8	UN 2276	Corrosive	III	1,2	1,2	
	Ethylisobutyrate	3.2	UN 2385	Flammable Liquid	II	1,2	1	
	Ethyl isocyanate	3.2	UN 2481	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Ethyl lactate	3.3	UN 1192	Flammable Liquid	III	1,2	1,2	
	Ethyl mercaptan	3.1	UN 2363	Flammable Liquid	I	1,3	5	Keep cool and dry. Stow 'away from' foodstuffs and all odor absorbing cargo
	Ethyl methacrylate, *inhibited*	3.2	UN 2277	Flammable Liquid	II	1,2	1	
	Ethyl methyl ether	2.1	UN 1039	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Ethyl methyl ketone	3.2	UN 1193	Flammable Liquid	II	1,2	1	
	Ethyl methyl ketone peroxide(s), *maximum concentration 60%*	5.2	UN 2127	Organic Peroxide	I	1	5	
	Ethyl methyl ketone peroxide(s), *maximum concentration 50%, containing not more than 10% available oxygen*	5.2	UN 2550	Organic Peroxide	I	1	5	
	N-Ethyl-n-benzylaniline	6.1	UN 2274	St. Andrews Cross	III	1,2	1,2	
	Ethyl nitrite, *solutions*	3.1	UN 1194	Flammable Liquid	I	1,3	5	Keep cool
	Ethyl orthoformate	3.3	UN 2524	Flammable Liquid	II	1,2	1,2	
	Ethyl oxalate	6.1	UN 2525	St. Andrews Cross	III	1,2	1	
	Ethylphenyldichlorosilane	8	UN 2435	Corrosive	II	1	1	Keep dry
	1-Ethyl piperidine	3.2	UN 2386	Flammable Liquid	II	1,2	1	
	Ethyl propionate	3.2	UN 1195	Flammable Liquid	II	1,2	1	
	Ethyl propyl ether	3.1	UN 2615	Flammable Liquid	II	1,3	5	Keep cool
	Ethyl silicate. *See* Tetraethyl silicate							
	Ethyltrichlorosilane	3.2	UN 1196	Flammable Liquid, Corrosive	II	1,2	1	
N	Explosives, blasting, Type A	1.1D	UN 0081	Explosive (1.1D)	--	--	--	
	Explosives, blasting, Type B	1.5 D	UN 0331	Explosive (1.5D)	--	6	5	
N	Explosives, blasting, Type B	1.1D	UN 0082	Explosive (1.1D)	--	--	--	
N	Explosives, blasting, Type C	1.1D	UN 0083	Explosive (1.1D)	--	--	--	
N	Explosives, blasting, Type D	1.1D	UN 0084	Explosive (1.1D)	--	--	--	
	Explosives, blasting, Type E	1.5 D	UN 0332	Explosive (1.5D)	--	6	5	
N	Explosives, blasting, Type E	1.1D	UN 0241	Explosive (1.1D)	--	--	--	
	Extracts, *aromatic, liquid*	3.2 3.3	UN 1169 UN 1169	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Extracts, *flavouring, liquid*	3.2 3.3	UN 1197 UN 1197	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Fabric, *animal or vegetable, containing more than 5% of animal or vegetable oil*	4.2	UN 1373	Spontaneously Combustible	III	1,2	1,2	
	Ferric arsenate	6.1	UN 1606	Poison	II	1,2	1,2	
	Ferric arsenite	6.1	UN 1607	Poison	II	1,2	1,2	
	Ferric chloride, *anhydrous or solutions*	8	UN 1773	Corrosive	III	1,2	1,2	
	Ferric nitrate	5.1	UN 1466	Oxidizer	III	1,2	1,2	
	Ferrocerium	4.1	UN 1323	Flammable Solid	II	1,2	1,2	
	Ferrosilicon, *containing between 30% and 90% silicon*	4.3	UN 1408	Dangerous When Wet, Poison	III	1,2	1,2	Stow in a well ventilated compartment
	Ferrous arsenate	6.1	UN 1608	Poison	II	1,2	1,2	
	Fertilizer ammoniating solution, *containing free ammonia in excess of 35% ammonia*	2.2	UN 1043	Nonflammable Gas	--	1,2	5	Stow 'away from' living quarters
	Fibres, *animal or vegetable, burnt, wet or damp*	4.2	UN 1372	Spontaneously Combustible	III	1,2	1,2	
	Fibres, *animal or vegetable, containing more than 5% of animal or vegetable oil*	4.2	UN 1373	Spontaneously Combustible	III	1,2	1,2	
	Fibres, *vegetable, dry*	4.1	--	None	--	1,2	1,2	Stow 'away from' animal or vegetable oils
	Fillers, *liquid. See* Paints, *etc.*							
	Film from which gelatine has been removed. See Celluloid, *scrap*							
	Film, motion picture, *nitrocellulose base, exposed or unexposed, developed or undeveloped*	4.1	UN 1324	Flammable Solid	III	1,2	1,2	Stow 'away from' flammable substances. Maximum 250 Kg. net on deck on passenger vessels
	Film, motion picture, *nitrocellulose base, old film*	4.1	UN 1324	Flammable Solid	III	1	5	Stow 'away from' flammable substances
	Fire extinguisher charges, *corrosive liquid*	8	UN 1774	Corrosive	II	1,2	1,2	
	Fire extinguishers, *containing compressed or liquefied gas*	2.2	UN 1044	Nonflammable Gas	--	1,2	1,2	
N	Fireworks, Type A	1.1G	UN 0333	Explosive (1.1G)	--	--	--	
N	Fireworks, Type B	1.2G	UN 0334	Explosive (1.2G)	--	--	--	
N	Fireworks, Type C	1.3G	UN 0335	Explosive (1.3G)	--	--	--	
	Fireworks, Type D	1.4 G	UN 0336	Explosive (1.4G)	--	1,3	1,3	
	Fireworks, Type D	1.4 S	UN 0337	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Fishmeal *or* fishscrap, *antioxidant treated, moisture content greater than 6% but not exceeding 12% by weight, fat content not exceeding 18% by weight*	4.1	UN 2216	None. Package to be marked 'Class 4.1'	III	1,2	1,2	Double strip stowage recommended. Provide good surface and through ventilation

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Fishmeal *or* fishscrap, *antioxidant treated, moisture content between 5% and 11% by weight, fat content not more than 18% by weight*	9	UN 2216	None	III	2	2	
	Fishmeal *or* fishscrap, *antioxidant treated, unrestricted moisture content, fat content exceeding 18% by weight*	4.2	UN 2216	Spontaneously Combustible	II	1,2	1,2	
	Fishmeal *or* fishscrap, *not antioxidant treated, moisture content greater than 6% but not exceeding 12% by weight, fat content not exceeding 15% by weight*	4.1	UN 1374	None. Package to be marked 'Class 4.1'	III	1,2	1,2	Double strip stowage recommended. Provide good surface and through ventilation
	Fishmeal *or* fishscrap, *not antioxidant treated, moisture content greater than 6% but not exceeding 12% by weight, fat content not exceeding 12% by weight*	9	UN 1374	None	III	1,2	1,2	
	Fishmeal *or* fishscrap, *not antioxidant treated, unrestricted moisture content, fat content exceeding 15% by weight*	4.2	UN 1374	Spontaneously Combustible	II	1,2	1,2	
	Flammable liquid preparation, n.o.s.	3.2	UN 1142	Flammable Liquid	II	1,2	1	
		3.3	UN 1142	Flammable Liquid	II	1,2	1,2	
	Flammable liquids, *(non-toxic)*, n.o.s.	3.2	UN 1993	Flammable Liquid	II	1,2	1	
		3.3	UN 1993	Flammable Liquid	II	1,2	1,2	
	Flammable liquids, *(toxic)*, n.o.s.	3.2	UN 1992	Flammable Liquid, Poison	II	1,2	1	
		3.3	UN 1992	Flammable Liquid, Poison	II	1,2	1,2	
	Flammable solids, n.o.s.	4.1	UN 1325	Flammable Solid	II	1,2	1,2	
N	Flares, aerial	1.3G	UN 0093	Explosive (1.3G)	--	--	--	
N	Flares, surface *(other than water-activated flares)*	1.3G	UN 0092	Explosive (1.3G)	--	--	--	
	Flax, dry. See Fibres, *vegetable, dry*							
	Fluoboric acid	8	UN 1775	Corrosive	II	1,2	1,2	
	Fluoric acid. *See* Hydrofluoric acid, *solution*							
	Fluorine	2.3	UN 1045	Poison Gas, Oxidizer	--	1	5	Stow 'away from' foodstuffs, organic materials, and living quarters
	Fluorobenzene	3.2	UN 2387	Flammable Liquid	II	1,2	1	
	Fluorophosphoric acid, *anhydrous*	8	UN 1776	Corrosive	II	1,2	1,2	
	Fluorosulphonic acid	8	UN 1777	Corrosive	I	1	5	Keep dry. Stow 'away from' fluorides
	Fluorotoluenes	3.2	UN 2388	Flammable Liquid	II	1,2	1	
		3.3	UN 2388	Flammable Liquid	II	1,2	1,2	
	Fluosilicic acid	8	UN 1778	Corrosive	II	1,2	1,2	
	Formaldehyde, *in solutions*	3.3	UN 1198	Flammable Liquid	II	1,2	1,2	Stow 'away from' foodstuffs
	Formaldehyde, *solutions flashpoint above 61 degrees C*	9	UN 2209	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Formalin. *See* Formaldehyde							
	Formic acid	8	UN 1779	Corrosive	II	1,2	1,2	Glass carboy in hampers prohibited
N	Fracturing devices, explosive, *for oil wells*	1.1D	UN 0099	Explosive (1.1D)	--	--	--	
	Fuel, aviation, *turbine engine*	3.2	UN 1863	Flammable Liquid	II	1,2	1	
	Fumaryl chloride	8	UN 1780	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Fungicides, *(poisonous)*, n.o.s.	6.1	UN 1609	Poison	I/II	1,2	1,2	Stow 'separated from' foodstuffs.
		6.1	UN 1609	St. Andrews Cross	III	1,2	1,2	Stow 'separated from' foodstuffs.
		9	UN 1609	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Furan	3.1	UN 2389	Flammable Liquid	I	1,3	5	Keep cool
	Furfural	3.3	UN 1199	Flammable Liquid	II	1,2	1,2	
	Furfurylamine	3.3	UN 2526	Flammable Liquid	II	1,2	1,2	
	Fuse, igniter, *tubular, metal clad*	1.4 G	UN 0103	Explosive (1.4G)	--	1,3	1,3	
N	Fuse, instantaneous, non-detonating	1.3G	UN 0101	Explosive (1.3G)	--	--	--	
	Fusel oil	3.2	UN 1201	Flammable Liquid	II	1,2	1	
	Fuse, safety	1.4 S	UN 0105	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Fuzes, detonating	1.4S	UN 0367	None. Package to be marked '1.4S'	--	1,3	1,3	
	Fuzes, detonating	1.4 B	UN 0257	Explosive (1.4B)	--	1,3	1,3	
N	Fuzes, detonating	1.1B	UN 0106	Explosive (1.1B)	--	--	--	
N	Fuzes, detonating	1.2B	UN 0107	Explosive (1.2B)	--	--	--	
	Fuzes, igniting	1.4S	UN 0368	None. Package to be markéd '1.4S'	--	1,3	1,3	
N	Fuzes, igniting	1.3G	UN 0316	Explosive (1.3G)	--	--	--	
N	Fuzes, igniting	1.4G	UN 0317	Explosive (1.4G)	--	--	--	
N	Gaines, with detonator	1.1B	UN 0225	Explosive (1.1B)	--	--	--	
N	Gaines, with detonator	1.2B	UN 0268	Explosive (1.2B)	--	--	--	
N	Gaines, without detonator	1.1D	UN 0042	Explosive (1.1D)	--	--	--	
N	Gaines, without detonator	1.2D	UN 0283	Explosive (1.2D)	--	--	--	
	Gas cartridges	2.1	UN 2037	Flammable Gas	--			
	Gas drips, *hydrocarbon*	3.2	UN 1864	Flammable Liquid	II	1,2	1	
	Gas oil	3.3	UN 1202	Flammable Liquid	II	1,2	1,2	
	Gasoline	3.1	UN 1203	Flammable Liquid	II	1,2	5	
	Germane	2.3	UN 2192	Poison Gas, Flammable Gas	--	1	5	Stow 'away from' living quarters
	Germicides, *(poisonous)*, n.o.s.	6.1	(UN 1601)	Poison	I/II	1,2	1,2	Stow 'separated from' foodstuffs.
		6.1	(UN 1601)	St. Andrews Cross	III	1,2	1,2	Stow 'separated from' foodstuffs.

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
		9	(UN 1601)	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Glyceryl trinitrate, *solution up to 1% in alcohol*	3.2	UN 1204	Flammable Liquid	II	1,2	1	
	Glycidaldehyde	3.3	UN 2622	Flammable Liquid, Poison	II	1,2	1,2	
N	Grenades, *hand or rifle, with bursting charge*	1.1D	UN 0284	Explosive (1.1D)	--	--	--	
N	Grenades, *hand or rifle, with bursting charge*	1.2D	UN 0285	Explosive (1.2D)	--	--	--	
N	Grenades, *hand or rifle, with bursting charge*	1.1F	UN 0292	Explosive (1.1F)	--	--	--	
N	Grenades, *hand or rifle, with bursting charge*	1.2F	UN 0293	Explosive (1.2F)	--	--	--	
	Grenades, practice, *hand or rifle*	1.4 S	UN 0110	None. Package to be marked '1.4 S'	--	1,3	1,3	
N	Grenades, practice, *hand or rifle*	1.2G	UN 0372	Explosive (1.2G)	--	--	--	
N	Grenades, practice, *hand or rifle*	1.3G	UN 0318	Explosive (1.3G)	--	--	--	
	Guanidine nitrate	9	UN 1467	None	III	1,2	1,2	Stow 'separated from' nitro compounds, chlorates or acids
N	Guanyl nitrosamino guanylidene hydrazine, *containing, by weight, at least 30% water*	1.1A	UN 0113	Explosive (1.1A)	--	--	--	
N	Guanyl nitrosamino guanyl tetrazene, *containing, by weight, at least 30% water or mixture of alcohol and water*	1.1A	UN 0114	Explosive (1.1A)	--	--	--	
	Gutta percha, *solution*	3.3	UN 1205	Flammable Liquid	II	1,2	1,2	
	Hafnium metal powder, dry	4.2	UN 2545	Spontaneously Combustible	II	1	5	
	Hafnium metal powder, wet, *with not less than 25% water (a visible excess of water must be present)*	4.1	UN 1326	Flammable Solid	II	1,2	5	
	Halogenated irritating liquids, n.o.s.	6.1	UN 1610	Poison	I/II	1	5	
		6.1	UN 1610	St. Andrews Cross	III	1	5	
	Hay	4.1	UN 1327	None	III	1,2	1,2	Stow 'away from' animal or vegetable oils
	Helium, *compressed*	2.2	UN 1046	Nonflammable Gas	--	1,2	1,2	
	Helium, *liquid*	2.2	UN 1963	Nonflammable Gas	--	1,2	1,2	
	Hemp, dry. See Fibres, *vegetable, dry*							
	Heptane	3.2	UN 1206	Flammable Liquid	II	1,2	1	
	n-Heptene	3.2	UN 2278	Flammable Liquid	II	1,2	1	
	Hexachlorobutadiene	6.1	UN 2279	St. Andrews Cross	III	1,2	1,2	
	Hexadecyl trichlorosilane	8	UN 1781	Corrosive	II	1	1	Keep dry
	Hexadiene	3.1	UN 2458	Flammable Liquid	II	1,3	5	Keep cool
	Hexaethyl tetraphosphate	6.1	UN 1611	Poison	I/II	1,2	5	
		6.1	UN 1611	St. Andrews Cross	III	1,2	5	
	Hexaethyl tetraphosphate *and compressed gas mixture*	6.1	UN 1612	Poison, Non-flammable Compressed gas	I/II	1	5	Shade from radiant heat. Segregation same as nonflammable gas.
		6.1	UN 1612	St. Andrews Cross, Non-flammable Compressed Gas	III	1	5	Shade from radiant heat. Segregation same as for non-flammable gas
	Hexafluoroacetone	2.3	UN 2420	Poison Gas	--	1	5	Stow 'away from' living quarters
	Hexafluoroacetone hydrate	6.1	UN 2552	Poison	II	1,2	1	
	Hexafluorophosphoric acid	8	UN 1782	Corrosive	II	1,2	1,2	
	Hexafluoropropylene	2.2	UN 1858	Nonflammable Gas	--	1,2	1,2	
	Hexaldehyde	3.3	UN 1207	Flammable Liquid	III	1,2	1,2	
	Hexamethylenediamine, *solid*	8	UN 2280	Corrosive	III	1,3	1,3	Keep cool
	Hexamethylenediamine, *solution*	8	UN 1783	Corrosive, Poison	II	1,2	1,2	
	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetroxonane, *maximum concentration 52% with inert solid*	5.2	UN 2166	Organic Peroxide	II	1	5	
	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetroxonane, *maximum concentration 52% in solution*	5.2	UN 2167	Organic Peroxide	II	1	5	
	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetroxonane, *technical pure*	5.2	UN 2165	Organic Peroxide	I	1	5	
	Hexamine	4.1	UN 1328	Flammable Solid	III	1,2	1,2	
	Hexane	3.1	UN 1208	Flammable Liquid	II	1,2	5	
N	Hexanitrodiphenylamine	1.1D	UN 0079	Explosive (1.1D)	--	--	--	
N	Hexanitrostilbene	1.1D	UN 0392	Explosive (1.1D)	--	--	--	
	Hexanols	3.3	UN 2282	Flammable Liquid	III	1,2	1,2	
N	Hexatonal, cast	1.1D	UN 0393	Explosive (1.1D)	--	--	--	
	Hex-1-ene	3.1	UN 2370	Flammable Liquid	II	1,3	5	Keep cool
N	Hexolite, *dry or containing, by weight, less than 15% water*	1.1D	UN 0118	Explosive (1.1D)	--	--	--	
	Hexyl trichlorosilane	8	UN 1784	Corrosive	II	1	1	Keep dry
	Hydrazine, *anhydrous and solutions containing less than 36% water, by weight*	8	UN 2029	Corrosive, Poison	I	1	5	
	Hydrazine, *solutions containing 36% or more water, by weight*	8	UN 2030	Corrosive, Poison	II	1,2	5	Under deck not permitted if containing less than 64% water by weight. Stow 'away from' nitric acids and perchloric acids exceeding 50% acid by weight
	Hydrides, *(metal)*, n.o.s.	4.3	UN 1409	Dangerous When Wet	I	1,2	5	
	Hydriodic acid	8	UN 1787	Corrosive	II	1	1	Glass carboys prohibited on passenger vessels
	Hydrobromic acid	8	UN 1788	Corrosive	II	1	1	Glass carboys prohibited on passenger vessels. Stow 'away from' fluorides
	Hydrocarbon gases *(and mixtures of such gases, compressed)*, n.o.s.	2.1	UN 1964	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Hydrocarbon gases *(and mixtures of such gases, liquefied)*, n.o.s.	2.1	UN 1965	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Hydrochloric acid	8	UN 1789	Corrosive	II	1	1	Glass carboys prohibited on passenger vessels. Stow 'away from' fluorides

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Hydrocyanic acid, *anhydrous. See* Hydrogen cyanide							
	Hydrocyanic acid, *aqueous solution of not more than 20% of hydrogen cyanide*	6.1	UN 1613	Poison	I	1	5	
	Hydrofluoric acid, *solution*	8	UN 1790	Corrosive	I/II	1	5	Keep cool
	Hydrofluoric and sulphuric acid, *mixtures. See* Acid mixtures, *hydrofluoric and sulphuric*							
	Hydrofluosilicic acid. *See* Fluosilicic acid							
	Hydrogen and methane, *mixtures*	2.1	UN 2034	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Hydrogen bromide, *anhydrous*	2.3	UN 1048	Poison Gas, Corrosive	--	1	5	Stow 'away from' foodstuffs and living quarters
	Hydrogen chloride, *anhydrous*	2.3	UN 1050	Poison Gas, Corrosive	--	1	5	Stow 'away from' foodstuffs and living quarters
	Hydrogen, *compressed*	2.1	UN 1049	Flammable Gas	--	1,2	5	Stow 'separated from' chlorine, 'away from' living quarters
	Hydrogen cyanide, *anhydrous, stabilized*	2.3	UN 1051	Poison Gas, Flammable Gas	--	1	5	Stow 'away from' foodstuffs and living quarters
	Hydrogen cyanide, *anhydrous, stabilized, absorbed in a porous inert material*	6.1	UN 1614	Poison	I	1	5	Shade from radiant heat
	Hydrogen fluoride, *anhydrous*	2.3	UN 1052	Poison Gas, Corrosive	--	1	5	Stow 'away from' foodstuffs and living quarters
	Hydrogen iodide, *anhydrous*	2.3	UN 2197	Poison Gas, Corrosive	--	1	5	Stow 'away from' living quarters
	Hydrogen iodide, *solution. See* Hydriodic acid							
	Hydrogen, *liquid*	2.1	UN 1966	Flammable Gas	--	5	5	
	Hydrogen peroxide, *concentrations of over 40% up to 60% peroxide*	5.1	UN 2014	Oxidizer, Corrosive	II	1	5	Shade from radiant heat. Stow 'away from' powdered metals and 'separated from' permanganates
	Hydrogen peroxide, *concentrations of 8% up to 40% peroxide*	5.1	UN 2014	Oxidizer	II	1,2	1	Shade from radiant heat. Stow 'away from' powdered metals and 'separated from' permanganates
	Hydrogen peroxide, *stabilized, concentrations of over 60% peroxide*	5.1	UN 2015	Oxidizer, Corrosive	I	1	5	Permitted only under conditions approved by the Department
	Hydrogen selenide	2.3	UN 2202	Poison Gas, Flammable Gas	--	1	5	Stow 'away from' living quarters
	Hydrogen sulphide	2.1	UN 1053	Flammable Gas, Poison Gas	--	1	5	Stow 'away from' foodstuffs and living quarters
	Hydrosilicofluoric acid. *See* Fluosilicic acid							
	1-Hydroxy-1'-hydroperoxy dicyclohexyl peroxide, *and mixtures with* bis-(1-hydroxy cyclohexyl) peroxide, *in a concentration of more than 90% with less than 10% water*	5.2	UN 2117	Organic Peroxide	I	1	5	
	1-Hydroxy-1'-hydroperoxy dicyclohexyl peroxide, *and mixtures with* bis-(1-hydroxy cyclohexyl) peroxide, *in a concentration of 90% or less with at least 10% water*	5.2	UN 2119	Organic Peroxide	I	1	5	
	1-Hydroxy-1'-hydroperoxy dicyclohexyl peroxide, *and mixtures with* bis-(1-hydroxy cyclohexyl) peroxide, *maximum concentration 72% as a paste or in solution*	5.2	UN 2118	Organic Peroxide	I	1	5	
	Hypochlorite, *solutions containing more than 5% available chlorine*	8	UN 1791	Corrosive	II/III	1,2	1	Glass carboys in hampers prohibited under deck
	Igniters	1.4 G	UN 0325	Explosive (1.4G)	--	1,3	1,3	
N	Igniters	1.1G	UN 0121	Explosive (1.1G)	--	--	--	
N	Igniters	1.2G	UN 0314	Explosive (1.2G)	--	--	--	
N	Igniters	1.3G	UN 0315	Explosive (1.3G)	--	--	--	
	Inflammable gas for lighters. *See* Lighters, *for cigars and cigarettes, containing flammable gas*							
	Inflammable liquid preparations, n.o.s.. *See* Flammable liquid preparations, n.o.s							
	Inflammable liquids, *(non-toxic)*, n.o.s.. *See* Flammable liquids, *(non-toxic)*, n.o.s							
	Inflammable liquids, *(toxic)*, n.o.s.. *See* Flammable liquids, *(toxic)*, n.o.s							
	Inflammable solids, n.o.s.. *See* Flammable solids, n.o.s							
	Ink, printers	3.2	UN 1210	Flammable Liquid	II	1,2	1	
		3.3	UN 1210	Flammable Liquid	II	1,2	1,2	
	Insecticide gases, *(non-toxic)*, n.o.s.	2.1	UN 1968	Flammable Gas	--	1,2	1	
		2.2	UN 1968	Nonflammable Gas	--	1,3	1,3	
	Insecticide gases, *(toxic)*, n.o.s.	2.3	UN 1967	Poison Gas	--	1	5	Shade from radiant heat
	Insecticide gases, *toxic*, n.o.s.	2.3	UN 1967	Poison Gas	--	1	5	Shade from radiant heat
	Insecticides, n.o.s.	6.1	UN 1615	Poison	I/II	1,2	1,2	Stow 'separated from' foodstuffs.
		6.1	UN 1615	St. Andrews Cross	III	1,2	1,2	Stow 'separated from' foodstuffs.
		9	UN 1615	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Iodine monochloride	8	UN 1792	Corrosive	II	1	5	Keep dry
	Iodine pentafluoride	5.1	UN 2495	Oxidizer, Poison	I	1	5	Keep dry
	2-Iodobutane	3.2	UN 2390	Flammable Liquid	II	1,2	1	
	Iodomethylpropanes	3.2	UN 2391	Flammable Liquid	II	1,2	1	
	Iodopropanes	3.2	UN 2392	Flammable Liquid	II	1,2	1	
		3.3	UN 2392	Flammable Liquid	II	1,2	1,2	
	Iron carbonyl	3.1	UN 1994	Flammable Liquid, Poison	I	1	5	Shade from radiant heat
	Iron chloride. *See* Ferric chloride							
	Iron oxide, *spent*	4.2	UN 1376	Spontaneously Combustible	III	1,2	5	
	Iron pentacarbonyl. *See* Iron carbonyl							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Iron sesquichloride. *See* Ferric chloride							
	Iron sponge, *spent. See* Iron oxide, *spent*							
	Iron swarf, *e.g. borings, cuttings, drillings, filings, shavings, turnings*	4.2	UN 2793	None	--	1,2	1,2	
	Isobutane *or isobutane mixtures*	2.1	UN 1969	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Isobutanol	3.3	UN 1212	Flammable Liquid	II	1,2	1,2	
	Isobutyl acetate	3.2	UN 1213	Flammable Liquid	II	1,2	1	
	Isobutyl acrylate, *inhibited*	3.3	UN 2527	Flammable Liquid	II	1,2	1,2	
	Isobutyl alcohol. *See* Isobutanol							
	Isobutyl aldehyde. *See* Isobutyraldehyde							
	Isobutylamine	3.2	UN 1214	Flammable Liquid	II	1,2	1	
	Isobutylene	2.1	UN 1055	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Isobutyl formate	3.2	UN 2393	Flammable Liquid	II	1,2	1	
	Isobutylisobutyrate	3.3	UN 2528	Flammable Liquid	III	1,2	1,2	
	Isobutyl isocyanate	3.2	UN 2486	Flammable Liquid, Poison	II	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Isobutyl methacrylate, *inhibited*	3.3	UN 2283	Flammable Liquid	III	1,2	1,2	
	Isobutyl methyl ketone peroxide, *maximum concentration 62% in solution*	5.2	UN 2126	Organic Peroxide	I	1	5	
	Isobutyl propionate	3.2	UN 2394	Flammable Liquid	II	1,2	1	
	Isobutyraldehyde	3.1	UN 2045	Flammable Liquid	II	1,3	5	Keep cool
	Isobutyric acid	3.3	UN 2529	Flammable Liquid	III	1,2	1,2	
	Isobutyric anhydride	3.3	UN 2530	Flammable Liquid	III	1,2	1 2	
	Isobutyronitrile	3.2	UN 2284	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Isobutyryl chloride	3.2	UN 2395	Flammable Liquid, Poison	II	1	1	Keep dry. Shade from radiant heat
	Isobutyryl peroxide, *maximum concentration 52% in solution*	5.2	UN 2182	Organic Peroxide	II	1	5	Maximum transport temperature -20 deg C
	Isocyanates *(and solutions)*, n.o.s.	3.1	UN 2478	Flammable Liquid, Poison	II	1	5	Stow 'away from' living quarters and sources of heat
	Isocyanates *(with a boiling point below 300 degrees C and a flashpoint of 23 degrees C or above, and their solutions)*, n.o.s.	6.1	UN 2206	Poison, Flammable Liquid (only if flashpoint of the substance or solution is below 61 deg C.)	II	1,3	1,3	Shade from radiant heat. Stow 'away from' sources of heat. Segregation same as for flammable liquids if flashpoint below 61 deg C
	Isocyanates *(with a boiling point of 300 degrees C and above and their solutions)*, n.o.s.	9	UN 2207	None	III	1,2	1,2	Stow 'away from' foodstuffs and sources of heat
	Isododecane	3.3	UN 2286	Flammable Liquid	III	1,2	1,2	
	Isoheptene	3.1	UN 2287	Flammable Liquid	II	1,3	5	Keep cool
	Isohexene	3.1	UN 2288	Flammable Liquid	II	1,3	5	Keep cool
	Isononanoyl peroxide, *technical pure or in solution*	5.2	UN 2128	Organic Peroxide	II	1	5	Maximum transport temperature 0 deg C
	Isooctene	3.1	UN 1216	Flammable Liquid	II	1,2	5	
	Isopentane	3.1	UN 1265	Flammable Liquid	I	1,2	5	
	Isopentenes	3.1	UN 2371	Flammable Liquid	I	1,3	5	Keep cool
	Isophoronediamine	8	UN 2289	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	Isophorone diisocyanate	6.1	UN 2290	Poison	II	1,2	1	
	Isoprene, *inhibited*	3.1	UN 1218	Flammable Liquid	I	1,3	5	Keep cool
	Isopropanol	3.2	UN 1219	Flammable Liquid	II	1,2	1	
	Isopropenyl acetate	3.2	UN 2403	Flammable Liquid	II	1,2	1	
	Isopropenylbenzene	3.3	UN 2303	Flammable Liquid	II	1,2	1,2	
	Isopropyl acetate	3.2	UN 1220	Flammable Liquid	II	1,2	1	
	Isopropyl acid phosphate	8	UN 1793	Corrosive	III	1,2	1,2	Glass carboys in hampers prohibited under deck
	Isopropyl alcohol. *See* Isopropanol							
	Isopropylamine	3.1	UN 1221	Flammable Liquid	I	1,3	5	Keep cool
	Isopropylbenzene	3.3	UN 1918	Flammable Liquid	II	1,2	1,2	
	Isopropyl butyrate	3.3	UN 2405	Flammable Liquid	II	1,2	1,2	
	Isopropyl chloroformate	3.2	UN 2407	Flammable Liquid, Corrosive	II	1,2	1	
	Isopropyl formate	3.2	UN 2408	Flammable Liquid	II	1,2	1	
	Isopropyl isobutyrate	3.2	UN 2406	Flammable Liquid	II	1,2	1	
	Isopropyl isocyanate	3.2	UN 2483	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Isopropyl mercaptan	3.1	UN 2703	Flammable Liquid	II	1,3	5	Keep cool and dry. Stow 'away from' foodstuffs and all odor absorbing cargo.
		3.2	UN 2703	Flammable Liquid	II	1,3	1	Keep cool and dry. Stow 'away from' foodstuffs and all odor absorbing cargo
	Isopropyl nitrate	3.2	UN 1222	Flammable Liquid	II	1,2	1	
	Isopropyl peroxydicarbonate. *See* Diisopropyl perdicarbonate							
	Isopropyl propionate	3.2	UN 2409	Flammable Liquid	II	1,2	1	
N	Jet perforating guns, charged, *oil well, without detonator*	1.1D	UN 0124	Explosive (1.1D)	--	--	--	
	Jute, dry. See Fibres, *vegetable, dry*							
	Kapok, dry. See Fibres, *vegetable, dry*							
	Kerosene	3.3	UN 1223	Flammable Liquid	II	1,2	1,2	
	Ketones, *(liquid, non-toxic)*, n.o.s.	3.2	UN 1224	Flammable Liquid	II	1,2	1	
		3.3	UN 1224	Flammable Liquid	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Ketones, *(liquid, toxic)*, n.o.s.	3.2	UN 1224	Flammable Liquid, Poison	II	1,2	1	
		3.3	UN 1224	Flammable Liquid, Poison	II	1,2	1,2	
	Krypton, *compressed*	2.2	UN 1056	Nonflammable Gas	--	1,2	1,2	
	Krypton, *liquid*	2.2	UN 1970	Nonflammable Gas	--	1	5	
	Lacquer base. *See* Paints, *etc.*							
	Lacquer chips. *See* Nitrocellulose, *wetted with, by weight, more than 40% flammable liquids.*							
	Lacquers. *See* Paints, *etc.*							
	Lauroyl peroxide, *technical pure*	5.2	UN 2124	Organic Peroxide	II	1	5	
	Lead acetate	6.1	UN 1616	St. Andrews Cross	III	1,2	1,2	
	Lead arsenates	6.1	UN 1617	Poison	II	1,2	1,2	
	Lead arsenites	6.1	UN 1618	Poison	II	1,2	1,2	
N	Lead azide, *containing, by weight, at least 20% water or mixture of alcohol and water*	1.1A	UN 0129	Explosive (1.1A)	--	--	--	
	Lead compounds, (*water soluble*), n.o.s.	6.1	UN 2291	St. Andrews Cross	III	1,2	1,2	
	Lead cyanide	6.1	UN 1620	Poison	II	1,2	1,2	Stow 'away from' acids
	Lead dioxide	5.1	UN 1872	Oxidizer	III	1,2	1,2	Stow 'away from' foodstuffs
	Lead dross. *See* Lead sulphate, *containing more than 3% free acid*							
	Lead nitrate	5.1	UN 1469	Oxidizer,Poison	II	1,2	1,2	Store 'away from' foodstuffs
	Lead perchlorate	5.1	UN 1470	Oxidizer,Poison	II	1,2	1,2	Stow 'away from' powdered metals and foodstuffs
	Lead peroxide. *See* Lead dioxide							
N	Lead styphnate, *containing, by weight, at least 20% water or mixture of alcohol and water*	1.1A	UN 0130	Explosive (1.1A)	--	--	--	
	Lead sulphate, *containing more than 3% free acid*	8	UN 1794	Corrosive	II	1,2	1,2	
	Life-rafts, *inflatable*	9	--	None	--	1,2	1,2	
	Lighter fuels, *cigar and cigarette*	3.2	UN 1226	Flammable Liquid	II	1,2	1	
	Lighters *for cigars and cigarettes, etc., containing flammable gas*	2.1	UN 1057	Flammable Gas	--	1	1	Stow 'away from' living quarters. Not permitted in nonventilated containers
	Lighters *for cigars and cigarettes, etc., containing fuel*	3.2	UN 1226	Flammable Liquid	II	1,2	1	
	Lighters, fuse	1.4 S	UN 0131	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Liquefied non-flammable gases charged with nitrogen, carbon dioxide or air	2.2	UN 1058	Nonflammable Gas	--	1,2	1,2	
	Lithium alkyls	4.2	UN 2445	Spontaneously Combustible	I	1	1	
	Lithium aluminium hydride	4.3	UN 1410	Dangerous When Wet	I	1,2	5	
	Lithium aluminium hydride, *ethereal*	4.3	UN 1411	Dangerous When Wet, Flammable Liquid	I	1	5	
	Lithium amide	4.3	UN 1412	Dangerous When Wet	II	1,2	5	
	Lithium borohydride	4.3	UN 1413	Dangerous When Wet	I	1,2	5	
	Lithium hydride	4.3	UN 1414	Dangerous When Wet	I	1,2	5	
	Lithium hypochlorite, *dry, including mixtures containing more than 39% available chlorine (8.8% available oxygen)*	5.1	UN 1471	Oxidizer	II	1,2	1,2	
	Lithium, *(metal)*	4.3	UN 1415	Dangerous When Wet	II	1,2	5	
	Lithium peroxide	5.1	UN 1472	Oxidizer	II	1,2	1,2	Keep dry
	Lithium silicon	4.3	UN 1417	Dangerous When Wet	II	1,2	1,2	
	London purple	6.1	UN 1621	Poison	II	1,2	1,2	
	Lye. *See* Sodium hydroxide							
	Magnesium alloys, *containing more than 50% magnesium, pellets, turnings or ribbon*	4.1	UN 1869	Flammable Solid	III	1,2	1,2	Stow 'away from' nonflammable gases and poisons
	Magnesium alloys, *containing more than 50% magnesium, powder, non-pyrophoric*	4.3	UN 1418	Dangerous When Wet	II	1,2	1,2	Stow 'away from' nonflammable gases and poisons
	Magnesium aluminium phosphide	4.3	UN 1419	Dangerous When Wet	I	1	5	
	Magnesium arsenate	6.1	UN 1622	Poison	II	1,2	1,2	
	Magnesium bromate	5.1	UN 1473	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Magnesium diamide	4.2	UN 2004	Spontaneously Combustible	II	1	1	
	Magnesium diphenyl	4.2	UN 2005	Spontaneously Combustible	I	1	1	
	Magnesium hydride	4.3	UN 2010	Dangerous When Wet	I	1,2	5	
	Magnesium nitrate	5.1	UN 1474	Oxidizer	III	1,2	1,2	
	Magnesium, *pellets, turnings or ribbon*	4.1	UN 1869	Flammable Solid	III	1,2	1,2	Stow 'away from' nonflammable gases and poisons
	Magnesium perchlorate	5.1	UN 1475	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals
	Magnesium peroxide	5.1	UN 1476	Oxidizer	II	1,2	1,2	Keep dry
	Magnesium phosphide	4.3	UN 2011	Dangerous When Wet, Poison	I	1	5	
	Magnesium, *powder, non-pyrophoric*	4.3	UN 1418	Dangerous When Wet	II	1,2	1,2	Stow 'away from' nonflammable gases and poisons
	Maleic anhydride	8	UN 2215	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Maneb, *or* maneb preparation(s) *containing 60% or more maneb*	4.2	UN 2210	Spontaneously Combustible	III	1,2	1,2	Stow 'away from' acids, living quarters and foodstuffs
	Manganese ethylene-bis-dithiocarbamate. See Maneb							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Manganese resinate	4.1	UN 1330	Flammable Solid	III	1,2	1,2	
N	Mannitol hexanitrate, *containing, by weight, at least 40% water or mixture of alcohol and water*	1.1D	UN 0133	Explosive (1.1D)	--	--	--	
	Matches, *fusee*	4.1	UN 2254	Flammable Solid	III	1,2	1,2	
	Matches, *safety*	9	UN 1944	None	III	1,2	1,2	Keep dry
	Matches, *strike anywhere*	4.1	UN 1331	Flammable Solid	III	1,2	1	
	Matches, *wax 'vesta'*	4.1	UN 1945	Flammable Solid	III	1,2	1	
N	Medicines, n.o.s. *to be classified and labeled according to the principle hazardous constituent*	--	UN 1851		--			
	MEKP. See Ethyl methyl ketone peroxide							
	p-Menthane hydroperoxide, *technical pure*	5.2	UN 2125	Organic Peroxide	I	1	5	
	Mercaptans *and* mercaptan mixtures, *(liquid)*, n.o.s.	3.1	UN 1228	Flammable Liquid	II	1,3	5	Keep cool
	Mercuric acetate. *See* Mercury acetate							
	Mercuric arsenate	6.1	UN 1623	Poison	II	1,2	1,2	
	Mercuric bromide. *See* Mercury bromides							
	Mercuric chloride	6.1	UN 1624	Poison	II	1,2	1,2	
	Mercuric cyanide. *See* Mercury cyanide							
	Mercuric nitrate	6.1	UN 1625	Poison	II	1,2	1,2	
	Mercuric oxycyanide. *See* Mercury oxycyanide							
	Mercuric potassium cyanide	6.1	UN 1626	Poison	I	1,2	1,2	Stow 'away from' acids
	Mercuric sulphate	6.1	UN 1645	Poison	II	1,2	1,2	
	Mercurol. *See* Mercury nucleate							
	Mercurous acetate. *See* Mercury acetate							
	Mercurous bromide. *See* Mercury bromides							
	Mercurous nitrate. *See* Mercury acetate							
	Mercurous sulphate	6.1	UN 1628	Poison	II	1,2	1,2	
	Mercury acetate	6.1	UN 1629	Poison	II	1,2	1,2	
	Mercury ammonium chloride	6.1	UN 1630	Poison	II	1,2	1,2	
	Mercury benzoate	6.1	UN 1631	Poison	II	1,2	1,2	
	Mercury bisulphate	6.1	UN 1633	Poison	II	1,2	1,2	
	Mercury bromides	6.1	UN 1634	Poison	II	1,2	1,2	
	Mercury compounds, *(inorganic)*, n.o.s.	6.1	UN 2024	Poison	I/II	1,2	1,2	
		6.1	UN 2024	St. Andrews Cross	III	1,2	1,2	
	Mercury compounds, *(organic)*, n.o.s.	6.1	UN 2025	Poison	I/II	1,2	1,2	
		6.1	UN 2025	St. Andrews Cross	III	1,2	1,2	
	Mercury cyanide	6.1	UN 1636	Poison	II	1,2	1,2	Stow 'away from' acids
N	Mercury fulminate, *containing, by weight, at least 20% water or mixture of alcohol and water*	1.1A	UN 0135	Explosive (1.1A)	--	--	--	
	Mercury gluconate	6.1	UN 1637	Poison	II	1,2	1,2	
	Mercury iodide	6.1	UN 1638	Poison	II	1,2	1,2	
	Mercury nucleate	6.1	UN 1639	Poison	II	1,2	1,2	
	Mercury oleate	6.1	UN 1640	Poison	II	1,2	1,2	
	Mercury oxide	6.1	UN 1641	Poison	II	1,2	1,2	
	Mercury oxycyanide	6.1	UN 1642	Poison	II	1,2	1,2	Stow 'away from' acids
	Mercury potassium iodide	6.1	UN 1643	Poison	II	1,2	1,2	
	Mercury salicylate	6.1	UN 1644	Poison	II	1,2	1,2	
	Mercury thiocyanate	6.1	UN 1646	Poison	II	1,2	1,2	
	Mesityl oxide	3.3	UN 1229	Flammable Liquid	II	1,2	1,2	
	Metal alkyls, n.o.s.	4.2	UN 2003	Spontaneously Combustible	I	1	5	Shade from radiant heat. Stow 'separated from flammable liquids or gases, oxidizers or organic peroxides
	Metaldehyde	4.1	UN 1332	Flammable Solid	III	1,2	1,2	
	Methacraldehyde	3.2	UN 2396	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Methacrylic acid, *inhibited*	8	UN 2531	Corrosive	II	1	1	Keep cool. Glass carboys prohibited on passenger vessels
	Methallyl alcohol	3.3	UN 2614	Flammable Liquid	II	1,2	1,2	
	Methane *or* natural gases *with a high methane content, compressed*	2.1	UN 1971	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Methane *or* natural gases *with a high methane content, refrigerated liquid*	2.1	UN 1972	Flammable Gas	--	1	5	Stow 'away from' living quarters
	Methanol	3.2	UN 1230	Flammable Liquid, Poison	II	1,2	1	
	Methoxymethyl isocyanate	3.2	UN 2605	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	4-Methoxy-4-methylpentan-2-one	3.3	UN 2293	Flammable Liquid	III	1,2	1,2	
	Methyl acetate	3.2	UN 1231	Flammable Liquid	II	1,2	1	
	Methyl acetone	3.2	UN 1232	Flammable Liquid	II	1,2	1	
	Methyl acetylene, *mixed with 15% to 20%* propadiene	2.1	UN 1060	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	beta-Methyl acrolein. *See* Crotonaldehyde, *inhibited*							
	Methyl acrylate, *inhibited*	3.2	UN 1919	Flammable Liquid	II	1,2	1	
	Methylal	3.1	UN 1234	Flammable Liquid	II	1,3	5	Keep cool
	Methyl alcohol. *See* Methanol							
	Methyl allyl chloride	3.1	UN 2554	Flammable Liquid	II	1,3	5	Keep cool
	Methyl aluminium sesquibromide	4.2	UN 1926	Spontaneously Combustible	I	1	1	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Methyl aluminium sesquichloride	4.2	UN 1927	Spontaneously Combustible	I	1	1	
	Methylamine, *anhydrous*	2.1	UN 1061	Flammable Gas	--	1,2	5	
	Methylamine, *aqueous solution*	3.1	UN 1235	Flammable Liquid	II	1,3	5	Keep cool. Stow 'away from' mercury and its compounds
	Methylamyl acetate	3.3	UN 1233	Flammable Liquid	III	1,2	1,2	
	Methyl amyl ketone. *See* Amyl methyl ketone							
	N-Methylaniline	6.1	UN 2294	St. Andrews Cross	III	1,2	1,2	
	Methyl bromide	2.3	UN 1062	Poison Gas	--	1	5	
	Methyl bromide and chloropicrin, mixtures. *See* Chloropicrin and methyl bromide, mixtures							
	Methyl bromide and ethylene dibromide, *liquid mixtures*	6.1	UN 1647	Poison	I	1	1	
	2-Methyl-1,3-butadiene. *See* Isoprene							
	3-Methyl butan-2-one	3.2	UN 2397	Flammable Liquid	II	1,2	1	
	2-Methyl-1-butene	3.1	UN 2459	Flammable Liquid	I	1,3	5	Keep cool
	2-Methyl-2-butene	3.1	UN 2460	Flammable Liquid	II	1,3	5	Keep cool
	Methyl-tert-butyl ether	3.2	UN 2398	Flammable Liquid	II	1,2	1	
	Methyl butyrate	3.2	UN 1237	Flammable Liquid	II	1,2	1	
	Methyl chloride	2.1	UN 1063	Flammable Gas	--	1,2	5	Stow 'away from' living quarters
	Methyl chloride and chloropicrin, mixtures. *See* Chloropicrin and methyl chloride, mixtures							
	Methyl chloride and methylene chloride, *mixtures*	2.1	UN 1912	Flammable Gas	--	1,2	5	
	Methyl chloroacetate	3.3	UN 2295	Flammable Liquid	II	1,2	1,2	
	Methyl chlorocarbonate. *See* Methyl chloroformate							
	Methyl chloroformate	3.2	UN 1238	Flammable Liquid, Poison, Corrosive	I	1,2	1	
	Methylchloromethyl ether	3.1	UN 1239	Flammable Liquid	II	1	5	Keep cool
	Methyl chlorosilane	3.2	UN 2534	Flammable Liquid, Corrosive	I	1,2	1	
	Methyl cyanide	6.1	UN 1648	Poison, Flammable Liquid	II	1	5	Shade from radiant heat. Segregation as for flammable liquids
	Methyl cyclohexane	3.2	UN 2296	Flammable Liquid	II	1,2	1	
	Methyl cyclohexanol	3.3	UN 2617	Flammable Liquid	III	1,2	1,2	
	Methyl cyclohexanone	3.3	UN 2297	Flammable Liquid	III	1,2	1,2	
	Methyl cyclopentane	3.1	UN 2298	Flammable Liquid	II	1,2	5	
	Methyl dichloroacetate	6.1	UN 2299	St. Andrews Cross	III	1,2	1,2	
	Methyldichlorosilane	3.2	UN 1242	Flammable Liquid, Corrosive	I	1,2	1	
	Methylene bis (phenylene isocyanate). *See* Diphenylmethane diisocyanate							
	Methylene chloride. *See* Dichloromethane							
	Methyl ethyl ether. *See* Ethyl methyl ether							
	Methyl ethyl ketone peroxide(s). *See* Ethyl methyl ketone peroxide							
	Methyl ethyl ketone. *See* Ethyl methyl ketone							
	2-Methyl-5-ethylpyridine	6.1	UN 2300	St. Andrews Cross	III	1,2	1,2	
	Methyl formate	3.1	UN 1243	Flammable Liquid	I	1,3	5	Keep cool
	2-Methylfuran	3.1	UN 2301	Flammable Liquid	II	1,3	5	Keep cool
	5-Methylhexan-2-one	3.3	UN 2302	Flammable Liquid	III	1,2	1,2	
	Methylhydrazine	3.2	UN 1244	Flammable Liquid, Corrosive	I	1,2	1	
	Methyl isobutyl carbinol	3.3	UN 2053	Flammable Liquid	III	1,2	1,2	
	Methyl isobutyl ketone	3.2	UN 1245	Flammable Liquid	II	1,2	1	
	Methyl isocyanate *and solutions*	3.1	UN 2480	Flammable Liquid, Poison	I	1	5	Stow 'away from' living quarters and sources of heat
	Methyl isocyanate *(and solutions)*	3.2	UN 2480	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Methyl isopropenyl ketone, *inhibited*	3.2	UN 1246	Flammable Liquid	II	1,2	1	
	Methyl isothiocyanate	3.2	UN 2477	Flammable Liquid, Poison	II	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Methylisovalerate	3.2	UN 2400	Flammable Liquid	II	1,2	1	
	Methyl magnesium bromide, *in ethyl ether*	4.2	UN 1928	Spontaneously Combustible	I	1	5	
	Methylmercaptan	2.1	UN 1064	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Methyl methacrylate, *monomer, inhibited*	3.2	UN 1247	Flammable Liquid	II	1,2	1	
	Methylmorpholine	3.3	UN 2535	Flammable Liquid, Corrosive	II	1,2	1,2	
	Methyl orthosilicate	3.2	UN 2606	Flammable Liquid, Poison	I	1,3	5	Keep cool
	Methylpentadiene	3.1	UN 2461	Flammable Liquid	II	1,3	5	Keep cool
	Methylpentanes	3.1	UN 2462	Flammable Liquid	II	1,3	5	Keep cool
	Methylphenyldichlorosilane	8	UN 2437	Corrosive	II	1	1	Keep dry. Segregation same as for flammable liquids
	1-Methylpiperidine	3.2	UN 2399	Flammable Liquid	II	1,2	1	
	Methyl propionate	3.2	UN 1248	Flammable Liquid	II	1,2	1	
	Methyl propyl ether	3.1	UN 2612	Flammable Liquid	II	1,3	5	Keep cool
	Methyl propyl ketone	3.2	UN 1249	Flammable Liquid	II	1,2	1	
	Methyl sulphide. *See* Dimethyl sulfide							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Methyltetrahydrofuran	3.2	UN 2536	Flammable Liquid	II	1,2	1	
	Methyl trichloroacetate	6.1	UN 2533	St. Andrews Cross	III	1,2	1	
	Methyltrichlorosilane	3.2	UN 1250	Flammable Liquid, Corrosive	II	1,2	1	
	alpha-Methyl valeraldehyde	3.3	UN 2367	Flammable Liquid	III	1,2	1,2	
	Methyl vinyl ketone	3.2	UN 1251	Flammable Liquid	II	1,2	1	
N	Mines, *with bursting charge*	1.1D	UN 0137	Explosive (1.1D)	--	--	--	
N	Mines, *with bursting charge*	1.2D	UN 0138	Explosive (1.2D)	--	--	--	
N	Mines, *with bursting charge*	1.1F	UN 0136	Explosive (1.1F)	--	--	--	
N	Mines, *with bursting charge*	1.2F	UN 0294	Explosive (1.2F)	--	--	--	
	Mischmetal, *powder*	4.1	UN 1333	Flammable Solid	II	1,2	5	Stow 'separated from' flammable substances and oxidizers
	Mischmetal, *slabs or ingots*	4.1	UN 1333	Flammable Solid	III	1,2	1,2	Stow 'separated from' flammable substances and oxidizers
	Mixed acid. *See* Acid mixtures, *nitrating acid*							
	Mixed acid, spent. See Acid mixtures, *spent*							
	Molybdenum pentachloride	8	UN 2508	Corrosive	III	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Monochlorodifluoromethane. *See* Chlorodifluoromethane							
	Monochloropentafluoroethane. *See* Chloropentafluoroethane							
	Monochlorotetrafluoroethane. *See* Chlorotetrafluoroethane							
	Monochlorotrifluoromethane. *See* Chlorotrifluoromethane							
	Monoethanolamine. *See* Ethanolamine *and solutions thereof.*							
	Monoethylamine. *See* Ethylamine							
	Monomethylamine, *anhydrous. See* Methylamine, *anhydrous*							
	Monomethylamine, *aqueous solution. See* Methylamine, *aqueous solution*							
	Monopropylamine	3.1	UN 1277	Flammable Liquid	II	1,2	5	
	Morpholine	3.3	UN 2054	Flammable Liquid	II	1,2	1,2	
	Motor fuel anti-knock mixtures	6.1	UN 1649	Poison	I	1	5	If flashpoint below 61 deg C segregation same as for flammable liquids
	Motor fuel, n.o.s.	3.1	(UN 1203)	Flammable Liquid	II	1,2	5	
	Motor spirit. *See* Gasoline							
	Muriatic acid. *See* Hydrochloric acid							
	Naphtha distillate	3.2	(UN 1268)	Flammable Liquid	II	1,2	1	
	Naphthalene, *crude or refined*	4.1	UN 1334	Flammable Solid	III	1,2	1,2	
	Naphtha, petroleum	3.2	UN 1255	Flammable Liquid	II	1,2	1	
	Naphtha, solvent	3.2	UN 1256	Flammable Liquid	II	1,2	1	
	Naphthylamine *(alpha)*	6.1	UN 2077	St. Andrews Cross	III	1,2	1,2	
	Naphthylamine *(beta)*	6.1	UN 1650	Poison	II	1,2	1,2	
	alpha-Naphthylthiourea	6.1	UN 1651	Poison	II	1,2	1,2	
	Naphthylurea	6.1	UN 1652	Poison	II	1,2	1,2	
	Napthalene, molten	4.1	UN 2304	Flammable Solid	III	1	1	Protect from sparks and open flame
	Natural gases with a high methane content. See Methane *or* natural gases, *etc.*							
	Natural gasoline. *See* Casinghead gasoline							
	N, N-Dimethylcyclohexylamine	8	UN 2264	Corrosive	II	1,2	1,2	Keep cool. Segregation same as for flammable liquids
	Neohexane. *See* Dimethyl butane							
	Neon, *compressed*	2.2	UN 1065	Nonflammable Gas	--	1,2	1,2	
	Neon, *liquid*	2.2	UN 1913	Nonflammable Gas	--	1	5	
	Nickel carbonyl	3.1	UN 1259	Flammable Liquid, Poison	I	1	5	Keep cool. Prohibited on any ship carrying explosives
	Nickel catalyst, *finely divided, activated or spent, wetted with not less than 40% of water or other suitable liquid*	4.2	UN 1378	Spontaneously Combustible	II	1,2	1	
	Nickel cyanide	6.1	UN 1653	Poison	II	1,2	1,2	
	Nicotine	6.1	UN 1654	Poison	II	1,2	1,2	
	Nicotine, *(compounds and preparations)*, n.o.s.	6.1	UN 1655	Poison	I/II	1,2	1,2	
		6.1	UN 1655	St. Andrews Cross	III	1,2	1,2	
	Nicotine hydrochloride, *and solutions*	6.1	UN 1656	Poison	II	1,2	1,2	
	Nicotine salicylate	6.1	UN 1657	Poison	II	1,2	1,2	
	Nicotine sulphate, *solid or solution*	6.1	UN 1658	Poison	II	1,2	1,2	
	Nicotine tartrate	6.1	UN 1659	Poison	II	1,2	1,2	
	Nitrate of soda and potash, mixture. *See* Sodium nitrate and potash, *mixture*							
	Nitrates, *(inorganic)*, n.o.s.	5.1	UN 1477	Oxidizer	II	1,2	1,2	
	Nitrating acid. *See* Acid mixtures, *nitrating acid*							
N	Nitric acid, *other than red fuming, all concentrations*	8	UN 2031	Corrosive	I/II			
N	Nitric acid, *red fuming*	8	UN 2032	Corrosive, Oxidizer	I			
	Nitric oxide	2.3	UN 1660	Poison Gas, Oxidizer	--	1	5	Stow 'away from' foodstuffs and living quarters
	Nitric oxide and nitrogen tetroxide, *mixtures*	2.3	UN 1975	Poison Gas, Oxidizer	--	1	5	Stow 'away from' foodstuffs, organic materials and living quarters
	Nitroanilines *(o-, m-, p-)*	6.1	UN 1661	Poison	II	1,2	1,2	
	Nitrobenzene	6.1	UN 1662	Poison	II	1,2	1,2	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Nitrobenzenesulphonic acid	8	UN 2305	Corrosive	II	1,2	1,2	
	Nitrobenzol. *See* Nitrobenzene							
N	5-Nitrobenzotriazol	1.1D	UN 0385	Explosive (1.1D)	--	--	--	
	Nitrobenzotrifluoride	6.1	UN 2306	Poison	II	1,2	1,2	
	Nitrocellulose, *containing at least 25% alcohol, by weight, and not exceeding 12.6% nitrogen by dry weight*	4.1	UN 2556	Flammable Solid	I	1	5	Shade from radiant heat, keep away from heat and open flame
	Nitrocellulose, *containing at least 25%, by weight, water*	4.1	UN 2555	Flammable Solid	II	1	5	Shade from radiant heat. Keep away from heat and open flame
	Nitrocellulose, *containing at least 18% plasticizing substance, by weight, and not exceeding 12.6% nitrogen by dry weight*	4.1	UN 2557	Flammable Solid	I	1	1	Shade from radiant heat. Keep away from heat and open flame
	Nitrocellulose, *in solution in flammable liquids*	3.2 3.3	UN 2059 UN 2060	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Nitrocellulose, *wetted with, by weight, more than 40% flammable liquids*	3.2 3.3	(UN 2556) (UN 2556)	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
N	Nitrocellulose with *less than 25%* alcohol, *by weight*	1.1D	UN 0340	Explosive (1.1D)	--	--	--	
N	Nitrocellulose with *less than 18%* plasticizing substance, *by weight*	1.1D	UN 0341	Explosive (1.1D)	--	--	--	
N	Nitrocellulose with *less than* 25% water, *by weight*	1.1D	UN 0340	Explosive (1.1D)	--	--	--	
N	Nitrocellulose with *not less than 25%* alcohol, *by weight*	1.3C	UN 0342	Explosive (1.3C)	--	--	--	
N	Nitrocellulose with *not less than 18%* plasticizing substance, *by weight*	1.3C	UN 0343	Explosive (1.3C)	--	--	--	
	3-Nitro-4-chlorobenzotrifluoride	6.1	UN 2307	Poison	II	1,2	1,2	
	Nitrocresols	6.1	UN 2446	Poison	III	1,2	1,2	
	Nitrogen, *compressed*	2.2	UN 1066	Nonflammable Gas	--	1,2	1,2	
	Nitrogen dioxide	2.3	UN 1067	Poison Gas, Oxidizer	--	1	5	Stow 'away from' foodstuffs, organic materials and living quarters
	Nitrogen, *liquid*	2.2	UN 1977	Nonflammable Gas	--	1	5	
	Nitrogen tetroxide. *See* Nitrogen dioxide							
	Nitrogen trifluoride	2.3	UN 2451	Poison Gas	--	1	5	Stow 'away from' living quarters and organic materials
	Nitrogen trioxide	2.3	UN 2421	Poison Gas	--	1	5	Stow 'away from' living quarters and readily combustible substances
N	Nitroglycerine, desensitized, *containing, by weight, at least 40% nonvolatile water-insoluble phlegmatizer*	1.1D	UN 0143	Explosive (1.1D), Poison	--	--	--	
N	Nitroglycerine, spirit of, *containing more than 1% but not more than 10% nitroglycerine in solution in alcohol*	1.1D	UN 0144	Explosive (1.1D)	--	--	--	
	Nitroglycerin solution, *up to 1% in alcohol. See* Glyceryl trinitrate, *solution*							
N	Nitroguanidine, *dry or containing, by weight, less than 20% water*	1.1D	UN 0282	Explosive (1.1D)	--	--	--	
	Nitroguanidine, *wetted with not less than 20% of water*	4.1	UN 1336	Flammable Solid	I	1,2	5	
	Nitrohydrochloric acid	8	UN 1798	Corrosive	I	1	5	Stow 'away from' fluorides
	Nitromethane	3.3	UN 1261	Flammable Liquid	II	1,2	1,2	
	Nitromuriatic acid. *See* Nitrohydrochloric acid							
	Nitronapthalene	4.1	UN 2538	Flammable Solid	III	1,2	1,2	
	Nitrophenols *(o-, m-, p-)*	6.1	UN 1663	St. Andrews Cross	III	1,2	1,2	
	Nitropropanes	3.3	UN 2608	Flammable Liquid	III	1,2	1,2	
	p-Nitrosodimethylaniline	4.2	UN 1369	Spontaneously Combustible	II	1,2	5	Stow 'away from' foodstuffs
N	Nitrostarch, *dry or containing, by weight, less than 20% water*	1.1D	UN 0146	Explosive (1.1D)	--	--	--	
	Nitrostarch, *wetted with not less than 20% of water*	4.1	UN 1337	Flammable Solid	I	1	5	
	Nitrosyl chloride	2.3	UN 1069	Poison Gas, Corrosive	--	1	5	Stow 'away from' foodstuffs and living quarters
	Nitrosylsulphuric acid	8	UN 2308	Corrosive	II	1	5	Stow 'away from' organic materials
	Nitrotoluenes *(o-, m-, p-)*	6.1	UN 1664	Poison	II	1,2	1,2	
N	Nitro urea	1.1D	UN 0147	Explosive (1.1D)	--	--	--	
	Nitrous oxide	2.2	UN 1070	Nonflammable Gas, Oxidizer	--	1,2	1,2	
	Nitroxylenes *(o-, m-, p-)*	6.1	UN 1665	Poison	II	1,2	1,2	
	Nonane	3.3	UN 1920	Flammable Liquid	II	1,2	1,2	
	n-Nonanoyl peroxide, *technical pure*	5.2	UN 2130	Organic Peroxide	II	1	5	Maximum transport temperature 0 deg C
	Nonyl trichlorosilane	8	UN 1799	Corrosive	II	1	1	Keep dry
	Octadecyl trichlorosilane	8	UN 1800	Corrosive	II	1	1	Keep dry
	Octadiene	3.2	UN 2309	Flammable Liquid	III	1,2	1	
	Octafluorocyclobutane	2.2	UN 1976	Nonflammable Gas	--	1,2	1,2	
	Octane *and its isomers*	3.2	UN 1262	Flammable Liquid	II	1,2	1	
	n-Octanoyl peroxide, *technical pure*	5.2	UN 2129	Organic Peroxide	II	1	5	Maximum transport temperature 10 deg C
N	Octolite, *dry or containing, by weight, less than 15% water*	1.1D	UN 0266	Explosive (1.1D)	--	--	--	
	Octyl trichlorosilane	8	UN 1801	Corrosive	II	1	1	Keep dry
	Oil gas	2.1	UN 1071	Flammable Gas, Poison Gas	--	1	5	Stow 'away from' living quarters
	Oleum. *See* Sulphuric acid, *fuming*							
	Organic peroxides, mixture (*this description must be supplemented with the name of the primary constituent of the mixture*)	5.2	UN 2756	Organic Peroxide	I/II	1	5	
	Organic peroxides, n.o.s.	5.2	UN 2255	Organic Peroxide	I/II	1	5	
	Organophosphates, *(poisonous)*, n.o.s.	6.1 6.1	UN 1893 UN 1893	Poison St. Andrews Cross	I/II III	1,2 1,2	1,2 1,2	
	Osmium tetroxide	6.1	UN 2471	Poison	I	1,2	1	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Oxalates, *water soluble*	6.1	UN 2449	St. Andrews Cross	III	1,2	1,2	
	Oxidizing substances, n.o.s.	5.1	UN 1479	Oxidizer	II	1,2	1,2	
	Oxygen and carbon dioxide, mixtures. See Carbon dioxide and oxygen *mixtures*							
	Oxygen, *compressed*	2.2	UN 1072	Nonflammable Gas, Oxidizer	--	1,2	1,2	
	Oxygen difluoride	2.3	UN 2190	Poison Gas	--	1	5	Keep dry. Stow 'away from' living quarters and readily combustible substances
	Oxygen, *liquid*	2.2	UN 1073	Nonflammable Gas, Oxidizer	--	1	5	Stow 'separated from' acetylene. Do not overstow
	Paint, enamel, lacquer, stain, shellac, varnish, polish, filler (liquid), lacquer base *and* thinner (*not including substances containing nitrocellulose for which See* Nitrocellulose.)	3.2 3.3	UN 1263 UN 1263	Flammable Liquid Flammable Liquid	II/III II/III	1,2 1,2	1 1,2	
	Paper, *treated with unsaturated oils, incompletely dried*	4.2	UN 1379	Spontaneously Combustible	III	1,2	1,2	
	Paraformaldehyde	4.1	UN 2213	None. Package to be marked 'Class 4.1'	III	1,2	1,2	
	Paraldehyde	3.3	UN 1264	Flammable Liquid	III	1,2	1,2	
	Parathion, *and mixtures, solid, liquid or under compressed gas*	6.1 6.1	UN 1668 UN 1668	Poison St. Andrews Cross	I/II III	1,2 1,2	1,2 1,2	Shade cylinders from radiant heat. Shade cylinders from radiant heat
	Pentaborane	4.2	UN 1380	Spontaneously Combustible	I	1	5	
	Pentachloroethane	6.1	UN 1669	Poison	II	1,2	1,2	
N	Pentaerythrite tetranitrate, *containing, by weight, at least 25% water or at least 15% phlegmatizer*	1.1D	UN 0150	Explosive (1.1D)	--	--	--	
	Pentane	3.1	UN 1265	Flammable Liquid	I	1,2	5	
	2,4-Pentanedione	3.3	UN 2310	Flammable Liquid	III	1,2	1,2	
N	Pentolite, *dry or containing, by weight, less than 15% water*	1.1D	UN 0151	Explosive (1.1D)	--	--	--	
	Peracetic acid, *maximum concentration 43% in acetic acid or in a mixture of acetic acid and water, with in either case not more than 6% hydrogen peroxide and not more than 1% sulphuric acid*	5.2	UN 2131	Organic Peroxide, Corrosive	I	1	5	
	Perborates, *(inorganic)*, n.o.s.	5.1	UN 1480	Oxidizer	II	1,2	1,2	
	Perchlorates, *(inorganic)*, n.o.s.	5.1	UN 1481	Oxidizer	II	1,3	1,3	Stow 'away from' powdered metals
	Perchloric acid, *not exceeding 50%, by weight, of acid*	8	UN 1802	Corrosive, Oxidizer	II	1	1	Stow 'away from' hydrazine
	Perchloric acid, *over 50% and not exceeding 72% of acid*	5.1	UN 1873	Oxidizer, Corrosive	I	1	5	
	Perchloroethylene. *See* Tetrachloroethylene							
	Perchloromethyl-mercaptan	6.1	UN 1670	Poison	I	1	5	
	Perchloryl fluoride	2.3	(UN 1955)	Poison Gas	--	1	5	Stow 'away from' living quarters and readily combustible substances
	Perfumery products, *flammable liquid*	3.2 3.3	UN 1266 UN 1266	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Permanganates, *(inorganic)*, n.o.s.	5.1	UN 1482	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds, hydrogen peroxide and strong liquid acids
	Peroxides, *(metallic)*, n.o.s.	5.1	UN 1483	Oxidizer	II	1,2	1,2	
	Pesticides, *(high hazard, solid or liquid)*, n.o.s.	6.1 6.1	UN 2588 UN 2588	Poison St. Andrews Cross	I/II III	1,2 1,2	1,2 1,2	Stow 'separated from' foodstuffs. Stow 'away from' foodstuffs
	Pesticides, *(liquid, non-toxic)*, n.o.s.	3.2 3.3	UN 1996 UN 1996	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Pesticides, *(liquid, toxic)*, n.o.s.	3.2	UN 1995	Flammable Liquid, Poison	II	1,2	1	
		3.3	UN 1995	Flammable Liquid, Poison	II	1,2	1,2	
	Pesticides, *(low hazard, solid or liquid)*, n.o.s.	9	--	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Petroleum crude oil	3.1 3.2 3.3	UN 1267 UN 1267 UN 1267	Flammable Liquid Flammable Liquid Flammable Liquid	II II II	1,2 1,2 1,2	5 1 1,2	
	Petroleum distillates, n.o.s.	3.1 3.2 3.3	UN 1268 UN 1268 UN 1268	Flammable Liquid Flammable Liquid Flammable Liquid	II II II	1,2 1,2 1,2	5 1 1,2	
	Petroleum ether. *See* Petroleum spirit							
	Petroleum gases, *liquefied*	2.1	UN 1075	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Petroleum oil	3.1 3.2 3.3	UN 1270 UN 1270 UN 1270	Flammable Liquid Flammable Liquid Flammable Liquid	II II II	1,2 1,2 1,2	5 1 1,2	
	Petroleum spirit	3.1 3.2 3.3	UN 1271 UN 1271 UN 1271	Flammable Liquid Flammable Liquid Flammable Liquid	II II II	1,2 1,2 1,2	5 1 1,2	
	Petrol. *See* Gasoline							
	Phenetidines	6.1	UN 2311	St. Andrews Cross	III	1,2	1,2	
	Phenol	6.1	UN 1671	Poison	II	1,2	1,2	
	Phenolsulphonic acid, *liquid*	8	UN 1803	Corrosive	II	1,2	1	Metal drums only under deck
	Phenylacetonitrile. *See* Benzyl cyanide, *liquid*							
	Phenylcarbylamine chloride	6.1	UN 1672	Poison	I	1	5	
	Phenylenediamines *(o-, m-, p-)*	6.1	UN 1673	St. Andrews Cross	III	1,2	1,2	
	Phenylhydrazine	6.1	UN 2572	Poison	II	1,2	1,2	
	Phenyl isocyanate	6.1	UN 2487	Poison	II	1	5	Shade from radiant heat
	Phenyl mercaptan	3.2	UN 2337	Flammable Liquid, Poison	II	1,2	1	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Phenylmercuric acetate	6.1	UN 1674	Poison	II	1,2	1,2	
	Phenylmercuric compounds, n.o.s.	6.1	UN 2026	Poison	I/II	1,2	1,2	
		6.1	UN 2026	St. Andrews Cross	III	1,2	1,2	
	Phenylmercuric hydroxide	6.1	UN 1894	Poison	II	1,2	1,2	
	Phenylmercuric nitrate	6.1	UN 1895	Poison	II	1,2	1,2	
	Phenyl trichlorosilane	8	UN 1804	Corrosive	II	1	1	Keep dry
	Phosgene	2.3	UN 1076	Poison Gas, Corrosive	--	1	5	Stow 'away from' living quarters
	Phosphine	2.3	UN 2199	Poison Gas, Flammable Gas	--	1	5	Stow 'away from' living quarters
	o-Phosphoric acid, *liquid*	8	UN 1805	Corrosive	III	1,2	1,2	Glass carboys in hampers prohibited under deck. Keep dry
	o-Phosphoric acid, *solid*	8	UN 1805	Corrosive	III	1,2	1,2	
	Phosphoric anhydride. *See* Phosphorus pentoxide							
	Phosphorous bromide. *See* Phosphorus tribromide							
	Phosphorous chloride. *See* Phosphorus trichloride							
	Phosphorus, *amorphous*	4.1	UN 1338	Flammable Solid	III	1,2	1,2	
	Phosphorus heptasulphide, *free from yellow or white phosphorus*	4.1	UN 1339	Flammable Solid	II	1,2	1	Stow 'separated from' oxidizing substances
	Phosphorus oxybromide	8	UN 1939	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Phosphorus oxychloride. *See* Phosphoryl chloride							
	Phosphorus pentachloride	8	UN 1806	Corrosive	II	1	1	Keep dry
	Phosphorus pentafluoride	2.3	UN 2198	Poison Gas	--	1	5	Stow 'away from' living quarters
	Phosphorus pentasulphide, *free from yellow or white phosphorus*	4.1	UN 1340	Flammable Solid	II	1,2	1,2	Stow 'separated from' oxidizing substances
	Phosphorus pentoxide	8	UN 1807	Corrosive	II	1,2	1,2	Glass bottles prohibited under deck
	Phosphorus sesquisulphide, *free from yellow or white phosphorus*	4.1	UN 1341	Flammable Solid	II	1,2	1	Stow 'separated from' oxidizing substances
	Phosphorus tribromide	8	UN 1808	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Phosphorus trichloride	8	UN 1809	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Phosphorus trifluoride	2.3	(UN 1955)	Poison Gas	--	1	5	Stow 'away from' living quarters
	Phosphorus trisulphide, *free from yellow or white phosphorus*	4.1	UN 1343	Flammable Solid	II	1,2	1	Stow 'separated from' oxidizing substances
	Phosphorus white, molten	4.2	UN 2447	Spontaneously Combustible	I	1	5	
	Phosphorus, *white or yellow, dry*	4.2	UN 1381	Spontaneously Combustible	I	1,2	5	
	Phosphorus, *white or yellow, in water*	4.2	UN 1381	Spontaneously Combustible	I	1,2	5	
	Phosphoryl chloride	8	UN 1810	Corrosive	II	1	1	Glass carboys prohibited on passenger vessels
N	Photo-flash powder *in units*	1.1G	UN 0094	Explosive (1.1G)	--	--	--	
N	Photo-flash powder *in units*	1.2G	UN 0096	Explosive (1.2G)	--	--	--	
N	Photo-flash powder *in units*	1.3G	UN 0305	Explosive (1.3G)	--	--	--	
	Phthalic anhydride, *dust, powder or molten liquid*	8	UN 2214	None	III	1,2	1,2	Stow 'away from' foodstuffs and oxidizing substances
	Picolines	3.3	UN 2313	Flammable Liquid	II	1,2	1,2	
	Picric acid, *wetted with not less than 10% of water*	4.1	UN 1344	Flammable Solid	I	1	5	Stow 'away from' heavy metals and their compounds
	Picric acid, *wetted with not less than 30% of water*	4.1	UN 1344	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
	Pinane hydroperoxide, *technical pure*	5.2	UN 2162	Organic Peroxide	I	1	5	
	alpha-Pinene	3.3	UN 2368	Flammable Liquid	III	1,2	1,2	
	Pine oil	3.3	UN 1272	Flammable Liquid	III	1,2	1,2	
	Piperidine	3.2	UN 2401	Flammable Liquid	II	1,2	1	Keep dry
	Pivaloyl chloride	8	UN 2438	Corrosive, Flammable Liquid	II	1	5	Shade from radiant heat. Segregation same as for flammable liquids
	Plastics moulding materials *evolving flammable vapours*	9	UN 2211	None	III	1,2	1,2	
	Plastics, *(spontaneously combustible)*, n.o.s.	4.2	UN 2006	Spontaneously Combustible	III	1	5	
	Poisonous liquids, n.o.s.	6.1	UN 2810	Poison	I/II	1,2	1	
		6.1	UN 2810	St. Andrews Cross	III	1,2	1,2	
	Poisonous solids, n.o.s.	6.1	UN 2811	Poison	I/II	1,2	1	
		6.1	UN 2811	St. Andrews Cross	III	1,2	1,2	
	Polishes. *See* Paints, *etc.*							
	Polishing fluid. *See* Flammable liquid preparations, n.o.s							
	Polystyrene beads, *expandable, containing flammable liquid.* *See* Plastics moulding materials							
	Potassium arsenate	6.1	UN 1677	Poison	II	1,2	1,2	
	Potassium arsenite	6.1	UN 1678	Poison	II	1,2	1,2	
	Potassium bifluoride, *solid*	8	UN 1811	Corrosive	II	1,2	1,2	Keep dry
	Potassium bifluoride, *solution*	8	UN 1811	Corrosive	II	1,2	1,2	
	Potassium borohydride	4.3	UN 1870	Dangerous When Wet	I	1,2	5	
	Potassium bromate	5.1	UN 1484	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and 'away from' powdered metals
	Potassium chlorate	5.1	UN 1485	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and 'away from' powdered metals
	Potassium chlorate, *aqueous solution*	5.1	UN 2427	Oxidizer	II	1,2	1	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Potassium cuprocyanide	6.1	UN 1679	Poison	II	1,2	1,2	Stow 'away from' acids

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Potassium cyanide	6.1	UN 1680	Poison	I	1,2	1,2	Stow 'away from' acids
	Potassium dithionite	4.2	UN 1929	Spontaneously Combustible	II	1,2	5	Keep dry
	Potassium fluoride	6.1	UN 1812	St. Andrews Cross, Corrosive	III	1,2	1,2	Stow 'away from' acids
	Potassium hydrogen fluoride. *See* Potassium bifluoride, *solution*							
	Potassium hydroxide, *solid*	8	UN 1813	Corrosive	II	1,2	1,2	Keep dry
	Potassium hydroxide, *solution*	8	UN 1814	Corrosive	II	1,2	1,2	
	Potassium hypochlorite, *solution. See* Hypochlorite, *solutions, etc.*							
	Potassium metal	4.2	UN 2257	Spontaneously Combustible	II	1,2	5	
	Potassium, metal alloys	4.3	UN 1420	Dangerous When Wet	II	1,2	5	
	Potassium metavanadate	6.1	UN 2864	Poison	II	1,2	1,2	
	Potassium nitrate	5.1	UN 1486	Oxidizer	III	1,2	1,2	
	Potassium nitrate and sodium nitrite, *mixture*	5.1	UN 1487	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and cyanides, and 'away from' foodstuffs
	Potassium nitrate bags, *empty. See* Bags, *empty and unwashed, etc.*							
	Potassium nitrite	5.1	UN 1488	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and cyanides, and 'away from' foodstuffs
	Potassium oxide	8	UN 2033	Corrosive	II	1,2	1,2	Keep dry
	Potassium perchlorate	5.1	UN 1489	Oxidizer	II	1,2	1,2	Stow 'away from powdered metals
	Potassium permanganate	5.1	UN 1490	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Potassium peroxide	5.1	UN 1491	Oxidizer	I	1,2	1,2	Keep dry
	Potassium persulphate	5.1	UN 1492	Oxidizer	III	1,2	1,2	
	Potassium phosphide	4.3	UN 2012	Dangerous When Wet, Poison	I	1	5	
N	Potassium salts of nitro-aromatic derivatives, *explosive*	1.3C	UN 0158	Explosive (1.3C)	--	--	--	
	Potassium silicofluoride, *solid*	6.1	UN 2655	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Potassium-sodium, *alloy*	4.3	UN 1422	Dangerous When Wet	I	1,2	5	
	Potassium sulphide, *anhydrous or containing less than 30% water of crystallization*	4.2	UN 1382	Spontaneously Combustible	II	1,2	1,2	Stow 'separated from' liquid acids
	Potassium sulphide, *hydrated, containing not less than 30% water of crystallization*	8	UN 1847	Corrosive	II	1,2	1,2	Stow 'separated from' explosives and acids
	Potassium superoxide	5.1	UN 2466	Oxidizer	I	1,2	1	Keep dry. Stow 'away from' combustible materials including packaging of other cargo
N	Powder paste, *containing, by weight, at least 35% water*	1.3C	UN 0159	Explosive (1.3C)	--	--	--	
N	Powder, smokeless	1.1C	UN 0160	Explosive (1.1C)	--	--	--	
N	Powder, smokeless	1.3C	UN 0161	Explosive (1.3C)	--	--	--	
	Primers, cap type	1.4B	UN 0378	Explosive (1.4B)	--	1,3	1,3	
	Primers, cap type	1.4S	UN 0044	None. Package to be marked '1.4S'	--	1,3	1,3	
N	Primers, cap type	1.1B	UN 0377	Explosive (1.1B)	--	--	--	
	Primers, tubular	1.4G	UN 0320	Explosive (1.4G)	--	1,3	1,3	
	Primers, tubular	1.4S	UN 0376	None. Package to be marked '1.4S'	--	1,3	1,3	
N	Primers, tubular	1.3G	UN 0319	Explosive (1.3G)	--	--	--	
	Projectiles, *inert, with tracer*	1.4 S	UN 0345	None. Package to be marked '1.4 S'	--	1,3	1,3	
N	Projectiles, *with burster or expelling charge*	1.2D	UN 0346	Explosive (1.2D)	--	--	--	
N	Projectiles, *with burster or expelling charge*	1.4D	UN 0347	Explosive (1.4D)	--	--	--	
N	Projectiles, *with bursting charge*	1.1D	UN 0168	Explosive (1.1D)	--	--	--	
N	Projectiles, *with bursting charge*	1.2D	UN 0169	Explosive (1.2D)	--	--	--	
N	Projectiles, *with bursting charge*	1.4D	UN 0344	Explosive (1.4D)	--	--	--	
N	Projectiles, *with bursting charge*	1.1F	UN 0167	Explosive (1.1F)	--	--	--	
N	Projectiles, *with bursting charge*	1.2F	UN 0324	Explosive (1.2F)	--	--	--	
	Propane	2.1	UN 1978	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Propanethiols	3.1	UN 2402	Flammable Liquid	II	1,3	5	Keep cool and dry. Stow 'away from' foodstuffs and all odor absorbing cargo.
		3.2	UN 2402	Flammable Liquid	II	1,3	1	Keep cool and dry. Stow 'away from' foodstuffs and all odor absorbing cargo
	Propanol	3.2	UN 1274	Flammable Liquid	II	1,2	1	
	Propionaldehyde	3.2	UN 1275	Flammable Liquid	II	1,2	1	
	Propionic acid, *solution containing not less than 80% acid*	8	UN 1848	Corrosive	III	1,2	1,2	Stow 'separated by a complete compartment or hold from' organic peroxides, and 'separated longitudinally by and intervening complete compartment or hold from' explosives
	Propionic anhydride	8	UN 2496	Corrosive	III	1,2	1,2	Keep dry. Glass carboys prohibited on passenger vessels
	Propionitrile	3.2	UN 2404	Flammable Liquid, Poison	II	1,3	5	Keep cool
	Propionyl chloride	8	UN 1815	Corrosive, Flammable Liquid	II	1	1	Keep dry. Stow 'separated longitudinally by an intervening complete compartment or hold from' explosives
	Propionyl peroxide, *maximum concentration 28% in solution*	5.2	UN 2132	Organic Peroxide	II	1	5	Maximum transport temperature 15 deg C
	n-Propyl acetate	3.2	UN 1276	Flammable Liquid	II	1,2	1	
	sec-Propyl alcohol. *See* Isopropanol							
	n-Propyl alcohol. *See* Propanol							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Propylamine. *See* Monopropylamine							
	Propyl benzene	3.3	UN 2364	Flammable Liquid	II	1,2	1,2	
	Propyl chloride	3.1	UN 1278	Flammable Liquid	II	1,3	5	Keep cool
	n-Propyl chloroformate	3.3	UN 2740	Flammable Liquid, Poison, Corrosive	I	1,2	1,2	
	Propylene	2.1	UN 1077	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Propylene diamine	3.3	UN 2258	Flammable Liquid, Corrosive	II	1,2	1,2	
	Propylenediamine	3.2	UN 2258	Flammable Liquid, Corrosive	II	1,2	1	
	Propylene dichloride	3.2	UN 1279	Flammable Liquid	II	1,2	1	
	Propyleneimine, *inhibited*	3.2	UN 1921	Flammable Liquid	I	1,2	1	
	Propylene oxide, *inhibited*	3.1	UN 1280	Flammable Liquid	I	1,3	5	Keep cool
	Propyl formates	3.2	UN 1281	Flammable Liquid	II	1,2	1	
	n-Propyl isocyanate	3.2	UN 2482	Flammable Liquid, Poison	I	1	5	Keep cool. Stow 'away from' living quarters and sources of heat
	Propyl mercaptan	3.1	UN 2704	Flammable Liquid	II	1,3	5	Keep cool and dry. Stow 'away from' foodstuffs and all odor absorbing cargo
		3.2	UN 2704	Flammable Liquid	II	1,3	1	Keep cool and dry. Stow 'away from' foodstuffs and all odor absorbing cargo
	n-Propyl nitrate	3.2	UN 1865	Flammable Liquid	II	1,2	1	
	Propyl trichlorosilane	8	UN 1816	Corrosive	II	1	1	Keep dry. Stow 'separated longitudinally by an intervening compartment or hold from' explosives
	Pyridine	3.2	UN 1282	Flammable Liquid, Poison	II	1,2	1	
	Pyrophoric alloys	4.2	UN 1383	Spontaneously Combustible	II	1	5	
	Pyrophoric fuel, n.o.s.	4.2	UN 1375	Spontaneously Combustible	I	1	5	Prohibited on vessels carrying explosives
	Pyrophoric liquids, n.o.s.. *See* Pyrophoric fuel, n.o.s							
	Pyrophoric metals	4.2	UN 1383	Spontaneously Combustible	II	1	5	
	Pyrosulphuryl chloride	8	UN 1817	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Pyroxylin. *See* Nitrocellulose							
	Pyrrolidine	3.2	UN 1922	Flammable Liquid	II	1,2	1	
	Rags, *oily*	4.2	UN 1856	Spontaneously Combustible	III	1,2	1,2	Keep dry
	Rare gases, *mixtures*	2.2	UN 1979	Nonflammable Gas	--	1,2	1,2	
	Rare gases, *mixtures with* nitrogen	2.2	UN 1981	Nonflammable Gas	--	1,2	1,2	
	Rare gases, *mixtures with* oxygen	2.2	UN 1980	Nonflammable Gas	--	1,2	1,2	
	Receptacles, *small, containing flammable compressed gas, not fitted with a dispersion device, not refillable*	2.1	UN 2037	Flammable Gas	--			
	Reducing liquid. *See* Flammable liquid preparation, n.o.s							
	Refrigerant gases, n.o.s.	2.1	UN 1078	Flammable Gas	--	1	1	
		2.2	UN 1078	Nonflammable Gas	--	1,2	1,2	
	Release devices, explosive	1.4 S	UN 0173	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Removing liquid. *See* Flammable liquid preparations, n.o.s							
	Resin, *solution in flammable liquid*	3.2	UN 1866	Flammable Liquid	II	1,2	1	
		3.3	UN 1866	Flammable Liquid	II	1,2	1,2	
	Rivets, explosive	1.4 S	UN 0174	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Road asphalt, *liquid, tars or oil. See* Cut-backs, *asphalt or bitumen*							
N	Rocket motors	1.1C	UN 0280	Explosive (1.1C)	--	--	--	
N	Rocket motors	1.2C	UN 0281	Explosive (1.2C)	--	--	--	
N	Rocket motors	1.3C	UN 0186	Explosive (1.3C)	--	--	--	
N	Rocket motors, *containing hypergolic liquids, with or without expelling charge*	1.2L	UN 0322	Explosive (1.2L)	--	--	--	
N	Rocket motors, *containing hypergolic liquids, with or without expelling charge*	1.3L	UN 0250	Explosive (1.3L)	--	--	--	
N	Rockets, line throwing	1.2G	UN 0238	Explosive (1.2G)	--	--	--	
N	Rockets, line throwing	1.3G	UN 0240	Explosive (1.3G)	--	--	--	
N	Rockets, *with bursting charge*	1.1E	UN 0181	Explosive (1.1E)	--	--	--	
N	Rockets, *with bursting charge*	1.2E	UN 0182	Explosive (1.2E)	--	--	--	
N	Rockets, *with bursting charge*	1.1F	UN 0180	Explosive (1.1F)	--	--	--	
N	Rockets, *with bursting charge*	1.2F	UN 0295	Explosive (1.2F)	--	--	--	
N	Rockets, *with inert head*	1.3C	UN 0183	Explosive (1.3C)	--	--	--	
	Rodenticides, n.o.s.	6.1	UN 1681	Poison	I/II	1,2	1,2	Stow 'separated from' foodstuffs.
		6.1	UN 1681	St. Andrews Cross	III	1,2	1,2	Stow 'separated from' foodstuffs.
		9	UN 1681	None	III	1,2	1,2	Stow 'away from' foodstuffs
	Rosin oil	3.2	UN 1286	Flammable Liquid	III	1,2	1	
		3.3	UN 1286	Flammable Liquid	III	1,2	1,2	
	R 22. See Chlorodifluoromethane							
	R 12. See Dichlorodifluoromethane							
	Rubber scrap, *powdered or granulated*	4.1	UN 1345	Flammable Solid	II	1,2	1,2	
	Rubber shoddy. *See* Rubber scrap							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo-vessel	(b) Passenger vessel	(c) Other requirements
	Rubber solution	3.2 3.3	UN 1287 UN 1287	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Rubidium, *(metal)*	4.3	UN 1423	Dangerous When Wet	I	1,2	5	
N	Samples, explosive substance, *other than primary explosives*	1	UN 0190	None	--	--	--	
	Sand acid. *See* Fluosilicic acid							
	Seed cake, *containing vegetable oil, mechanically expelled seeds, containing more than 10% of oil or more than 20% of oil and moisture combined*	4.2	UN 1386	None. Package to be marked 'Class 4.2'	III	1,2	5	
	Seed cake, *containing vegetable oil, solvent extractions and expelled seeds, containing not more than 10% of oil and, when the amount of moisture is higher than 10%, not more than 20% of oil and moisture combined*	4.2	UN 1386	None. Package to be marked 'Class 4.2'	III	1,2	1,2	
	Seed cake, *containing vegetable oil, solvent extractions containing not more than 1.5% of oil and 11% of moisture*	4.2	UN 2217	None. Package to be marked 'Class 4.2'	III	1,2	1,2	
	Selenic acid	8	UN 1905	Corrosive	I	1,2	1,2	Keep dry
	Selenium hexafluoride	2.3	UN 2194	Poison Gas	--	1	5	Stow 'away from' living quarters
	Shale oil	3.2 3.3	UN 1288 UN 1288	Flammable Liquid Flammable Liquid	II II	1,2 1,2	1 1,2	
	Sheep dips, *(poisonous)*, n.o.s.	6.1 6.1 9	UN 1682 UN 1682 UN 1682	Poison St. Andrews Cross None	I/II III III	1,2 1,2 1,2	1,2 1,2 1,2	Stow 'separated from' foodstuffs. Stow 'separated from' foodstuffs. Stow 'away from' foodstuffs.&
	Shellac. *See* Paints, *etc.*							
	Signal devices, hand	1.4S	UN 0373	None. Package to be marked '1.4S'	--	1,3	1,3	
	Signal devices, hand	1.4 G	UN 0191	Explosive (1.4G)	--	1,3	1,3	
N	Signals, distress, *ship (other than water-activated)*	1.1G	UN 0194	Explosive (1.1G)	--	--	--	
N	Signals, distress, *ship (other than water-activated)*	1.3G	UN 0195	Explosive (1.3G)	--	--	--	
N	Signals, railway track, explosive	1.1G	UN 0192	Explosive (1.1G)	--	--	--	
N	Signals, railway track, explosive	1.4S	UN 0193	None. Package to be marked '1.4S'	--	--	--	
N	Signals, smoke, *with explosive sound unit*	1.1G	UN 0196	Explosive (1.1G)	--	--	--	
N	Signals, smoke, *with explosive sound unit*	1.2G	UN 0313	Explosive (1.2G)	--	--	--	
	Signals, smoke, *without explosive sound unit*	1.4 G	UN 0197	Explosive (1.4G)	--	1,3	1,3	
	Silane	2.3	UN 2203	Poison Gas, Flammable Gas	--	1	5	Shade from radiant heat. Stow 'away from' living quarters, 'separated from' oxidizers
	Silicofluoric acid. *See* Fluosilicic acid							
	Silicofluorides, *solid*, n.o.s.	6.1	(UN 2811)	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Silicon chloride. *See* Silicon tetrachloride							
	Silicon powder, *amorphous*	4.1	UN 1346	Flammable Solid	III	1,2	1,2	
	Silicon tetrachloride	8	UN 1818	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Silicon tetrafluoride	2.3	UN 1859	Poison Gas, Corrosive	--	1	5	
	Silver arsenite	6.1	UN 1683	Poison	II	1,2	1,2	
	Silver cyanide	6.1	UN 1684	Poison	II	1,2	1,2	Stow 'away from' strong liquid acids
	Silver nitrate	5.1	UN 1493	Oxidizer	II	1,2	1,2	Stow 'away from' foodstuffs
	Sisal, dry. *See* Fibre, *vegetable, dry*							
	Sludge acid	8	UN 1906	Corrosive	II	1,2	1	Stow 'away from' fluorides. Metal drums only under deck
	Soda lime	8	UN 1907	Corrosive	III	1,2	1,2	Keep dry
	Sodium aluminate, *solution*	8	UN 1819	Corrosive	II	1,2	1,2	
	Sodium amalgam	4.3	UN 1424	Dangerous When Wet	I	1,2	1,2	
	Sodium amide	4.3	UN 1425	Dangerous When Wet	II	1,2	5	
	Sodium-ammonium-vanadate	6.1	UN 2863	Poison	II	1,2	1,2	
	Sodium arsanilate	6.1	UN 2473	St. Andrews Cross	III	1,2	1,2	
	Sodium arsenate	6.1	UN 1685	Poison	II	1,2	1,2	
	Sodium arsenite, *aqueous solutions*	6.1 6.1	UN 1686 UN 1686	Poison St. Andrews Cross	I/II III	1,2 1,2	1,2 1,2	
	Sodium arsenite, *solid*	6.1	UN 2027	Poison	II	1,2	1,2	Stow 'away from' oxidizers and organic peroxides
	Sodium azide	6.1	UN 1687	Poison	II	1,2	1,2	Stow 'away from' heavy metals and their compounds, 'separated from' acids
	Sodium bisulphate, *solid*. *See* Sodium hydrogen sulphate							
	Sodium bisulphite, *solution*. *See* Sodium hydrogen sulphite, *solution*							
	Sodium borohydride	4.3	UN 1426	Dangerous When Wet	I	1,2	5	
	Sodium bromate	5.1	UN 1494	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Sodium cacodylate	6.1	UN 1688	Poison	II	1,2	1,2	Stow 'away from' acids
	Sodium chlorate	5.1	UN 1495	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Sodium chlorate, *aqueous solution*	5.1	UN 2428	Oxidizer	II	1,2	1	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Sodium chlorite	5.1	UN 1496	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Sodium chlorite, *solution containing more than 5% available chlorine*	8	UN 1908	Corrosive	II	1,2	1	Glass carboys in hampers not permitted under deck
	Sodium cuprocyanide, *solid*	6.1	UN 2316	Poison	I	1,2	1,2	Keep dry. Stow 'separated from' acids
	Sodium cyanide	6.1	UN 1689	Poison	I	1,2	1,2	Stow 'away from' acids

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
N	Sodium dinitro-o-cresolate, *dry or containing, by weight, less than 15% water*	1.3C	UN 0234	Explosive (1.3C)	--	--	--	
	Sodium dinitro-o-cresolate, *wetted with not less than 15% of water*	4.1	UN 1348	Flammable Solid, Poison	I	1,2	5	Stow 'away from' heavy metals and their compounds
	Sodium dinitro-o-cresolate, *wetted with not less than 10% of water*	4.1	UN 1348	Flammable Solid, Poison	I	1	5	Stow 'away from' heavy metals and their compounds
	Sodium dithionite	4.2	UN 1384	Spontaneously Combustible	II	1,2	1,2	New metal drums only under deck
	Sodium fluoride, *solid*	6.1	UN 1690	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Sodium fluoride, *solution*	6.1	(UN 2810)	Poison	II	1,2	1,2	
	Sodium hydrate. *See* Sodium hydroxide, *solution*							
	Sodium hydride	4.3	UN 1427	Dangerous When Wet	I	1,2	5	
	Sodium hydrogen fluoride	8	UN 2439	Corrosive	II	1,3	1,3	Keep cool and dry
	Sodium hydrogen sulphate, *containing more than 3% free acid*	8	UN 1821	Corrosive	II	1,2	1,2	
	Sodium hydrogen sulphite, *solution*	8	UN 1909	Corrosive	II	1,2	1,2	
	Sodium hydrosulphide, *solid*	4.2	UN 2318	Spontaneously Combustible	II	1,2	1,2	
	Sodium hydroxide, *solid*	8	UN 1823	Corrosive	II	1,2	1,2	Keep dry
	Sodium hydroxide, *solution*	8	UN 1824	Corrosive	II	1,2	1,2	
	Sodium, *(metal)*	4.3	UN 1428	Dangerous When Wet	II	1,2	5	
	Sodium *metal, dispersion in organic liquids*	4.3	UN 1429	Dangerous When Wet	I	1,2	5	
	Sodium methylate	4.3	UN 1431	Dangerous When Wet	I	1,2	1	
	Sodium methylate, *solutions in alcohol*	3.2	UN 1289	Flammable Liquid	II	1,2	1	
		3.3	UN 1289	Flammable Liquid	II	1,2	1,2	
	Sodium monoxide	8	UN 1825	Corrosive	II	1,2	1,2	Keep dry
	Sodium nitrate	5.1	UN 1498	Oxidizer	III	1,2	1,2	
	Sodium nitrate and potash, *mixture*	5.1	UN 1478	Oxidizer	II	1,2	1,2	
	Sodium nitrate and potassium nitrate, *mixtures*	5.1	UN 1499	Oxidizer	III	1,2	1,2	
	Sodium nitrate bags, *empty. See* Bags, *empty and unwashed, etc.*							
	Sodium nitrite	5.1	UN 1500	Oxidizer	II	1,2	1,2	
	Sodium pentachlorophenate	6.1	UN 2567	Poison	II	1,2	1,2	
	Sodium percarbonates	5.1	UN 2467	Oxidizer	III	1,2	1,2	Keep dry
	Sodium perchlorate	5.1	UN 1502	Oxidizer	II	1,2	1,2	Stow 'away from' foodstuffs, 'separated from' ammonium compounds and cyanides. Paper bags prohibited on passenger vessels
	Sodium permanganate	5.1	UN 1503	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Sodium peroxide	5.1	UN 1504	Oxidizer	I	1,2	1	Keep dry. Stow 'away from' powdered metals, permanganates, and combustible packagings and cargo
	Sodium persulphate	5.1	UN 1505	Oxidizer	III	1,2	1,2	
	Sodium phenolate, *solid*	8	UN 2497	Corrosive	III	1,2	1,2	
	Sodium phosphide	4.3	UN 1432	Dangerous When Wet, Poison	I	1	5	
N	Sodium picramate, *dry or containing, by weight, less than 20% water*	1.3C	UN 0235	Explosive (1.3C)	--	--	--	
	Sodium picramate, *wetted with not less than 20% of water*	4.1	UN 1349	Flammable Solid	I	1,2	5	Stow 'away from' heavy metals and their compounds
	Sodium-potassium, *alloy. See* Potassium-sodium, *alloy*							
N	Sodium salts of nitro-aromatic derivatives, *explosive*	1.3C	UN 0203	Explosive (1.3C)	--	--	--	
	Sodium silicofluoride, *solid*	6.1	UN 2674	St. Andrews Cross	III	1,2	1,2	Stow 'away from' acids
	Sodium sulphide, *anhydrous or containing less than 30% water of crystallization*	4.2	UN 1385	Spontaneously Combustible	II	1,2	1,2	Stow 'separated from' acids
	Sodium sulphide, *hydrated, containing not less than 30% water of crystallization*	9	UN 1849	None	II	1,2	1,2	Stow 'separated from' explosives and acids
	Sodium superoxide	5.1	UN 2547	Oxidizer	I	1,2	5	Keep dry. Stow 'away from' powdered metals, permanganates and combustible packaging and cargo
	Solvents, *(non-toxic)*, n.o.s.	3.2	UN 1998	Flammable Liquid	II	1,2	1	
		3.3	UN 1998	Flammable Liquid	II	1,2	1,2	
	Solvents, *(toxic)*, n.o.s.	3.2	UN 1997	Flammable Liquid, Poison	II	1,2	1	
		3.3	UN 1997	Flammable Liquid, Poison	II	1,2	1,2	
N	Sounding devices, explosive	1.1E	UN 0374	Explosive (1.1E)	--	--	--	
N	Sounding devices, explosive	1.2E	UN 0375	Explosive (1.2E)	--	--	--	
N	Sounding devices, explosive	1.1F	UN 0296	Explosive (1.1F)	--	--	--	
N	Sounding devices, explosive	1.2F	UN 0204	Explosive (1.2F)	--	--	--	
	Spent mixed acid. See Acid mixtures, *spent*							
	Spirits of salts. *See* Hydrochloric acid							
	Squibs	1.4 S	UN 0206	None. Package to be marked '1.4 S'	--	1,3	1,3	
	Stains. *See* Paints, *etc.*							
	Stannic chloride, *anhydrous*	8	UN 1827	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Stannic chloride pentahydrate	8	UN 2440	Corrosive	III	1,2	1,2	Keep dry
	Stannic phosphides	4.3	UN 1433	Dangerous When Wet	I	1	5	
	Steel swarf. *See* Iron swarf							

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Stibine	2.3	(UN 1953)	Poison Gas, Flammable Gas	--	1	5	Stow 'away from' living quarters
	Straw	4.1	UN 1327	None	III	1,2	1,2	Stow 'away from' animal or vegetable oils
	Strike anywhere matches. *See* Matches, *strike anywhere*							
	Strontium, *alloys, non-pyrophoric*	4.3	UN 1434	Dangerous When Wet	II	1,2	5	
	Strontium arsenite	6.1	UN 1691	Poison	II	1,2	1,2	
	Strontium chlorate	5.1	UN 1506	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Strontium nitrate	5.1	UN 1507	Oxidizer	III	1,2	1,2	
	Strontium perchlorate	5.1	UN 1508	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals
	Strontium peroxide	5.1	UN 1509	Oxidizer	II	1,2	1,2	Keep dry
	Strontium phosphide	4.3	UN 2013	Dangerous When Wet, Poison	I	1	5	
	Strontium, powdered. *See* Pyrophoric metals							
	Strychnine, *and salts*	6.1	UN 1692	Poison	I	1,2	1,2	
	Styrene monomer, *inhibited*	3.3	UN 2055	Flammable Liquid	II	1,2	1,2	
N	Substances, explosive, n.o.s.	1.1L	UN 0357	Explosive (1.1L)	--	--	--	
N	Substances, explosive, n.o.s.	1.2L	UN 0358	Explosive (1.2L)	--	--	--	
N	Substances, explosive, n.o.s.	1.3L	UN 0359	Explosive (1.3L)	--	--	--	
	Succinic acid peroxide, *technical pure*	5.2	UN 2135	Organic Peroxide	I	1	5	
	Sulphides, n.o.s.	4.2	--	Spontaneously Combustible	III	1	5	
	Sulphur chlorides	8	UN 1828	Corrosive	I	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Sulphur dichloride. *See* Sulphur chlorides							
	Sulphur dioxide	2.3	UN 1079	Poison Gas	--	1,2	5	Stow 'away from' living quarters
	Sulphur hexafluoride	2.2	UN 1080	Nonflammable Gas	--	1,2	1,2	
	Sulphuric acid, *containing more than 51% acid*	8	UN 1830	Corrosive	II	1,2	1	Stow 'away from' fluorides and all other corrosives except nitric acids, sulphur trioxide and other sulphuric acids
	Sulphuric acid, *containing not more than 51% acid*	8	UN 1830	Corrosive	II	1,2	1	Stow 'away from' fluorides. Glass carboys in hampers not permitted under deck
	Sulphuric acid, *fuming*	8	UN 1831	Corrosive	I	1,2	1	Stow 'away from' fluorides and all other corrosives except nitric acids, sulphur trioxide and other sulphuric acids
	Sulphuric acid, *spent*	8	UN 1832	Corrosive	II	1,2	1	Stow 'away from' fluorides. For concentrations of more than 51% acid, stow 'away from' all other corrosives except nitric acids, sulphur trioxide and other sulphuric acids
	Sulphuric and hydrofluoric acid, mixtures. *See* Acid mixtures, *hydrofluoric and sulphuric*							
	Sulphuric anhydride. *See* Sulphur trioxide, *stabilized*							
	Sulphur, *lump or powder*	4.1	UN 1350	Flammable Solid	III	1,2	1,2	Protect from sparks and open flame. Stow 'separated from' oxidizing substances
	Sulphur, molten	4.1	UN 2448	Flammable Solid	III	1	1	Stow 'separated from' oxidizers, 'away from' living quarters. Protect from sparks and open flame
	Sulphurous acid	8	UN 1833	Corrosive	II	1,2	1	Glass carboys in hampers not permitted under deck
	Sulphur tetrafluoride	2.3	UN 2418	Poison Gas	--	1	5	Stow 'away from' living quarters
	Sulphur trioxide, *stabilized*	8	UN 1829	Corrosive	I	1,2	1,2	Keep dry. Glass bottles not permitted under deck. Stow 'away from' other corrosives except nitric and sulphuric acids
	Sulphuryl chloride	8	UN 1834	Corrosive	I	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Sulphuryl fluoride	2.2	UN 2191	Nonflammable Gas, Corrosive	--	1,2	5	Stow 'away from' living quarters
	Tars, *liquid.* *See* Cut-backs, *asphalt or bitumen*							
	Tear gas candles, *non-explosive*	6.1	UN 1700	Poison	II	1	5	
	Tear gas grenades, *non-explosive.* *See* Tear gas candles							
	Tear gas, *(irritating substances, liquid or solid)*, n.o.s.	6.1	UN 1693	Poison	I/II	1	5	
		6.1	UN 1693	St. Andrews Cross	III	1	5	
	Tellurium hexafluoride	2.3	UN 2195	Poison Gas	--	1	5	Stow 'away from' living quarters
	T.E.L. *See* Motor fuel anti-knock mixtures							
	Terpene hydrocarbons n.o.s.	3.3	UN 2319	Flammable Liquid	III	1,2	1,2	
	Terpinolene	3.3	UN 2541	Flammable Liquid	III	1,2	1,2	
	Tetrabromoethane. *See* Acetylene tetrabromide							
	1,1,2,2-Tetrachloroethane	6.1	UN 1702	Poison	II	1,2	1,2	
	Tetrachloroethylene	6.1	UN 1897	St. Andrews Cross	III	1,2	1,2	
	Tetraethyl dithiopyrophosphate, *liquid and mixtures*	6.1	UN 1704	Poison	I/II	1	5	
		6.1	UN 1704	St. Andrews Cross	III	1	5	
	Tetraethyl dithiopyrophosphate *with gases, including solutions and mixtures thereof*	6.1	UN 1703	Poison, Nonflammable gas	I/II	1	5	Shade from radiant heat. Segregation same as for nonflammable gases.
		6.1	UN 1703	St. Andrews Cross, Nonflammable gas	III	1	5	Shade from radiant heat. Segregation same as for nonflammable gases.
	Tetraethylenepentamine	8	UN 2320	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	Tetraethyl lead. *See* Motor fuel anti-knock mixtures							
	Tetraethyl pyrophosphate and compressed gas, *mixture*	6.1	UN 1705	Poison, Nonflammable gas	I/II	1	5	Shade from radiant heat. Segregation same as for nonflammable gases

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
		6.1	UN 1705	St. Andrews Cross, Nonflammable gas	III	1	5	Shade from radiant heat. Segregation same as for nonflammable gases
	Tetraethyl silicate	3.3	UN 1292	Flammable Liquid	II	1,2	1,2	
	Tetrafluoroethylene, *inhibited*	2.2	UN 1081	Nonflammable Gas	--	1,2	1,2	Stow 'away from' living quarters
	Tetrafluorohydrazine	2.3	(UN 1955)	Poison Gas	--	11	5	Stow 'away from' living quarters and readily combustible substances, 'separated from' hydrogen
	Tetrafluoromethane	2.2	UN 1982	Nonflammable Gas	--	1,2	1,2	
	1,2,3,6-Tetrahydrobenzaldehyde	3.3	UN 2498	Flammable Liquid	III	1,2	1,2	
	Tetrahydrofuran	3.1	UN 2056	Flammable Liquid	II	1,3	5	Keep cool
	1,2,3,6-Tetrahydropyridine	3.2	UN 2410	Flammable Liquid	II	1,2	1	
	Tetrahydrothiophene	3.2	UN 2412	Flammable Liquid	II	1,2	1	
	Tetralin hydroperoxide, *technical pure*	5.2	UN 2136	Organic Peroxide	I	1	5	
	Tetramethylammonium hydroxide	8	UN 1835	Corrosive	II	1,2	1,2	
	1,1,3,3-Tetramethyl butyl hydroperoxide, *technical pure*	5.2	UN 2160	Organic Peroxide	II	1	5	
	1,1,3,3-Tetramethyl butyl peroxy-2-ethyl hexanoate, *technical pure*	5.2	UN 2161	Organic Peroxide	I	1	5	Maximum transport temperature 20 deg C
	Tetramethylsilane	3.1	UN 2749	Flammable Liquid	I	1	5	Keep cool. Shade from radiant heat
N	Tetranitro-aniline	1.1D	UN 0207	Explosive (1.1D)	--	--	--	
	Tetranitromethane	5.1	UN 1510	Oxidizer	I	1	5	Shade from radiant heat. Stow 'away from' foodstuffs
	Textile waste, *(wet)*, n.o.s.	4.2	UN 1857	Spontaneously Combustible	III	1,2	1,2	
	Thallium chlorate	5.1	UN 2573	Oxidizer, Poison	II	1,2	1,2	
	Thallium compounds	6.1	UN 1707	Poison	II	1,2	1,2	
	Thinners. *See* Paints, *etc.*							
	Thinning liquid. *See* Flammable liquid preparations, n.o.s							
	Thioacetic acid	3.2	UN 2436	Flammable Liquid	II	1,2	1	
	Thiocarbonyl chloride. See Thiophosgene							
	Thioglycolic acid	8	UN 1940	Corrosive	II	1,2	1,2	Glass carboys in hampers prohibited under deck
	Thionyl chloride	8	UN 1836	Corrosive	I	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	4-Thiopentenal	6.1	UN 2785	St. Andrews Cross	III	1	5	Segregation same as for flammable liquids if flashpoint below 61 deg C. Shade from radiant heat and sunlight. Stow 'away from' living quarters, acids and bases
	Thiophene	3.2	UN 2414	Flammable Liquid	II	1,2	1	
	Thiophosgene	6.1	UN 2474	Poison	II	1,2	1	Stow 'away from' acids
	Thiophosphoryl chloride	8	UN 1837	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Tin chloride, *fuming. See* Stannic chloride, *anhydrous*							
	Tinctures, *medicinal*	3.2	UN 1293	Flammable Liquid	II	1,2	1	
	Tin tetrachloride. *See* Stannic chloride, *anhydrous*							
	Titanium hydride	4.1	UN 1871	Flammable Solid	II	1,2	5	
	Titanium metal powder, dry	4.2	UN 2546	Spontaneously Combustible	II	1,2	5	
	Titanium metal powder, wet, *with not less than 25% water (a visible excess of water must be present)*	4.1	UN 1352	Flammable Solid	II	1,2	5	
	Titanium tetrachloride	8	UN 1838	Corrosive	II	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Titanium trichloride	4.2	UN 2441	Spontaneously Combustible, Corrosive	II	1,2	1,2	
	Toe puffs, *nitrocellulose base*	4.1	UN 1353	Flammable Solid	III	1	5	
	Toluene	3.2	UN 1294	Flammable Liquid	II	1,2	1	
	Toluene diisocyanate *(T.D.I.)*	6.1	UN 2078	Poison	II	1,3	1,3	Shade from radiant heat. Stow 'away from' living quarters and sources of heat
	Toluidines *(o-, m-, p-)*	6.1	UN 1708	Poison	II	1,2	1,2	Stow 'away from' acids
	2,4-Toluylenediamine	6.1	UN 1709	St. Andrews Cross	III	1,2	1,2	
N	Torpedoes, *with bursting charge*	1.1E	UN 0329	Explosive (1.1E)	--	--	--	
N	Torpedoes, *with bursting charge*	1.1F	UN 0330	Explosive (1.1F)	--	--	--	
	Tracers for ammunition	1.4 G	UN 0306	Explosive (1.4G)	--	1,3	1,3	
N	Tracers for ammunition	1.3G	UN 0212	Explosive (1.3G)	--	--	--	
	Triallylamine	3.3	UN 2610	Flammable Liquid	II	1,2	1,2	
	Tributylamine	8	UN 2542	Corrosive	III	1,2	1,2	
	Trichloroacetic acid, *solid*	8	UN 1839	Corrosive	II	1,2	1,2	Keep dry
	Trichloroacetic acid, *solutions*	8	UN 2564	Corrosive	II	1,2	1	Glass carboys in hampers prohibited under deck
	Trichloroacetyl chloride	8	UN 2442	Corrosive	II	1	5	Keep dry
	Trichlorobenzene, *liquid*	6.1	UN 2321	St. Andrews Cross	III	1,2	1,2	
	Trichlorobutene	6.1	UN 2322	St. Andrews Cross	III	1,3	1,3	Stow 'away from' sources of heat. Segregation same as for flammable liquids
	Trichloroethylene	6.1	UN 1710	St. Andrews Cross	III	1,2	1,2	
	Trichloroisocyanuric acid, *dry*	5.1	UN 2468	Oxidizer	II	1,2	1,2	Shade from radiant heat. Keep dry. Stow 'separated from' nitrogen compounds
	Trichlorosilane	4.3	UN 1295	Dangerous When Wet, Flammable Liquid	I	1	5	

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Tricresylphosphate, *with more than 3% ortho isomer*	6.1	UN 2574	Poison	II	1,2	1,2	
	Triethylaluminium. See Aluminium triethyl							
	Triethylamine	3.2	UN 1296	Flammable Liquid	II	1,2	1	
	Triethylenetetramine	8	UN 2259	Corrosive	II	1,2	1	Stow 'separated from' nitric acid, 'away from' acids, copper and copper alloys and living quarters
	Triethyl phosphite	3.3	UN 2323	Flammable Liquid	III	1,2	1,2	
	Trifluorobromomethane. See Bromotrifluoromethane							
	Trifluorochloroethane	2.2	UN 1983	Nonflammable Gas	–	1,2	1,2	
	Trifluorochloroethylene	2.1	UN 1082	Flammable Gas	–	1,2	1	Stow 'away from' living quarters
	Trifluorochloromethane. See Chlorotrifluoromethane							
	Trifluoroethane	2.1	UN 2035	Flammable Gas	–	1,2	1	Stow 'away from' living quarters
	Trifluoromethane	2.2	UN 1984	Nonflammable Gas	–	1,2	1,2	
	Triisobutyl aluminium	4.2	UN 1930	Spontaneously Combustible	I	1	1	
	Triisobutylene	3.3	UN 2324	Flammable Liquid	II	1,2	1,2	
	Triisopropyl borate	3.3	UN 2616	Flammable Liquid	II	1,2	1,2	
	Trimethylaluminium. See Aluminium trimethyl							
	Trimethylamine, *anhydrous*	2.1	UN 1083	Flammable Gas, Poison Gas	–	1	5	Stow 'away from' living quarters
	Trimethylamine, *aqueous solutions containing not more than 30% of trimethylamine*	3.2	UN 1297	Flammable Liquid	II	1,2	1	Stow 'away from' mercury and its compounds
	1,3,5-Trimethylbenzene	3.3	UN 2325	Flammable Liquid	III	1,2	1,2	
	Trimethyl borate	3.1	UN 2416	Flammable Liquid	II	1,3	5	Keep cool
	Trimethylchlorosilane	3.2	UN 1298	Flammable Liquid, Corrosive	I	1,2	1	
	Trimethylcyclohexylamine	8	UN 2326	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	3,3,5-Trimethylhexamethylene diamine	8	UN 2327	Corrosive	III	1,2	1,2	Glass carboys prohibited on passenger vessels
	Trimethylhexamethylene diisocyanate	6.1	UN 2328	Poison	II	1,2	1	
	Trimethyl phosphite	3.3	UN 2329	Flammable Liquid	III	1,2	1,2	
N	Trinitro-aniline	1.1D	UN 0153	Explosive (1.1D)	–	–	–	
N	Trinitroanisole	1.1D	UN 0213	Explosive (1.1D)	–	–	–	
N	Trinitrobenzene, *dry or containing, by weight, less than 35% water*	1.1D	UN 0214	Explosive (1.1D)	–	–	–	
N	Trinitrobenzenesulfonic acid	1.1L	UN 0386	Explosive (1.1L)	–	–	–	
	Trinitrobenzene, *wetted with not less than 10% of water*	4.1	UN 1354	Flammable Solid	I	1	5	Stow 'away from' heavy metals and their compounds
N	Trinitrobenzoic acid, *dry or containing, by weight, less than 30% water*	1.1D	UN 0215	Explosive (1.1D)	–	–	–	
	Trinitrobenzoic acid, *wetted with not less than 10% of water*	4.1	UN 1355	Flammable Solid	I	1	5	Stow 'away from' heavy metals and their compounds
N	Trinitrochlorobenzene	1.1D	UN 0155	Explosive (1.1D)	–	–	–	
N	Trinitrofluorenone	1.1D	UN 0387	Explosive (1.1D)	–	–	–	
N	Trinitrometacresol	1.1D	UN 0216	Explosive (1.1D)	–	–	–	
N	Trinitronaphthalene	1.1D	UN 0217	Explosive (1.1D)	–	–	–	
N	Trinitrophenetole	1.1D	UN 0218	Explosive (1.1D)	–	–	–	
N	Trinitrophenol, *dry or containing, by weight, less than 30% water*	1.1D	UN 0154	Explosive (1.1D)	–	–	–	
	Trinitrophenol, wetted. See Picric acid, wetted							
N	Trinitrophenylmethylnitramine	1.1D	UN 0208	Explosive (1.1D)	–	–	–	
N	Trinitroresorcinol, *containing, by weight, not less than 20% water or mixture of alcohol and water*	1.1D	UN 0394	Explosive (1.1D)	–	–	–	
N	Trinitroresorcinol, *dry or containing, by weight, less than 20% water or mixture of alcohol and water*	1.1D	UN 0219	Explosive (1.1D)	–	–	–	
N	Trinitrotoluene, *dry or containing, by weight, less than 30% water*	1.1D	UN 0209	Explosive (1.1D)	–	–	–	
N	Trinitrotoluene *mixed* with hexanitrostilbene	1.1D	UN 0388	Explosive (1.1D)	–	–	–	
N	Trinitrotoluene *mixed* with trinitrobenzene	1.1D	UN 0388	Explosive (1.1D)	–	–	–	
N	Trinitrotoluene *mixed* with trinitrobenzene and hexanitrostilbene	1.1D	UN 0389	Explosive (1.1D)	–	–	–	
	Trinitrotoluene, *wetted with not less than 10% of water*	4.1	UN 1356	Flammable Solid	I	1	5	Stow 'away from' heavy metals and their compounds
	Tripropylamine	3.3	UN 2260	Flammable Liquid, Corrosive	II	1,2	1,2	
	Tripropylene	3.2	UN 2057	Flammable Liquid	II	1,2	1	
		3.3	UN 2057	Flammable Liquid	II	1,2	1,2	
	Tris-(1-aziridinyl)phosphine oxide, *solution*	6.1	UN 2501	Poison	II	1,2	1,2	
N	Tritonal	1.1D	UN 0390	Explosive (1.1D)	–	–	–	
	Tungsten hexafluoride	2.3	UN 2196	Poison Gas	–	1	5	Stow 'away from' living quarters
	Turpentine	3.3	UN 1299	Flammable Liquid	III	1,2	1,2	
	Turpentine substitute	3.2	UN 1300	Flammable Liquid	II	1,2	1	
		3.3	UN 1300	Flammable Liquid	II	1,2	1,2	
	U D M H. See Dimethylhydrazine, *unsymmetrical*							
	Undecane	3.3	UN 2330	Flammable Liquid	III	1,2	1,2	
	Urea hydrogen peroxide	5.1	UN 1511	Oxidizer	III	1,2	1,2	Keep dry. Shade from radiant heat
N	Urea nitrate, *dry or containing, by weight, less than 20% water*	1.1D	UN 0220	Explosive (1.1D)	–	–	–	
	Urea nitrate, *wetted with not less than 10% of water*	4.1	UN 1357	Flammable Solid	I	1,2	1,2	
	Valeraldehyde	3.2	UN 2058	Flammable Liquid	II	1,2	1	
	Valeryl chlorides	8	UN 2502	Corrosive	II	1	1	Keep dry
	Vanadium oxitrichloride	8	UN 2443	Corrosive	II	1	1	Keep dry. Stow 'away from' organic compounds

172.102 Optional Hazardous Materials Table (Cont'd)

(1) Notes and Symbols	(2) Hazardous Materials Description and Proper Shipping Names	(3) IMCO Class	(4) Identification Number	(5) Label(s) required	(6) Packaging Group	(7) Vessel Stowage Requirements (a) Cargo vessel	(b) Passenger vessel	(c) Other requirements
	Vanadium pentoxide, *non-fused form*	6.1	UN 2862	Poison	II	1,2	1,2	
	Vanadium tetrachloride	8	UN 2444	Corrosive	I	1	1	Keep dry. Glass carboys prohibited on passenger vessels
	Vanadium trichloride	8	UN 2475	Corrosive	III	1,2	1,2	Keep dry
	Vanadium trioxide, *non-fused form*	6.1	UN 2860	Poison	II	1,2	1,2	
	Varnish. *See* Paints, *etc.*							
	Vinyl acetate, *inhibited*	3.2	UN 1301	Flammable Liquid	II	1,2	1	
	Vinyl bromide, *inhibited*	2.1	UN 1085	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Vinyl chloride, *inhibited*	2.1	UN 1086	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Vinyl ethyl ether, *inhibited*	3.1	UN 1302	Flammable Liquid	I	1,3	5	Keep cool
	Vinyl fluoride, *inhibited*	2.1	UN 1860	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Vinyl isobutyl ether, *inhibited*	3.2	UN 1304	Flammable Liquid	II	1,2	1	
	Vinyl methyl ether, *inhibited*	2.1	UN 1087	Flammable Gas	--	1,2	1	Stow 'away from' living quarters
	Vinyl Toluenes *(mixed isomers), inhibited*	3.3	UN 2618	Flammable Liquid	III	1,2	1,2	
	Vinyl trichlorosilane, *inhibited*	3.2	UN 1305	Flammable Liquid, Corrosive	I	1,2	1	
N	Warheads, rocket, *with burster or expelling charge*	1.4D	UN 0370	Explosive (1.4D)	--	--	--	
N	Warheads, rocket, *with burster or expelling charge*	1.4F	UN 0371	Explosive (1.4F)	--	--	--	
N	Warheads, rocket, *with bursting charge*	1.1D	UN 0286	Explosive (1.1D)	--	--	--	
N	Warheads, rocket, *with bursting charge*	1.2D	UN 0287	Explosive (1.2D)	--	--	--	
N	Warheads, rocket, *with bursting charge*	1.1F	UN 0369	Explosive (1.1F)	--	--	--	
N	Warheads, torpedo, *with bursting charge*	1.1D	UN 0221	Explosive (1.1D)	--	--	--	
	Water-gas	2.1	(UN 1953)	Flammable Gas, Poison Gas	--	1	5	Stow 'away from' living quarters
	White asbestos. *See* Asbestos, white							
	White phosphorus, *dry. See* Phosphorus, *white or yellow, dry*							
	White phosphorus, *wet. See* Phosphorus, *white or yellow, in water*							
	Wood alcohol. See Methanol							
	Wool waste, *wet*	4.2	UN 1387	Spontaneously Combustible	III	1,2	1,2	
	Xenon	2.2	UN 2036	Nonflammable Gas	--	1,2	1,2	
	Xylenes	3.2	UN 1307	Flammable Liquid	II	1,2	1	
		3.3	UN 1307	Flammable Liquid	II	1,2	1,2	
	Xylenols	6.1	UN 2261	Poison	II	1,2	1,2	
	Xylidines	6.1	UN 1711	Poison	II	1,2	1,2	Stow 'away from' acids
	Xylols. See Xylenes							
	Xylyl bromide	6.1	UN 1701	Poison	II	1	5	
	Yellow phosphorus, *dry. See* Phosphorus, *white or yellow, dry*							
	Yellow phosphorus, *wet. See* Phosphorus, *white or yellow, in water*							
	Zinc arsenate and arsenite, *solid mixtures*	6.1	UN 1712	Poison	II	1,2	1,2	
	Zinc ashes	4.3	UN 1435	Dangerous When Wet	III	1,2	1,2	
	Zinc bromate	5.1	UN 2469	Oxidizer	III	1,2	1,2	Stow 'away from' powdered metals and 'separated from' ammonium compounds
	Zinc chlorate	5.1	UN 1513	Oxidizer	II	1,2	1,2	Stow 'away from' powdered metals, 'separated from' ammonium compounds
	Zinc chloride, *anhydrous*	8	UN 2331	Corrosive	III	1,2	1,2	Keep dry
	Zinc chloride, *solution*	8	UN 1840	Corrosive	III	1,2	1,2	
	Zinc cyanide	6.1	UN 1713	Poison	I	1,2	1,2	Stow 'away from' acids
	Zinc dithionite	9	UN 1931	None	III	1,2	1,2	Keep dry. Stow 'away from' acids
	Zinc ethyl. See Diethylzinc							
	Zinc nitrate	5.1	UN 1514	Oxidizer	II	1,2	1,2	
	Zinc permanganate	5.1	UN 1515	Oxidizer	II	1,2	1,2	Stow 'separated from' ammonium compounds and hydrogen peroxide
	Zinc peroxide	5.1	UN 1516	Oxidizer	II	1,2	1,2	Keep dry
	Zinc phosphide	6.1	UN 1714	Poison, Dangerous When Wet	II	1,2	1,2	Stow 'away from' acids and oxidizers
	Zinc, *powder or dust, non-pyrophoric*	4.3	UN 1436	Dangerous When Wet	II	1,2	1,2	
	Zinc, *powder or dust, pyrophoric. See* Pyrophoric metals							
	Zirconium hydride	4.1	UN 1437	Flammable Solid	II	1,2	5	
	Zirconium, *metal, dry, coiled wire, finished metal sheets, strip (thinner than 18 microns)*	4.2	UN 2009	Spontaneously Combustible	III	1	5	
	Zirconium, *metal, dry coiled wire or finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)*	4.1	(UN 1325)	Flammable Solid	III	1,2	1,2	
	Zirconium, *metal, dry, powder or sponge*	4.2	UN 2008	Spontaneously Combustible	II	1	5	
	Zirconium metal powder, dry	4.2	UN 2008	Spontaneously Combustible	II	1	5	
	Zirconium metal powder, wet *with not less than 25% water (a visible excess of water must be present)*	4.1	UN 1358	Flammable Solid	II	1,2	5	
N	Zirconium picramate, *dry or containing, by weight, less than 20% water*	1.3C	UN 0236	Explosive (1.3C)	--	--	--	
	Zirconium picramate, *wetted with not less than 20% of water*	5.1	UN 1517	Oxidizer	I	1	5	Stow 'away from' heavy metals and their salts
	Zirconium, *scrap*	4.2	UN 1932	Spontaneously Combustible	III	1	5	
	Zirconium, *suspended in flammable liquid*	3.1	UN 1308	Flammable Liquid	II	1	5	Keep cool
	Zirconium tetrachloride	8	UN 2503	Corrosive	III	1,2	1,2	Keep dry

14. A Numeric-Alpha index is added as Appendix A to Subpart B of Part 172 to read as follows:

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 0001	102	Alarm devices, explosive
UN 0004	102	Ammonium picrate
UN 0005	102	Cartridges for weapons
UN 0006	102	Cartridges for weapons
UN 0007	102	Cartridges for weapons
UN 0009	102	Ammunition, incendiary
UN 0010	102	Ammunition, incendiary
UN 0012	102	Cartridges for weapons
UN 0014	102	Cartridges for weapons, blank
UN 0015	102	Ammunition, smoke
UN 0016	102	Ammunition, smoke
UN 0018	102	Ammunition, tear producing
UN 0019	102	Ammunition, tear producing
UN 0020	102	Ammunition, toxic
UN 0021	102	Ammunition, toxic
UN 0022	102	Amorces
UN 0027	102	Black powder
UN 0028	102	Black powder, compressed
UN 0029	102	Blasting caps, non-electric
UN 0030	102	Blasting caps, electric
UN 0033	102	Bombs
UN 0034	102	Bombs
UN 0035	102	Bombs
UN 0037	102	Bombs, photo-flash
UN 0038	102	Bombs, photo-flash
UN 0039	102	Bombs, photo-flash
UN 0042	102	Boosters
UN 0042	102	Gaines, without detonator
UN 0043	102	Bursters
UN 0044	102	Caps, percussion
UN 0044	102	Primers, cap type
UN 0048	102	Charges, demolition
UN 0049	102	Cartridges, flash
UN 0050	102	Cartridges, flash
UN 0054	102	Cartridges, signal
UN 0055	102	Cases, cartridges, empty, with primer
UN 0056	102	Charges, depth
UN 0059	102	Charges, shaped
UN 0060	102	Charges, supplementary, explosive
UN 0065	102	Cord, detonating
UN 0066	102	Cord, igniter
UN 0070	102	Cutters, cable, explosive
UN 0072	102	Cyclotrimethylenetrinitramine
UN 0073	102	Detonators for ammunition
UN 0074	102	Diazodinitrophenol
UN 0075	102	Diethyleneglycol dinitrate
UN 0076	102	Dinitrophenol
UN 0077	102	Dinitrophenates
UN 0078	102	Dinitroresorcinol
UN 0079	102	Hexanitrodiphenylamine
UN 0081	102	Explosives, blasting, Type A
UN 0082	102	Explosives, blasting, Type B
UN 0083	102	Explosives, blasting, Type C
UN 0084	102	Explosives, blasting, Type D
UN 0092	102	Flares, surface
UN 0093	102	Flares, aerial
UN 0094	102	Photo-flash powder
UN 0096	102	Photo-flash powder
UN 0099	102	Fracturing devices, explosive
UN 0101	102	Fuse, instantaneous, non-detonating
UN 0102	102	Cord, detonating
UN 0103	102	Fuse, igniter
UN 0104	102	Cord, detonating, mild effect
UN 0105	102	Fuse, safety
UN 0106	102	Fuzes, detonating
UN 0107	102	Fuzes, detonating
UN 0110	102	Grenades, practice
UN 0113	102	Guanyl nitrosamino guanylidene hydrazine
UN 0114	102	Guanyl nitrosamino guanyl tetrazene
UN 0118	102	Hexolite
UN 0121	102	Igniters
UN 0124	102	Jet perforating guns, charged
UN 0129	102	Lead azide
UN 0130	102	Lead styphnate
UN 0131	102	Lighters, fuse
UN 0132	102	Deflagrating metal salts of aromatic nitro-derivatives, n.o.s.
UN 0133	102	Mannitol hexanitrate
UN 0135	102	Mercury fulminate

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 0136	102	Mines
UN 0137	102	Mines
UN 0138	102	Mines
UN 0143	102	Nitroglycerine, desensitized
UN 0144	102	Nitroglycerine, spirit of
UN 0146	102	Nitrostarch
UN 0147	102	Nitro urea
UN 0150	102	Pentaerythrite tetranitrate
UN 0151	102	Pentolite
UN 0153	102	Trinitro-aniline
UN 0154	102	Trinitrophenol
UN 0155	102	Trinitrochlorobenzene
UN 0158	102	Potassium salts of nitro-aromatic derivatives
UN 0159	102	Powder paste
UN 0160	102	Powder, smokeless
UN 0161	102	Powder, smokeless
UN 0167	102	Projectiles
UN 0168	102	Projectiles
UN 0169	102	Projectiles
UN 0171	102	Ammunition, illuminating
UN 0173	102	Release devices, explosive
UN 0174	102	Rivets, explosive
UN 0180	102	Rockets
UN 0181	102	Rockets
UN 0182	102	Rockets
UN 0183	102	Rockets
UN 0186	102	Rocket motors
UN 0190	102	Samples, explosive substance
UN 0191	102	Signal devices, hand
UN 0192	102	Signals, railway track, explosive
UN 0193	102	Signals, railway track, explosive
UN 0194	102	Signals, distress
UN 0195	102	Signals, distress
UN 0196	102	Signals, smoke
UN 0197	102	Signals, smoke
UN 0203	102	Sodium salts of nitro-aromatic derivatives
UN 0204	102	Sounding devices, explosive
UN 0206	102	Squibs
UN 0207	102	Tetranitro-aniline
UN 0208	102	Trinitrophenylmethylnitramine
UN 0209	102	Trinitrotoluene
UN 0212	102	Tracers for ammunition
UN 0213	102	Trinitroanisole
UN 0214	102	Trinitrobenzene
UN 0215	102	Trinitrobenzoic acid
UN 0216	102	Trinitrometacresol
UN 0217	102	Trinitronaphthalene
UN 0218	102	Trinitrophenetole
UN 0219	102	Trinitroresorcinol
UN 0220	102	Urea nitrate
UN 0221	102	Warheads, torpedo
UN 0222	102	Ammonium nitrate
UN 0223	102	Ammonium nitrate fertilizers
UN 0224	102	Barium azide
UN 0225	102	Boosters, with detonator
UN 0225	102	Gaines, with detonator
UN 0226	102	Cyclotetramethylenetetranitramine
UN 0234	102	Sodium dinitro-o-cresolate
UN 0235	102	Sodium picramate
UN 0236	102	Zirconium picramate
UN 0237	102	Charges, shaped, flexible, linear
UN 0238	102	Rockets, line throwing
UN 0240	102	Rockets, line throwing
UN 0241	102	Explosives, blasting, Type E
UN 0242	102	Charges, propelling, for cannon
UN 0243	102	Ammunition, incendiary, white phosphorus
UN 0244	102	Ammunition, incendiary, white phosphorus
UN 0245	102	Ammunition, smoke, white phosphorus
UN 0246	102	Ammunition, smoke, white phosphorus
UN 0247	102	Ammunition, incendiary
UN 0248	102	Contrivances, water-activated
UN 0249	102	Contrivances, water-activated
UN 0250	102	Rocket motors
UN 0254	102	Ammunition, illuminating
UN 0255	102	Blasting caps, electric
UN 0257	102	Fuzes, detonating
UN 0266	102	Octolite
UN 0267	102	Blasting caps, non-electric
UN 0268	102	Boosters, with detonator

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 0268	102	Gaines, with detonator
UN 0271	102	Charges, propelling, for rocket motors
UN 0272	102	Charges, propelling, for rocket motors
UN 0273	102	Charges, propelling, for rocket motors
UN 0274	102	Charges, propelling, for rocket motors
UN 0275	102	Cartridges, power device
UN 0276	102	Cartridges, power device
UN 0277	102	Cartridges, oil well
UN 0278	102	Cartridges, oil well
UN 0279	102	Charges, propelling, for cannon
UN 0280	102	Rocket motors
UN 0281	102	Rocket motors
UN 0282	102	Nitroguanidine
UN 0283	102	Boosters
UN 0283	102	Gaines, without detonator
UN 0284	102	Grenades
UN 0285	102	Grenades
UN 0286	102	Warheads, rocket
UN 0287	102	Warheads, rocket
UN 0288	102	Charges, shaped, flexible, linear
UN 0289	102	Cord, detonating
UN 0290	102	Cord, detonating
UN 0291	102	Bombs
UN 0292	102	Grenades
UN 0293	102	Grenades
UN 0294	102	Mines
UN 0295	102	Rockets
UN 0296	102	Sounding devices, explosive
UN 0297	102	Ammunition, illuminating
UN 0299	102	Bombs, photo-flash
UN 0300	102	Ammunition, incendiary
UN 0301	102	Ammunition, tear-producing
UN 0303	102	Ammunition, smoke
UN 0305	102	Photo-flash powder
UN 0306	102	Tracers for ammunition
UN 0312	102	Cartridges, signal
UN 0313	102	Signals, smoke
UN 0314	102	Igniters
UN 0315	102	Igniters
UN 0316	102	Fuzes, igniting
UN 0317	102	Fuzes, igniting
UN 0318	102	Grenades, practice
UN 0319	102	Primers, tubular
UN 0320	102	Primers, tubular
UN 0321	102	Cartridges for weapons
UN 0322	102	Rocket motors
UN 0323	102	Cartridges, power device
UN 0324	102	Projectiles
UN 0325	102	Igniters
UN 0326	102	Cartridges for weapons, blank
UN 0327	102	Cartridges for weapons, blank
UN 0328	102	Cartridges for weapons, with inert projectile
UN 0329	102	Torpedoes
UN 0330	102	Torpedoes
UN 0331	102	Explosives, blasting, Type B
UN 0332	102	Explosives, blasting, Type E
UN 0333	102	Fireworks, Type A
UN 0334	102	Fireworks, Type B
UN 0335	102	Fireworks, Type C
UN 0336	102	Fireworks, Type D
UN 0337	102	Fireworks, Type D
UN 0338	102	Cartridges for weapons, blank
UN 0339	102	Cartridges for weapons, with inert projectile
UN 0340	102	Nitrocellulose with
UN 0341	102	Nitrocellulose with
UN 0342	102	Nitrocellulose with
UN 0343	102	Nitrocellulose with
UN 0344	102	Projectiles
UN 0345	102	Projectiles
UN 0346	102	Projectiles
UN 0347	102	Projectiles
UN 0348	102	Cartridges for weapons
UN 0349	102	Articles, explosive, n.o.s.
UN 0350	102	Articles, explosive, n.o.s.
UN 0351	102	Articles, explosive, n.o.s.
UN 0352	102	Articles, explosive, n.o.s.
UN 0353	102	Articles, explosive, n.o.s.
UN 0354	102	Articles, explosive, n.o.s.
UN 0355	102	Articles, explosive, n.o.s.

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 0358	102	Articles, explosive, n.o.s.
UN 0357	102	Substances, explosive, n.o.s.
UN 0358	102	Substances, explosive, n.o.s.
UN 0359	102	Substances, explosive, n.o.s.
UN 0360	102	Blasting cap assemblies, non-electric
UN 0361	102	Blasting cap assemblies, non electric
UN 0362	102	Ammunition, practice
UN 0363	102	Ammunition, proof
UN 0364	102	Detonators for ammunition
UN 0365	102	Detonators for ammunition
UN 0366	102	Detonators for ammunition
UN 0367	102	Fuzes, detonating
UN 0368	102	Fuzes, igniting
UN 0369	102	Warheads, rocket
UN 0370	102	Warheads, rocket
UN 0371	102	Warheads, rocket
UN 0372	102	Grenades, practice
UN 0373	102	Signal devices, hand
UN 0374	102	Sounding devices, explosive
UN 0375	102	Sounding devices, explosive
UN 0376	102	Primers, tubular
UN 0377	102	Primers, cap type
UN 0378	102	Primers, cap type
UN 0379	102	Cases, cartridge, empty, with primer
UN 0380	102	Articles, pyrophoric
UN 0381	102	Cartridges, power device
UN 0382	102	Components, explosive train, n.o.s.
UN 0383	102	Components, explosive train, n.o.s.
UN 0384	102	Components, explosive train, n.o.s.
UN 0385	102	5-Nitrobenzotriazol
UN 0386	102	Trinitrobenzenesulfonic acid
UN 0387	102	Trinitrofluorenone
UN 0388	102	Trinitrotoluene
UN 0389	102	Trinitrotoluene
UN 0390	102	Tritonal
UN 0391	102	Cyclotrimethylenetrinitramine mixed with cyclotetramethylenetetranitramine
UN 0392	102	Hexanitrostilbene
UN 0393	102	Hexatonal, cast
UN 0394	102	Trinitroresorcinol
UN 1001	101	Acetylene
UN 1002	102	Air
UN 1002	101	Air, compressed
UN 1003	102	Air
UN 1005	102	Ammonia
UN 1005	101	Ammonia, anhydrous
UN 1006	101	Argon
UN 1008	101	Boron trifluoride
UN 1009	102	Bromotrifluoromethane
UN 1009	101	Monobromotrifluoromethane
UN 1010	102	Butadiene
UN 1010	101	Butadiene, inhibited
UN 1011	102	Butane
UN 1012	102	Butylene
UN 1013	102	Carbon dioxide
UN 1014	102	Carbon dioxide and oxygen
UN 1014	101	Carbon dioxide-oxygen mixture
UN 1015	102	Carbon dioxide and nitrous oxide
UN 1015	101	Carbon dioxide-nitrous oxide mixture
UN 1016	101	Carbon monoxide
UN 1017	101	Chlorine
UN 1018	102	Chlorodifluoromethane
UN 1018	101	Monochlorodifluoromethane
UN 1020	102	Chloropentafluoroethane
UN 1020	101	Monochloropentafluoroethane
UN 1021	102	Chlorotetrafluoroethane
UN 1021	101	Monochlorotetrafluoroethane
UN 1022	102	Chlorotrifluoromethane
UN 1022	101	Monochlorotrifluoromethane
UN 1023	102	Coal gas
UN 1026	102	Cyanogen
UN 1026	101	Cyanogen gas
UN 1027	101	Cyclopropane
UN 1028	101	Dichlorodifluoromethane
UN 1029	102	Dichloromonofluoromethane
UN 1030	102	1,1-Difluoroethane
UN 1030	101	Difluoroethane
UN 1031	102	Difluoromonochloroethane
UN 1032	102	Dimethylamine
UN 1032	101	Dimethylamine, anhydrous
UN 1033	101	Dimethyl ether
UN 1035	101	Ethane
UN 1036	102	Ethylamine
UN 1036	101	Monoethylamine
UN 1037	101	Ethyl chloride
UN 1038	102	Ethylene
UN 1039	101	Ethyl methyl ether
UN 1040	101	Ethylene oxide
UN 1041	102	Ethylene oxide and carbon dioxide
NA 1043	101	Crude nitrogen fertilizer solution
UN 1043	101	Fertilizer ammoniating solution
NA 1043	101	Nitrogen fertilizer solution
UN 1044	101	Fire extinguisher
UN 1044	102	Fire extinguishers
UN 1045	101	Fluorine
UN 1046	101	Helium
UN 1048	101	Hydrogen bromide
UN 1049	101	Hydrogen
UN 1050	101	Hydrogen chloride
NA 1051	101	Hydrocyanic acid, liquefied
UN 1051	102	Hydrogen cyanide
UN 1052	102	Hydrogen fluoride
UN 1053	101	Hydrogen sulfide
UN 1053	102	Hydrogen sulphide
UN 1055	102	Isobutylene
UN 1056	102	Krypton
UN 1057	101	Cigarette lighter
UN 1057	102	Lighters
UN 1058	102	Liquefied non-flammable gases charged with nitrogen, carbon dioxide or air
UN 1060	102	Methyl acetylene
UN 1060	101	Methylacetylene-propadiene, stabilized
UN 1061	102	Methylamine
UN 1061	101	Methylamine, anhydrous
UN 1062	102	Methyl bromide
UN 1063	101	Methyl chloride
UN 1064	101	Methyl mercaptan
UN 1064	102	Methylmercaptan
UN 1065	101	Neon
UN 1066	101	Nitrogen
UN 1067	102	Nitrogen dioxide
UN 1067	101	Nitrogen dioxide, liquid
NA 1067	101	Nitrogen peroxide, liquid
NA 1067	101	Nitrogen tetroxide, liquid
UN 1069	101	Nitrosyl chloride
UN 1070	101	Nitrous oxide
UN 1071	102	Oil gas
NA 1072	101	Oxygen
UN 1073	102	Oxygen
NA 1073	101	Oxygen, pressurized liquid
UN 1075	101	Liquefied petroleum gas
UN 1075	102	Petroleum gases
UN 1076	101	Phosgene
UN 1077	102	Propylene
UN 1078	102	Refrigerant gases, n.o.s.
UN 1079	101	Sulfur dioxide
UN 1079	102	Sulphur dioxide
UN 1080	101	Sulfur hexafluoride
UN 1080	102	Sulphur hexafluoride
UN 1081	102	Tetrafluoroethylene
UN 1081	101	Tetrafluoroethylene, inhibited
UN 1082	101	Trifluorochlorethylene
UN 1082	102	Trifluorochloroethylene
UN 1083	102	Trimethylamine
UN 1083	101	Trimethylamine, anhydrous
UN 1085	102	Vinyl bromide
UN 1086	101	Vinyl chloride
UN 1087	101	Vinyl methyl ether
UN 1088	101	Acetal
UN 1089	101	Acetaldehyde
UN 1090	101	Acetone
UN 1091	101	Acetone oil
UN 1091	102	Acetone oils
UN 1092	102	Acrolein
UN 1092	101	Acrolein, inhibited
UN 1093	101	Acrylonitrile
UN 1095	102	Alcohol
UN 1096	102	Alcohol
UN 1098	101	Allyl alcohol
UN 1099	101	Allyl bromide
UN 1100	101	Allyl chloride
UN 1101	102	Diethylaluminium chloride
UN 1102	102	Aluminium triethyl
UN 1103	102	Aluminium trimethyl
UN 1104	101	Amyl acetate
UN 1104	102	Amyl acetates
UN 1105	102	Amyl alcohols
UN 1106	101	Amylamine
UN 1107	101	Amyl chloride
UN 1108	101	Amylene
UN 1108	102	n-Amylene
UN 1109	101	Amyl formate
UN 1109	102	Amyl formates
UN 1110	102	Amyl methyl ketone
UN 1110	101	Methyl amyl ketone
UN 1111	101	Amyl mercaptan
UN 1112	102	Amyl nitrate
UN 1113	101	Amyl nitrite
UN 1114	101	Benzene
UN 1115	101	Benzine
UN 1118	102	Brake fluid, hydraulic
UN 1120	102	Butanol
NA 1120	101	Butyl alcohol
UN 1121	102	sec-Butanol
UN 1122	102	tert-Butanol
UN 1123	101	Butyl acetate
UN 1123	102	n-Butyl acetate
UN 1124	102	sec-Butyl acetate
UN 1125	101	Butylamine
UN 1125	102	n-Butylamine
UN 1126	101	Butyl bromide
UN 1126	102	n-Butyl bromide
UN 1127	101	Butyl chloride
UN 1127	102	n-Butyl chloride
UN 1128	101	Butyl formate
UN 1128	102	n-Butyl formate
UN 1129	101	Butyraldehyde
UN 1130	101	Camphor oil
UN 1131	101	Carbon bisulfide, *or* Carbon disulfide
UN 1131	102	Carbon disulphide
UN 1132	102	Carbon remover
UN 1132	101	Carbon remover, liquid
UN 1133	102	Cement, adhesive
NA 1133	101	Cement, container, linoleum, tile, *or* wallboard, liquid
NA 1133	101	Cement, leather
NA 1133	101	Cement, liquid, n.o.s.
NA 1133	101	Cement, pyroxylin
NA 1133	101	Cement, roofing, liquid
NA 1133	101	Cement, rubber
UN 1134	101	Chlorobenzene
UN 1135	102	2-Chloroethanol
UN 1135	101	Ethylene chlorohydrin
UN 1136	101	Coal tar distillate
NA 1136	101	Coal tar light oil
NA 1136	101	Coal tar oil
UN 1137	101	Coal tar distillate
NA 1137	101	Coal tar light oil
NA 1137	101	Coal tar oil
UN 1139	101	Coating solution
NA 1142	101	Antifreeze compound, liquid
NA 1142	101	Antifreeze preparation, liquid
NA 1142	101	Compound, lacquer, paint, *or* varnish, removing, reducing, *or* thinning, liquid
NA 1142	101	Compound, polishing, liquid
NA 1142	101	Compound, vulcanizing, liquid
NA 1142	101	Dressing, leather
UN 1142	102	Flammable liquid preparation, n.o.s.
NA 1142	101	Leather bleach *or* dressing
NA 1142	101	Polish, metal, stove, furniture *or* wood, liquid
NA 1142	101	Rust preventive coating
UN 1143	101	Crotonaldehyde
UN 1144	101	Crotonylene
UN 1145	101	Cyclohexane
UN 1146	101	Cyclopentane
UN 1147	101	Decahydronaphthalene
UN 1148	102	Diacetone alchohol
UN 1148	101	Diacetone alcohol
UN 1149	101	Butyl ether
UN 1149	102	Dibutyl ethers
UN 1150	101	Dichloroethylene
UN 1152	101	Dichloropentane
UN 1152	102	Dichloropentanes
UN 1153	102	1,2-Diethoxyethane
UN 1153	101	Ethylene glycol diethyl ether
UN 1154	101	Diethylamine
UN 1155	102	Diethyl ether
UN 1155	101	Ethyl ether

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1156	101	Diethyl ketone
UN 1157	101	Diisobutyl ketone
UN 1158	101	Diisopropylamine
UN 1159	101	Diisopropyl ether
UN 1160	102	Dimethylamine
UN 1160	101	Dimethylamine, aqueous solution
UN 1161	101	Dimethyl carbonate
UN 1162	101	Dimethyldichlorosilane
UN 1163	102	Dimethylhydrazine
UN 1163	101	Dimethylhydrazine, unsymmetrical
UN 1164	101	Dimethyl sulfide
UN 1164	102	Dimethyl sulphide
UN 1165	101	Dioxane
UN 1166	101	Dioxolane
UN 1167	101	Divinyl ether
UN 1168	102	Driers
UN 1168	101	Paint drier, liquid
UN 1169	102	Extracts
UN 1170	101	Alcoholic beverage
NA 1170	101	Cologne spirits
UN 1170	102	Ethanol
UN 1170	101	Ethyl alcohol
UN 1171	102	2-Ethoxyethanol
UN 1171	101	Ethylene glycol monoethyl ether
UN 1172	102	2-Ethoxyethyl acetate
UN 1172	101	Ethylene glycol monoethyl ether acetate
UN 1173	101	Ethyl acetate
UN 1175	101	Ethyl benzene
UN 1175	102	Ethylbenzene
UN 1176	101	Ethyl borate
UN 1177	102	Ethylbutyl acetate
UN 1177	101	Ethyl butyl acetate
UN 1178	102	2-Ethylbutyraldehyde
UN 1178	101	Ethyl butyraldehyde
UN 1179	101	Ethyl butyl ether
UN 1180	101	Ethyl butyrate
UN 1181	101	Ethyl chloroacetate
UN 1182	101	Ethyl chloroformate
UN 1183	101	Ethyl dichlorosilane
UN 1183	102	Ethyldichlorosilane
UN 1184	101	Ethylene dichloride
UN 1185	102	Ethyleneimine
UN 1185	101	Ethylene imine, inhibited
UN 1188	101	Ethylene glycol monomethyl ether
UN 1189	101	Ethylene glycol monomethyl ether acetate
UN 1190	101	Ethyl formate
UN 1191	102	Ethyl hexaldehyde
UN 1191	101	Ethylhexaldehyde
UN 1192	101	Ethyl lactate
UN 1193	101	Ethyl methyl ketone
UN 1193	101	Methyl ethyl ketone
UN 1194	102	Ethyl nitrite
UN 1194	101	Ethyl nitrite (nitrous ether)
UN 1195	101	Ethyl propionate
UN 1196	101	Ethyl trichlorosilane
UN 1196	102	Ethyltrichlorosilane
UN 1197	101	Extract, liquid, flavoring
UN 1197	102	Extracts
UN 1198	102	Formaldehyde
UN 1198	101	Formaldehyde solution
UN 1199	101	Furfural
UN 1201	101	Fusel oil
UN 1202	102	Gas oil
UN 1203	102	Gasoline
NA 1203	101	Motor fuel, n.o.s.
UN 1204	102	Glyceryl trinitrate
NA 1204	101	Spirits of nitroglycerin
NA 1204	101	Spirits of nitroglycerin, not exceeding 1% nitroglycerin by weight
UN 1205	102	Gutta percha
UN 1206	101	Heptane
UN 1207	101	Hexaldehyde
UN 1208	101	Hexane
UN 1208	101	Neohexane
UN 1210	101	Ink
UN 1210	102	Ink, printers
UN 1212	102	Isobutanol
UN 1213	101	Isobutyl acetate
UN 1214	101	Isobutylamine
UN 1216	101	Isooctene
UN 1218	101	Isoprene
UN 1219	101	Isopropanol
UN 1220	101	Isopropyl acetate
UN 1221	101	Isopropylamine
UN 1222	101	Isopropyl nitrate
UN 1223	101	Kerosene
UN 1224	102	Ketones
UN 1226	101	Cigarette lighter
UN 1226	101	Lighter fluid
UN 1226	102	Lighter fuels
UN 1226	102	Lighters
NA 1228	101	Mercaptan mixture, aliphatic
UN 1228	102	Mercaptans *and* mercaptan mixtures
UN 1229	101	Mesityl oxide
NA 1230	101	Columbian spirits
UN 1230	102	Methanol
UN 1230	101	Methyl alcohol
UN 1231	101	Methyl acetate
UN 1232	101	Methyl acetone
UN 1233	101	Methylamyl acetate
UN 1234	101	Methylal
UN 1235	102	Methylamine
UN 1235	101	Methylamine, aqueous solution
UN 1237	101	Methyl butyrate
UN 1238	101	Methyl chloroformate
UN 1239	102	Methylchloromethyl ether
UN 1239	101	Methylchloromethyl ether, anhydrous
UN 1242	101	Methyl dichlorosilane
UN 1242	102	Methyldichlorosilane
UN 1243	101	Methyl formate
UN 1244	101	Methylhydrazine
UN 1245	102	Methyl isobutyl ketone
UN 1246	102	Methyl isopropenyl ketone
UN 1246	101	Methyl isopropenyl ketone, inhibited
UN 1247	102	Methyl methacrylate
UN 1247	101	Methyl methacrylate monomer, inhibited
NA 1247	101	Methyl methacrylate monomer, uninhibited
UN 1248	101	Methyl propionate
UN 1249	101	Methyl propyl ketone
UN 1250	101	Methyltrichlorosilane
UN 1251	102	Methyl vinyl ketone
UN 1251	101	Methyl vinyl ketone, inhibited
UN 1255	102	Naphtha, petroleum
UN 1255	101	Petroleum naphtha
UN 1256	101	Naphtha, solvent
UN 1257	102	Casinghead gasoline
NA 1257	101	Gasoline
UN 1259	101	Nickel carbonyl
UN 1261	101	Nitromethane
UN 1262	101	Isooctane
UN 1262	101	Octane
NA 1263	101	Compound, enamel
NA 1263	101	Lacquer base *or* Lacquer chips, plastic
UN 1263	101	Paint, Enamel, Lacquer, Stain, Shellac, *or* Varnish; Aluminum, Bronze, Gold, Wood filler, liquid *or* Lacquer base, liquid
UN 1263	102	Paint, enamel, lacquer, stain, shellac, varnish, polish, filler (liquid), lacquer base *and* thinner
UN 1264	101	Paraldehyde
UN 1265	101	Isopentane
UN 1265	101	Pentane
UN 1266	102	Perfumery products
UN 1267	102	Petroleum crude oil
NA 1268	101	Naphtha distillate
UN 1268	101	Petroleum distillate
UN 1268	102	Petroleum distillates, n.o.s.
NA 1268	101	Road oil
NA 1270	101	Oil
UN 1270	102	Petroleum oil
UN 1271	101	Petroleum ether
UN 1271	102	Petroleum spirit
UN 1272	101	Pine oil
UN 1274	102	Propanol
UN 1274	101	Propyl alcohol
UN 1275	101	Propionaldehyde
UN 1276	102	n-Propyl acetate
UN 1276	101	Propyl acetate
UN 1277	102	Monopropylamine
UN 1277	101	Propylamine
UN 1278	101	Propyl chloride
UN 1279	101	Propylene dichloride
UN 1280	101	Propylene oxide
UN 1281	101	Propyl formate
UN 1281	102	Propyl formates
UN 1282	101	Pyridine
UN 1286	102	Rosin oil
UN 1287	102	Rubber solution
UN 1288	102	Shale oil
UN 1289	102	Sodium methylate
NA 1289	101	Sodium methylate, alcohol mixture
UN 1292	101	Ethyl silicate
UN 1292	102	Tetraethyl silicate
UN 1293	102	Tinctures
UN 1294	101	Toluene
UN 1295	101	Trichlorosilane
UN 1296	101	Triethylamine
UN 1297	102	Trimethylamine
UN 1297	101	Trimethylamine, aqueous solution
UN 1298	101	Trimethylchlorosilane
UN 1299	101	Turpentine
UN 1300	101	Turpentine substitute
UN 1301	101	Vinyl acetate
UN 1302	102	Vinyl ethyl ether
UN 1302	101	Vinyl ethyl ether, inhibited
UN 1303	101	Vinylidene chloride, inhibited
UN 1304	101	Vinyl isobutyl ether
UN 1305	101	Vinyl trichlorosilane
UN 1307	101	Xylene
UN 1307	102	Xylenes
UN 1308	102	Zirconium
UN 1308	101	Zirconium, metal, liquid, suspensions
UN 1309	102	Aluminium
UN 1310	102	Ammonium picrate
UN 1310	101	Ammonium picrate, wet
UN 1312	102	Borneol
UN 1313	101	Calcium resinate
UN 1314	102	Calcium resinate
UN 1314	101	Calcium resinate, fused
UN 1318	102	Cobalt resinate
UN 1318	101	Cobalt resinate, precipitated
UN 1320	102	Dinitrophenol
UN 1321	102	Dinitrophenolates
UN 1322	102	Dinitroresorcinols
UN 1323	102	Ferrocerium
NA 1324	101	Film
UN 1324	102	Film, motion picture
NA 1325	101	Antimony sulfide, solid
NA 1325	101	Burnt cotton, not repicked
NA 1325	101	Cosmetics, n.o.s.
NA 1325	101	Drugs, n.o.s.
UN 1325	101	Flammable solid, n.o.s.
UN 1325	102	Flammable solids, n.o.s.
NA 1325	101	Fusee
NA 1325	101	Garbage tankage
NA 1325	101	N-Methyl-N'-nitro-N-nitrosoguanidine
NA 1325	101	Paper stock, wet
NA 1325	101	Rags, wet
NA 1325	101	Rough ammoniate tankage
NA 1325	101	Self-lighting cigarette
NA 1325	101	Smokeless powder for small arms
NA 1325	101	Tankage fertilizer
NA 1325	101	Tankage, rough ammoniate
NA 1325	101	Waste paper, wet
(UN 1325)	102	Zirconium
UN 1326	102	Hafnium metal powder, wet
UN 1326	101	Hafnium metal, wet
UN 1327	102	Bhusa
UN 1327	101	Hay
UN 1327	101	Hay or straw
UN 1327	102	Straw
UN 1328	102	Hexamine
UN 1330	102	Manganese resinate
UN 1331	102	Matches
UN 1331	101	Matches, strike anywhere
UN 1332	102	Metaldehyde
UN 1333	102	Mischmetal
UN 1334	102	Naphthalene
UN 1334	101	Naphthalene *or* Naphthalin
UN 1336	102	Nitroguanidine
UN 1336	101	Nitroguanidine, wet with not less than 20% water
UN 1337	102	Nitrostarch
UN 1337	101	Nitrostarch, wet with not less than 20% water
UN 1338	102	Phosphorus
UN 1338	101	Phosphorus, amorphous, red
UN 1339	101	Phosphorus heptasulfide
UN 1339	102	Phosphorus heptasulphide

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1340	101	Phosphorus pentasulfide
UN 1340	102	Phosphorus pentasulphide
UN 1341	101	Phosphorus sesquisulfide
UN 1341	102	Phosphorus sesquisulphide
UN 1343	101	Phosphorus trisulfide
UN 1343	102	Phosphorus trisulphide
UN 1344	102	Picric acid
NA 1344	101	Picric acid, wet, with not less than 10% water
UN 1345	102	Rubber scrap
NA 1345	101	Rubber scrap *or* Rubber buffings
NA 1345	101	Rubber shoddy *or* Rubber, regenerated *or* Rubber, reclaimed
UN 1346	102	Silicon powder
UN 1348	102	Sodium dinitro-o-cresolate
UN 1349	102	Sodium picramate
UN 1349	101	Sodium picramate, wet
UN 1350	101	Sulfur, solid
UN 1350	102	Sulphur
UN 1352	102	Titanium metal powder, wet
NA 1352	101	Titanium metal powder, wet with 20% or more water
UN 1353	102	Toe puffs
UN 1354	102	Trinitrobenzene
UN 1354	101	Trinitrobenzene, wet
UN 1355	102	Trinitrobenzoic acid
UN 1355	101	Trinitrobenzoic acid, wet
UN 1356	102	Trinitrotoluene
UN 1356	101	Trinitrotoluene, wet
UN 1357	102	Urea nitrate
NA 1357	101	Urea nitrate, wet
UN 1358	102	Zirconium metal powder, wet
UN 1358	101	Zirconium metal, wet
UN 1359	102	Bags
UN 1359	101	Bags, sodium nitrate, empty and unwashed
UN 1360	101	Calcium phosphide
UN 1361	102	Carbon, non-activated
NA 1361	101	Charcoal briquettes *or* briquets
NA 1361	101	Charcoal screenings, made from 'pinon' wood
NA 1361	101	Charcoal, shell
NA 1361	101	Charcoal, wood, ground, crushed, granulated, *or* pulverized
NA 1361	101	Charcoal, wood, lump
NA 1361	101	Charcoal wood screenings, other than 'pinon' wood screenings
NA 1361	101	Coal, ground bituminous, sea coal, coal facings
UN 1362	102	Carbon, activated
UN 1362	101	Charcoal, activated
UN 1363	101	Copra
UN 1364	102	Cotton waste
UN 1364	101	Cotton waste, oily
UN 1365	102	Cotton
UN 1366	102	Diethylzinc
UN 1367	102	Diethylmagnesium
UN 1368	102	Dimethylmagnesium
UN 1369	102	Dimethyl-p-nitrosoaniline
UN 1369	102	p-Nitrosodimethylaniline
UN 1370	102	Dimethylzinc
UN 1371	102	Driers
NA 1372	101	Burnt fiber
NA 1372	101	Fibers
NA 1372	101	Fibers, burnt
UN 1372	102	Fibres
NA 1372	101	Hair, wet
UN 1373	102	Fabric
NA 1373	101	Fibers *or* fabric, containing not more than 5% animal *or* vegetable oil
UN 1373	102	Fibres
UN 1374	102	Fishmeal *or* fishscrap
NA 1374	101	Fish meal *or* fish scrap containing less than 6% or more than 12% water
UN 1375	102	Pyrophoric fuel, n.o.s.
UN 1376	101	Iron mass *or* sponge, spent
UN 1376	102	Iron oxide
UN 1378	102	Nickel catalyst
UN 1378	101	Nickel catalyst, wet
UN 1379	102	Paper
UN 1380	101	Pentaborane
UN 1381	102	Phosphorus
UN 1381	101	Phosphorus, white *or* yellow, dry
UN 1381	101	Phosphorus, white *or* yellow, in water

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1382	102	Alkaline earth metal amalgams, n.o.s.
UN 1382	101	Potassium sulfide
UN 1382	102	Potassium sulphide
NA 1383	101	Iron mass *or* sponge
UN 1383	102	Pyrophoric alloys
UN 1383	102	Pyrophoric metals
UN 1384	102	Sodium dithionite
UN 1384	101	Sodium hydrosulfite
UN 1385	101	Sodium sulfide, anhydrous
UN 1385	102	Sodium sulphide
UN 1386	102	Seed cake
UN 1387	101	Waste wool, wet
UN 1387	102	Wool waste
UN 1389	102	Alkali metal amalgams, n.o.s.
UN 1390	102	Alkali metal amides, n.o.s.
UN 1391	102	Alkali metal dispersions, n.o.s.
UN 1393	102	Alloys of alkaline earth metals
UN 1394	102	Aluminium carbide
UN 1395	102	Aluminium ferrosilicon
UN 1396	102	Aluminium
UN 1396	101	Aluminum, metallic, powder
UN 1397	102	Aluminium phosphide
UN 1397	101	Aluminum phosphide
UN 1398	102	Aluminium silicon
UN 1399	102	Barium
UN 1400	102	Barium
UN 1401	102	Calcium
NA 1401	101	Calcium, metal
NA 1401	101	Calcium, metal, crystalline
UN 1402	101	Calcium carbide
UN 1403	102	Calcium cyanamide
UN 1403	101	Calcium cyanamide, not hydrated
UN 1404	102	Calcium hydride
UN 1405	102	Calcium silicide
UN 1406	102	Calcium silicon
UN 1407	102	Caesium
UN 1407	101	Cesium metal
UN 1408	101	Ferrosilicon
UN 1409	102	Hydrides
UN 1410	102	Lithium aluminium hydride
UN 1410	101	Lithium aluminum hydride
UN 1411	102	Lithium aluminium hydride
UN 1411	101	Lithium aluminum hydride, ethereal
UN 1412	102	Lithium amide
UN 1412	101	Lithium amide, powdered
UN 1413	101	Lithium borohydride
UN 1414	101	Lithium hydride
UN 1415	102	Lithium
UN 1415	101	Lithium metal
NA 1415	101	Lithium metal, in cartridges
UN 1417	101	Lithium silicon
UN 1418	102	Magnesium
UN 1418	102	Magnesium alloys
UN 1419	102	Magnesium aluminium phosphide
UN 1419	101	Magnesium aluminum phosphide
UN 1420	102	Potassium, metal alloys
UN 1420	101	Potassium, metal liquid alloy
UN 1421	102	Alkali metals
NA 1421	101	Sodium, metal liquid alloy
UN 1422	102	Potassium-sodium
UN 1422	101	Sodium potassium alloy (liquid)
UN 1422	101	Sodium potassium alloy (solid)
UN 1423	102	Rubidium
UN 1423	101	Rubidium metal
NA 1423	101	Rubidium metal, in cartridges
UN 1424	102	Sodium amalgam
UN 1425	101	Sodium amide
UN 1426	102	Sodium borohydride
UN 1427	101	Sodium hydride
UN 1428	102	Sodium
UN 1428	101	Sodium, metal *or* metallic
UN 1429	102	Sodium
UN 1429	101	Sodium, metal dispersion in organic solvent
UN 1431	102	Sodium methylate
UN 1431	101	Sodium methylate, dry
UN 1432	101	Sodium phosphide
UN 1433	101	Stannic phosphide
UN 1433	102	Stannic phosphides
UN 1434	102	Strontium
UN 1435	102	Zinc ashes
UN 1436	102	Zinc
UN 1437	101	Zirconium hydride
UN 1438	102	Aluminium nitrate

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1438	101	Aluminum nitrate
UN 1439	101	Ammonium dichromate
UN 1442	101	Ammonium perchlorate
UN 1444	102	Ammonium persulphate
UN 1445	101	Barium chlorate
NA 1445	101	Barium chlorate, wet
UN 1446	101	Barium nitrate
UN 1447	101	Barium perchlorate
UN 1448	101	Barium permanganate
UN 1449	102	Barium peroxide
UN 1449	101	Barium peroxide
UN 1450	102	Bromates
UN 1451	102	Caesium nitrate
UN 1452	101	Calcium chlorate
UN 1453	101	Calcium chlorite
UN 1454	101	Calcium nitrate
UN 1455	102	Calcium perchlorate
UN 1456	101	Calcium permanganate
UN 1457	101	Calcium peroxide
UN 1458	102	Borate and chlorate
UN 1458	101	Chlorate and borate mixture
UN 1459	102	Chlorate and magnesium chloride
UN 1459	101	Chlorate and magnesium chloride mixture
UN 1461	101	Chlorate, n.o.s.
NA 1461	101	Chlorate, n.o.s., wet
UN 1461	102	Chlorates
UN 1462	102	Chlorites
NA 1463	101	Chromic acid mixture, dry
NA 1463	101	Chromic acid, solid
UN 1463	102	Chromium trioxide
UN 1464	102	Dichromates
UN 1465	102	Didymium nitrate
UN 1466	101	Ferric nitrate
UN 1467	101	Guanidine nitrate
UN 1469	101	Lead nitrate
UN 1470	102	Lead perchlorate
UN 1471	102	Lithium hypochlorite
UN 1471	101	Lithium hypochlorite compound, dry
UN 1472	101	Lithium peroxide
UN 1473	102	Magnesium bromate
UN 1474	101	Magnesium nitrate
UN 1475	101	Magnesium perchlorate
UN 1476	102	Magnesium peroxide
UN 1476	101	Magnesium peroxide, solid
NA 1477	101	Ammonium sulfate nitrate
NA 1477	101	Nitrate, n.o.s.
UN 1477	102	Nitrates
UN 1478	102	Sodium nitrate and potash
NA 1479	101	Compound, tree *or* weed killing, solid
NA 1479	101	Cosmetics, n.o.s.
NA 1479	101	Cupric nitrate
NA 1479	101	Drugs, n.o.s.
NA 1479	101	Manganese dioxide
UN 1479	101	Oxidizer, n.o.s. *or* Oxidizing material, n.o.s.
UN 1479	102	Oxidizing substances, n.o.s.
NA 1479	101	Potassium dichromate
NA 1479	101	Sodium dichromate
UN 1480	102	Perborates
NA 1481	101	Perchlorate, n.o.s.
UN 1481	102	Perchlorates
NA 1482	101	Permanganate, n.o.s.
UN 1482	102	Permanganates
UN 1483	102	Peroxides
UN 1484	101	Potassium bromate
UN 1485	101	Potassium chlorate
UN 1486	101	Potassium nitrate
UN 1487	102	Potassium nitrate and sodium nitrite
UN 1487	101	Sodium nitrite mixed
NA 1487	101	Sodium nitrite mixture
UN 1488	101	Potassium nitrite
UN 1489	101	Potassium perchlorate
UN 1490	101	Potassium permanganate
UN 1491	101	Potassium peroxide
UN 1492	102	Potassium persulphate
UN 1493	101	Silver nitrate
UN 1494	101	Sodium bromate
UN 1495	101	Sodium chlorate
UN 1496	101	Sodium chlorite
UN 1498	101	Sodium nitrate
UN 1499	102	Sodium nitrate and potassium nitrate
UN 1500	101	Sodium nitrite
UN 1502	101	Sodium perchlorate

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1503	101	Sodium permanganate
UN 1504	101	Sodium peroxide
UN 1505	102	Sodium persulphate
UN 1506	101	Strontium chlorate
UN 1506	101	Strontium chlorate, wet
UN 1507	101	Strontium nitrate
UN 1508	102	Strontium perchlorate
UN 1509	101	Strontium peroxide
UN 1510	101	Tetranitromethane
UN 1511	102	Urea hydrogen peroxide
NA 1511	101	Urea peroxide
UN 1512	101	Zinc ammonium nitrite
UN 1513	101	Zinc chlorate
UN 1514	101	Zinc nitrate
UN 1515	101	Zinc permanganate
UN 1516	101	Zinc peroxide
UN 1517	102	Zirconium picramate
UN 1517	101	Zirconium picramate, wet
UN 1541	101	Acetone cyanohydrin
UN 1542	102	Aldrin
UN 1544	102	Alkaloids
UN 1545	102	Allyl isothiocyanate
UN 1546	102	Ammonium arsenate
UN 1546	101	Ammonium arsenate, solid
UN 1547	102	Aniline
UN 1547	101	Aniline oil, liquid
UN 1548	102	Aniline hydrochloride
UN 1549	102	Antimony compounds
NA 1549	101	Antimony tribromide, solid
NA 1549	101	Antimony tribromide solution
NA 1549	101	Antimony trifluoride, solid
NA 1549	101	Antimony trifluoride solution
UN 1550	102	Antimony lactate
UN 1550	101	Antimony lactate, solid
UN 1551	102	Antimony potassium tartrate
UN 1551	101	Antimony potassium tartrate, solid
UN 1553	102	Arsenic acid
UN 1553	101	Arsenic acid solution
UN 1554	102	Arsenic acid
UN 1554	101	Arsenic acid, solid
UN 1555	102	Arsenic bromide
UN 1555	101	Arsenic bromide, solid
UN 1556	101	Arsenical compound, liquid, n.o.s., *or* Arsenical mixture, liquid, n.o.s.
UN 1556	102	Arsenic compounds
NA 1556	101	Methyldichloroarsine
NA 1556	101	Phenyldichloroarsine
UN 1557	101	Arsenical compound, solid, n.o.s., *or* Arsenical mixture, solid, n.o.s.
NA 1557	101	Arsenical dip, liquid
UN 1557	102	Arsenic compounds
NA 1557	101	Arsenic iodide, solid
NA 1557	101	Arsenic sulfide, solid
NA 1557	101	Arsenic trisulfide
UN 1558	102	Arsenic, metallic
UN 1558	101	Arsenic, solid
UN 1559	102	Arsenic pentoxide
UN 1559	101	Arsenic pentoxide, solid
UN 1560	102	Arsenic trichloride
UN 1560	101	Arsenic trichloride, liquid
UN 1561	102	Arsenic trioxide
UN 1561	101	Arsenic trioxide, solid
UN 1562	101	Arsenical dust
UN 1564	102	Barium compounds, n.o.s.
UN 1565	102	Barium cyanide
UN 1565	101	Barium cyanide, solid
NA 1566	101	Beryllium chloride
UN 1566	101	Beryllium compound, n.o.s.
UN 1566	102	Beryllium compounds
NA 1566	101	Beryllium fluoride
UN 1567	102	Beryllium
UN 1568	102	Bordeaux arsenites
UN 1569	102	Bromoacetone
UN 1569	101	Bromoacetone, liquid
UN 1570	102	Brucine
UN 1570	101	Brucine, solid
UN 1571	102	Barium azide
UN 1571	101	Barium azide, wet
UN 1572	102	Cacodylic acid
UN 1573	102	Calcium arsenate
UN 1573	101	Calcium arsenate, solid
UN 1574	102	Calcium arsenate and arsenite
NA 1574	101	Calcium arsenite, solid
UN 1575	102	Calcium cyanide
UN 1575	101	Calcium cyanide, solid *or* Calcium cyanide mixture, solid

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1577	102	Chlorodinitrobenzene
UN 1577	101	Dinitrochlorobenzene
UN 1578	102	Chloronitrobenzenes
NA 1578	101	Nitrochlorobenzene, meta *or* para, solid
NA 1578	101	Nitrochlorobenzene, ortho, liquid
UN 1579	102	4-Chloro-o-toluidine hydrochloride
UN 1579	101	4-Chloro-o-toluidine hydrochloride
UN 1580	102	Chloropicrin
UN 1580	101	Chloropicrin, liquid
UN 1581	102	Chloropicrin and methyl bromide
NA 1581	101	Methyl bromide and more than 2% chloropicrin mixture, liquid
NA 1581	101	Methyl bromide, liquid
UN 1582	102	Chloropicrin and methyl chloride
UN 1582	101	Chloropicrin and methyl chloride mixture
NA 1583	101	Chloropicrin, absorbed
UN 1583	101	Chloropicrin mixture
UN 1583	102	Chloropicrin mixtures, n.o.s.
UN 1584	102	Cocculus
UN 1584	101	Cocculus, solid
UN 1585	102	Copper acetoarsenite
UN 1585	101	Copper acetoarsenite, solid
UN 1586	102	Copper arsenite
UN 1586	101	Copper arsenite, solid
UN 1587	101	Copper cyanide
UN 1588	101	Cyanide *or* cyanide mixture, dry
UN 1588	102	Cyanides
NA 1588	101	Cyanide solution, n.o.s.
UN 1589	101	Cyanogen chloride
UN 1590	102	Dichloroanilines
UN 1591	101	Dichlorobenzene, ortho, liquid
UN 1591	102	Dichlorobenzenes
UN 1592	101	Dichlorobenzene, para, solid
UN 1592	102	p-Dichlorobenzene
UN 1593	102	Dichloromethane
UN 1593	101	Dichloromethane *or* Methylene chloride
UN 1594	102	Diethyl sulphate
UN 1595	101	Dimethyl sulfate
UN 1595	102	Dimethyl sulphate
UN 1596	102	Dinitroanilines
UN 1597	102	Dinitrobenzenes
UN 1597	101	Dinitrobenzene, solid, *or* Dinitrobenzol, solid
UN 1597	101	Dinitrobenzene solution
UN 1598	102	4,6-Dinitro-o-cresol
UN 1599	102	Dinitrophenol
UN 1599	101	Dinitrophenol solution
UN 1600	101	Dinitrotoluene
UN 1600	102	Dinitrotoluenes
UN 1601	101	Disinfectant, liquid
UN 1601	102	Disinfectants
UN 1601	101	Disinfectant, solid
(UN 1601)	102	Germicides
UN 1602	102	Dye intermediates
UN 1603	102	Ethyl bromoacetate
UN 1604	101	Ethylenediamine
UN 1605	101	Ethylene dibromide
UN 1606	102	Ferric arsenate
UN 1606	101	Ferric arsenate, solid
UN 1607	102	Ferric arsenite
UN 1607	101	Ferric arsenite, solid
UN 1608	101	Ferrous arsenate
UN 1609	102	Fungicides
UN 1610	102	Halogenated irritating liquids, n.o.s.
UN 1611	102	Hexaethyl tetraphosphate
UN 1611	101	Hexaethyl tetraphosphate, liquid
UN 1612	102	Hexaethyl tetraphosphate
UN 1612	101	Hexaethyl tetraphosphate and compressed gas mixture
UN 1613	101	Hydrocyanic acid
UN 1613	101	Hydrocyanic acid solution, less than 5% hydrocyanic acid
UN 1614	102	Hydrogen cyanide
UN 1615	102	Insecticides, n.o.s.
UN 1616	101	Lead acetate
UN 1617	102	Lead arsenates
UN 1617	101	Lead arsenate, solid
UN 1618	102	Lead arsenites
UN 1618	101	Lead arsenite, solid
UN 1620	101	Lead cyanide
UN 1621	102	London purple
UN 1621	101	London purple, solid

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1622	102	Magnesium arsenate
UN 1622	101	Magnesium arsenate, solid
UN 1623	102	Mercuric arsenate
UN 1624	102	Mercuric chloride
UN 1624	101	Mercuric chloride, solid
UN 1625	101	Mercuric nitrate
UN 1626	102	Mercuric potassium cyanide
UN 1626	101	Mercuric potassium cyanide, solid
UN 1627	101	Mercurous nitrate, solid
UN 1628	101	Mercurous sulfate, solid
UN 1628	102	Mercurous sulphate
UN 1629	101	Mercuric acetate
UN 1629	101	Mercurous acetate, solid
UN 1629	102	Mercury acetate
UN 1630	101	Mercuric ammonium chloride, solid
UN 1630	102	Mercury ammonium chloride
UN 1631	101	Mercuric benzoate, solid
UN 1631	102	Mercury benzoate
UN 1633	102	Mercury bisulphate
UN 1634	101	Mercuric bromide, solid
UN 1634	101	Mercurous bromide, solid
UN 1634	102	Mercury bromides
UN 1636	101	Mercuric cyanide, solid
UN 1636	102	Mercury cyanide
UN 1637	101	Mercurous gluconate, solid
UN 1637	102	Mercury gluconate
UN 1638	101	Mercuric iodide, solid
NA 1638	101	Mercuric iodide solution
NA 1638	101	Mercurous iodide, solid
UN 1638	102	Mercury iodide
UN 1639	101	Mercurol *or* Mercury nucleate, solid
UN 1639	102	Mercury nucleate
UN 1640	101	Mercuric oleate, solid
UN 1640	102	Mercury oleate
UN 1641	101	Mercuric oxide, solid
UN 1641	101	Mercurous oxide, black, solid
UN 1641	102	Mercury oxide
UN 1642	101	Mercuric oxycyanide, solid
UN 1642	102	Mercury oxycyanide
UN 1643	101	Mercuric potassium iodide, solid
UN 1643	102	Mercury potassium iodide
UN 1644	101	Mercuric salicylate solid
UN 1644	102	Mercury salicylate
UN 1645	101	Mercuric sulfate, solid
UN 1645	102	Mercuric sulphate
UN 1646	101	Mercuric sulfocyanate, solid *or* Mercuric thiocyanate, solid
UN 1646	102	Mercury thiocyanate
UN 1647	102	Methyl bromide and ethylene dibromide
UN 1647	101	Methyl bromide - ethylene dibromide mixture, liquid
UN 1648	101	Acetonitrile
UN 1648	102	Methyl cyanide
UN 1649	101	Motor fuel antiknock compound *or* Antiknock compound
UN 1649	102	Motor fuel anti-knock mixtures
NA 1649	101	Tetraethyl lead, liquid
UN 1650	102	Naphthylamine
UN 1651	102	alpha-Naphthylthiourea
UN 1652	102	Naphthylurea
UN 1653	102	Nickel cyanide
UN 1653	101	Nickel cyanide, solid
UN 1654	102	Nicotine
UN 1654	101	Nicotine, liquid
UN 1655	102	Nicotine
UN 1656	101	Nicotine hydrochloride
UN 1657	101	Nicotine salicylate
UN 1658	101	Nicotine sulfate, liquid
UN 1658	101	Nicotine sulfate, solid
UN 1658	102	Nicotine sulphate
UN 1659	101	Nicotine tartrate
UN 1660	101	Nitric oxide
UN 1661	101	Nitroaniline
UN 1661	102	Nitroanilines
UN 1662	102	Nitrobenzene
UN 1662	101	Nitrobenzene, liquid *or* Nitrobenzol, liquid
UN 1663	101	Nitrophenol
UN 1663	102	Nitrophenols
UN 1664	101	Nitrotoluene
UN 1664	102	Nitrotoluenes
UN 1665	102	Nitroxylenes
NA 1665	101	Nitroxylol
UN 1668	102	Parathion

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1669	102	Pentachloroethane
UN 1670	101	Perchloromethyl mercaptan
UN 1670	102	Perchloromethyl-mercaptan
UN 1671	101	Phenol
UN 1672	102	Phenylcarbylamine chloride
UN 1673	101	Phenylenediamine, meta *or* para, solid
UN 1673	102	Phenylenediamines
UN 1674	102	Phenylmercuric acetate
UN 1677	102	Potassium arsenate
UN 1677	101	Potassium arsenate, solid
UN 1678	102	Potassium arsenite
UN 1678	101	Potassium arsenite, solid
UN 1679	102	Potassium cuprocyanide
UN 1680	102	Potassium cyanide
UN 1680	101	Potassium cyanide, solid
UN 1680	101	Potassium cyanide solution
UN 1681	102	Rodenticides, n.o.s.
UN 1682	102	Sheep dips
UN 1683	102	Silver arsenite
UN 1684	101	Silver cyanide
UN 1685	101	Sodium arsenate
UN 1686	101	Sodium arsenite
UN 1687	101	Sodium azide
UN 1688	102	Sodium cacodylate
UN 1689	102	Sodium cyanide
UN 1689	101	Sodium cyanide, solid
UN 1689	101	Sodium cyanide solution
UN 1690	102	Sodium fluoride
UN 1690	101	Sodium fluoride, solid
NA 1690	101	Sodium fluoride solution
UN 1691	102	Strontium arsenite
UN 1691	101	Strontium arsenite, solid
UN 1692	102	Strychnine
UN 1692	101	Strychnine salt, solid
UN 1692	101	Strychnine, solid
NA 1693	101	Irritating agent, n.o.s.
NA 1693	101	ORM-A, n.o.s.
UN 1693	102	Tear gas
UN 1694	102	Bromobenzyl cyanide
UN 1695	102	Chloroacetone
NA 1695	101	Monochloroacetone, stabilized *or* inhibited
UN 1697	102	Chloroacetophenone
UN 1697	101	Chloroacetophenone, gas, liquid, *or* solid
UN 1698	101	Diphenylaminechloroarsine
UN 1699	102	Diphenylchloroarsine
UN 1700	101	Tear gas candle
UN 1700	102	Tear gas candles
UN 1701	101	Xylyl bromide
UN 1702	102	1,1,2,2-Tetrachloroethane
UN 1702	101	Tetrachloroethane
UN 1703	102	Tetraethyl dithiopyrophosphate
UN 1703	101	Tetraethyl dithiopyrophosphate and compressed gas mixture
UN 1704	102	Tetraethyl dithiopyrophosphate
UN 1704	101	Tetraethyl dithiopyrophosphate, liquid
UN 1704	101	Tetraethyl dithiopyrophosphate mixture, dry
UN 1704	101	Tetraethyl dithiopyrophosphate mixture, liquid
UN 1705	102	Tetraethyl pyrophosphate and compressed gas
UN 1705	101	Tetraethyl pyrophosphate and compressed gas mixture
UN 1707	102	Thallium compounds
NA 1707	101	Thallium salt, solid, n.o.s.
NA 1707	101	Thallium sulfate, solid
UN 1708	102	Toluidines
UN 1709	102	2,4-Toluylenediamine
NA 1709	101	Toluenediamine
UN 1710	101	Trichloroethylene
UN 1711	102	Xylidines
UN 1712	101	Zinc arsenate
UN 1712	102	Zinc arsenate and arsenite
UN 1712	101	Zinc arsenite, solid
UN 1713	101	Zinc cyanide
UN 1714	101	Zinc phosphide
UN 1715	101	Acetic anhydride
UN 1716	101	Acetyl bromide
UN 1717	101	Acetyl chloride
UN 1718	101	Acid butyl phosphate
NA 1719	101	Alkaline

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1719	102	Caustic alkali liquids, n.o.s.
UN 1722	101	Allyl chlorocarbonate
UN 1722	102	Allyl chloroformate
UN 1723	102	Allyl iodide
UN 1724	101	Allyl trichlorosilane
UN 1725	102	Aluminium bromide
UN 1725	101	Aluminum bromide, anhydrous
UN 1726	102	Aluminium chloride
UN 1727	102	Ammonium hydrogen fluoride
UN 1727	101	Ammonium hydrogen fluoride, solid
UN 1728	102	Amyl trichlorosilane
UN 1728	101	Amyl trichorosilane
UN 1729	101	Anisoyl chloride
UN 1730	101	Antimony pentachloride
UN 1731	102	Antimony pentachloride
UN 1731	101	Antimony pentachloride solution
UN 1732	101	Antimony pentafluoride
UN 1733	102	Antimony trichloride
UN 1733	101	Antimony trichloride, solid
UN 1733	101	Antimony trichloride solution
UN 1734	102	Batteries
UN 1735	102	Battery fluid
UN 1736	101	Benzoyl chloride
UN 1737	101	Benzyl bromide
UN 1738	101	Benzyl chloride
UN 1739	101	Benzyl chloroformate
UN 1740	102	Bifluorides, n.o.s.
UN 1741	101	Boron trichloride
UN 1742	102	Boron trifluoride acetic acid complex
UN 1742	101	Boron trifluoride-acetic acid complex
UN 1743	102	Boron trifluoride propionic acid complex
UN 1744	101	Bromine
UN 1745	101	Bromine pentafluoride
UN 1746	101	Bromine trifluoride
UN 1747	101	Butyl trichlorosilane
UN 1748	102	Calcium hypochlorite
UN 1748	101	Calcium hypochlorite mixture
UN 1749	101	Chlorine trifluoride
UN 1750	102	Chloroacetic acid
UN 1750	101	Chloroacetic acid, liquid *or* solution
UN 1751	102	Chloroacetic acid
UN 1751	101	Chloroacetic acid, solid
UN 1752	101	Chloroacetyl chloride
UN 1753	102	Chlorophenyl trichlorosilane
UN 1753	101	Chlorophenyltrichlorosilane
UN 1754	101	Chlorosulfonic acid
UN 1754	101	Chlorosulfonic acid-sulfur trioxide mixture
UN 1754	102	Chlorosulphonic acid
UN 1754	102	Dichloroacetyl chloride
UN 1755	102	Chromic acid
UN 1755	101	Chromic acid solution
UN 1756	102	Chromic fluoride
UN 1756	101	Chromic fluoride, solid
UN 1757	102	Chromic fluoride
UN 1757	101	Chromic fluoride solution
UN 1758	102	Chromium oxychloride
UN 1758	101	Chromium oxychloride *or* Chromyl chloride
UN 1759	102	Cleaning compounds
UN 1759	101	Corrosive solid, n.o.s.
(UN 1759)	102	Corrosive solids, n.o.s.
NA 1759	101	Cosmetics, solid, n.o.s.
NA 1759	101	Drugs, n.o.s. solid
NA 1759	101	Ferrous chloride, solid
NA 1759	101	Stannous chloride, solid
NA 1760	101	Acid, liquid, n.o.s.
UN 1760	102	Alkaline corrosive liquids, n.o.s.
NA 1760	101	Aluminum phosphate solution
NA 1760	101	Aluminum sulfate solution
NA 1760	101	2-(2-Aminoethoxy) ethanol
NA 1760	101	Aminopropyldiethanolamine
NA 1760	101	N-Aminopropylmorpholine
NA 1760	101	bis (Aminopropyl) piperazine
NA 1760	101	Boiler compound, liquid
NA 1760	101	Chemical kit
NA 1760	101	Compound, cleaning, liquid
NA 1760	101	Compound, lacquer, paint, *or* varnish removing, liquid
NA 1760	101	Compound, rust preventing *or* Compound, rust removing
NA 1760	101	Compound, tree *or* weed killing, liquid
NA 1760	101	Compound, vulcanizing, liquid

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1760	101	Corrosive liquid, n.o.s.
UN 1760	102	Corrosive liquids, n.o.s.
NA 1760	101	Cosmetics, liquid, n.o.s.
NA 1760	101	2,2-Dichloropropionic acid
NA 1760	101	Drugs, n.o.s. liquid
NA 1760	101	Ethyl phosphonothioic dichloride, anhydrous
NA 1760	101	Ethyl phosphonous dichloride, anhydrous
NA 1760	101	Ethyl phosphorodichloridate
NA 1760	101	Ferrous chloride, solution
NA 1760	101	Flame retardant compound liquid
NA 1760	101	Hexanoic acid
NA 1760	101	Isopentanoic acid
NA 1760	101	Memtetrahydro phthalic anhydride
NA 1760	101	Methyl phosphonothioic dichloride, anhydrous
NA 1760	101	Methyl phosphonous dichloride
NA 1760	101	Morpholine, aqueous, mixture
NA 1760	101	Nitric acid, 40% or less
NA 1760	101	ORM-B, n.o.s.
NA 1760	101	Textile treating compound *or* mixture, liquid
NA 1760	101	Titanium sulfate solution
NA 1760	101	Valeric acid
NA 1760	101	Water treatment compounds, liquid
NA 1760	101	White acid
UN 1761	102	Cupriethylenediamine
UN 1761	101	Cupriethylene-diamine solution
UN 1762	101	Cyclohexenyl trichlorosilane
UN 1763	101	Cyclohexyl trichlorosilane
UN 1764	101	Dichloroacetic acid
UN 1765	101	Dichloroacetyl chloride
UN 1766	102	Dichlorophenyl trichlorosilane
UN 1766	101	Dichlorophenyltrichlorosilane
UN 1767	101	Diethyl dichlorosilane
UN 1768	102	Difluorophosphoric acid
UN 1768	101	Difluorophosphoric acid, anhydrous
UN 1769	101	Diphenyl dichlorosilane
UN 1770	102	Diphenylmethyl bromide
UN 1770	101	Diphenyl methyl bromide, solid
UN 1770	101	Diphenyl methyl bromide solution
UN 1771	101	Dodecyl trichlorosilane
UN 1773	102	Ferric chloride
UN 1773	101	Ferric chloride, solid
UN 1774	101	Fire extinguisher charge containing sulfuric acid
UN 1774	102	Fire extinguisher charges
UN 1775	101	Fluoboric acid
UN 1776	102	Fluorophosphoric acid
UN 1776	101	Monofluorophosphoric acid, anhydrous
UN 1777	101	Fluorosulfonic acid *or* Fluosulfonic acid
UN 1777	102	Fluorosulphonic acid
UN 1778	102	Fluosilicic acid
NA 1778	101	Hydrofluorosilicic acid
UN 1779	101	Formic acid
NA 1779	101	Formic acid solution
UN 1780	101	Fumaryl chloride
UN 1781	102	Hexadecyl trichlorosilane
UN 1781	101	Hexadecyltrichlorosilane
UN 1782	101	Hexafluorophosphoric acid
UN 1783	102	Hexamethylenediamine
UN 1783	101	Hexamethylenediamine, solution
UN 1784	102	Hexyl trichlorosilane
UN 1784	101	Hexyltrichlorosilane
UN 1786	102	Acid mixtures
UN 1786	101	Hydrofluoric and sulfuric acid mixture
UN 1787	101	Hydriodic acid
UN 1788	101	Hydrobromic acid
UN 1788	101	Hydrobromic acid not more than 49% strength
NA 1789	101	Compound, cleaning, liquid (containing hydrochloric (muriatic) acid)
UN 1789	101	Hydrochloric acid
NA 1789	101	Hydrochloric acid mixture
UN 1789	101	Hydrochloric acid solution, inhibited
NA 1790	101	Compound, cleaning, liquid (containing hydrofluoric acid)
NA 1790	101	Etching acid, liquid, n.o.s.
UN 1790	102	Hydrofluoric acid
UN 1790	101	Hydrofluoric acid solution
NA 1790	101	Hydrogen fluoride

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1791	102	Hypochlorite
NA 1791	101	Hypochlorite solution
NA 1791	101	Hypochlorite solution containing not more than 7% available chlorine
UN 1792	101	Iodine monochloride
UN 1793	102	Isopropyl acid phosphate
UN 1793	101	Isopropyl acid phosphate, solid
NA 1794	101	Lead dross
UN 1794	101	Lead sulfate, solid
UN 1794	102	Lead sulphate
UN 1796	102	Acid mixtures
NA 1796	101	Nitrating acid
NA 1796	101	Nitrating acid, spent
UN 1798	101	Nitrohydrochloric acid
NA 1798	101	Nitrohydrochloric acid, diluted
UN 1799	102	Nonyl trichlorosilane
UN 1799	101	Nonyltrichlorosilane
UN 1800	102	Octadecyl trichlorosilane
UN 1800	101	Octadecyltrichlorosilane
UN 1801	102	Octyl trichlorosilane
UN 1801	101	Octyltrichlorosilane
UN 1802	102	Perchloric acid
UN 1802	101	Perchloric acid, not over 50% acid
UN 1803	102	Phenolsulphonic acid
UN 1804	102	Phenyl trichlorosilane
UN 1804	101	Phenyltrichlorosilane
UN 1805	102	o-Phosphoric acid
UN 1805	101	Phosphoric acid
UN 1806	102	Phosphorus pentachloride
UN 1806	101	Phosphorus pentachloride, solid
NA 1807	101	Phosphoric anhydride
UN 1807	102	Phosphorus pentoxide
UN 1808	101	Phosphorus tribromide
UN 1809	101	Phosphorus trichloride
UN 1810	101	Phosphorus oxychloride
UN 1810	102	Phosphoryl chloride
UN 1811	102	Potassium bifluoride
NA 1811	101	Potassium hydrogen fluoride solution
UN 1812	101	Potassium fluoride
UN 1812	101	Potassium fluoride solution
UN 1813	102	Potassium hydroxide
UN 1813	101	Potassium hydroxide, dry solid, flake, bead, *or* granular
UN 1814	102	Potassium hydroxide
UN 1814	101	Potassium hydroxide, liquid *or* solution
UN 1815	102	Propionyl chloride
UN 1816	101	Propyl trichlorosilane
UN 1817	101	Pyrosulfuryl chloride
UN 1817	102	Pyrosulphuryl chloride
UN 1818	101	Silicon chloride *or* Silicon tetrachloride
UN 1818	102	Silicon tetrachloride
UN 1819	102	Sodium aluminate
UN 1819	101	Sodium aluminate solution
UN 1821	101	Sodium hydrogen sulfate, solid
UN 1821	102	Sodium hydrogen sulphate
UN 1823	102	Sodium hydroxide
UN 1823	101	Sodium hydroxide, dry solid, flake, bead, *or* granular
UN 1824	102	Sodium hydroxide
UN 1824	101	Sodium hydroxide, liquid *or* solution
UN 1825	102	Sodium monoxide
UN 1825	101	Sodium monoxide, solid
UN 1826	102	Acid mixtures
UN 1827	102	Stannic chloride
UN 1827	101	Tin tetrachloride, anhydrous
UN 1828	101	Sulfur chloride
UN 1828	102	Sulphur chlorides
UN 1829	101	Sulfur trioxide
UN 1829	102	Sulphur trioxide
UN 1830	101	Sulfuric acid
UN 1830	102	Sulphuric acid
NA 1831	101	Oleum
UN 1831	102	Sulphuric acid
UN 1832	101	Sulfuric acid, spent
UN 1832	102	Sulphuric acid
UN 1833	101	Sulfurous acid
UN 1833	102	Sulphurous acid
UN 1834	101	Sulfuryl chloride
UN 1834	102	Sulphuryl chloride
UN 1835	102	Tetramethylammonium hydroxide
UN 1835	101	Tetramethylammonium hydroxide, liquid
UN 1836	101	Thionyl chloride
UN 1837	101	Thiophosphoryl chloride
UN 1838	101	Titanium tetrachloride
UN 1839	102	Trichloroacetic acid
UN 1839	101	Trichloroacetic acid, solid
UN 1840	102	Zinc chloride
UN 1840	101	Zinc chloride solution
UN 1841	101	Acetaldehyde ammonia
UN 1842	102	Acetic acid
UN 1843	102	Ammenium dinitro-o-cresolate
UN 1845	101	Carbon dioxide, solid, *or* Dry ice, *or* Carbonice
UN 1846	101	Carbon tetrachloride
UN 1847	102	Potassium sulphide
UN 1848	101	Propionic acid
NA 1848	101	Propionic acid solution
UN 1849	102	Sodium sulphide
UN 1850	101	Eradicator, paint *or* grease, liquid
UN 1850	102	Eradicators
UN 1851	101	Medicines, n.o.s.
UN 1851	101	Medicines, n.o.s., liquid
UN 1851	101	Medicines, n.o.s., solid
UN 1854	102	Barium alloys
UN 1855	102	Calcium
UN 1856	102	Rags
UN 1856	101	Rags, oily
UN 1857	102	Textile waste
UN 1857	101	Textile waste, wet
UN 1857	101	Waste textile, wet
UN 1858	101	Hexafluoropropylene
UN 1859	101	Silicon tetrafluoride
UN 1860	102	Vinyl fluoride
UN 1860	101	Vinyl fluoride, inhibited
UN 1862	101	Ethyl crotonate
UN 1863	102	Fuel, aviation
UN 1863	101	Fuel, aviation, turbine engine
UN 1864	102	Gas drips
UN 1864	101	Gas drips, hydrocarbon
UN 1865	102	n-Propyl nitrate
UN 1866	102	Resin
UN 1866	101	Resin solution
UN 1867	102	Cigarettes
UN 1868	101	Decaborane
UN 1869	102	Magnesium
UN 1869	102	Magnesium alloys
UN 1869	101	Magnesium, metal
UN 1870	102	Potassium borohydride
UN 1871	102	Titanium hydride
UN 1872	102	Lead dioxide
UN 1872	101	Lead peroxide
UN 1873	101	Perchloric acid
UN 1884	101	Barium oxide
UN 1885	101	Benzidine
UN 1886	102	Benzylidene chloride
UN 1887	101	Bromochloromethane
UN 1888	101	Chloroform
UN 1889	101	Cyanogen bromide
UN 1891	102	Ethyl bromide
UN 1892	102	Ethyl dichloroarsine
UN 1893	102	Organophosphates
UN 1894	102	Phenylmercuric hydroxide
UN 1895	102	Phenylmercuric nitrate
UN 1897	102	Tetrachloroethylene
UN 1897	101	Tetrachloroethylene *or* Perchloroethylene
UN 1898	101	Acetyl iodide
UN 1899	102	Alkanesulphonic acids
UN 1901	102	Calcium hydrogen sulphite
NA 1902	101	Di-(2-ethylhexyl) phosphoric acid
UN 1902	101	Diisooctyl acid phosphate
UN 1903	101	Disinfectant, liquid
UN 1903	102	Disinfectants
UN 1905	102	Selenic acid
UN 1905	101	Selenic acid, liquid
UN 1906	101	Acid, sludge
UN 1906	102	Sludge acid
UN 1907	102	Soda lime
UN 1907	101	Soda lime, solid
UN 1908	102	Sodium chlorite
UN 1908	101	Sodium chlorite solution
UN 1909	102	Sodium hydrogen sulphite
UN 1910	101	Calcium oxide
UN 1911	102	Diborane
UN 1911	101	Diborane *or* diborane mixtures
UN 1912	102	Methyl chloride and methylene chloride
UN 1912	101	Methyl chloride-methylene chloride mixture
UN 1913	102	Neon
UN 1914	102	Butyl propionate
UN 1915	102	Cyclohexanone
UN 1916	102	Dichloroethyl ether
UN 1917	102	Ethyl acrylate
UN 1917	101	Ethyl acrylate, inhibited
UN 1918	102	Isopropylbenzene
UN 1919	102	Methyl acrylate
UN 1919	101	Methyl acrylate, inhibited
UN 1920	102	Nonane
UN 1921	102	Propyleneimine
UN 1921	101	Propyleneimine, inhibited
UN 1922	101	Pyrrolidine
UN 1923	102	Calcium dithionite
UN 1924	102	Ethyl aluminium dichloride
UN 1925	102	Ethyl aluminium sesquichloride
UN 1926	102	Methyl aluminium sesquibromide
UN 1927	102	Methyl aluminium sesquichloride
UN 1928	102	Methyl magnesium bromide
UN 1928	101	Methyl magnesium bromide in ethyl ether
UN 1929	102	Potassium dithionite
UN 1930	102	Triisobutyl aluminium
UN 1931	102	Zinc dithionite
UN 1931	101	Zinc hydrosulfite
UN 1932	102	Zirconium
UN 1932	101	Zirconium scrap
UN 1935	102	Cyanides
UN 1938	102	Bromoacetic acid
UN 1938	101	Bromoacetic acid, solid
UN 1938	101	Bromoacetic acid solution
UN 1939	101	Phosphorus oxybromide
UN 1940	101	Thioglycolic acid
UN 1941	101	Dibromodifluoromethane
UN 1942	102	Ammonium nitrate
NA 1942	101	Ammonium nitrate (no organic coating)
NA 1942	101	Ammonium nitrate (organic coating)
UN 1944	102	Matches
UN 1944	101	Matches, safety
UN 1945	102	Matches
UN 1950	102	Aerosol dispensers
UN 1951	102	Argon
UN 1951	101	Argon, liquid pressurized
UN 1952	102	Ethylene oxide and carbon dioxide
UN 1953	102	Compressed *or* liquefied gases
(UN 1953).	102	Stibine
(UN 1953).	102	Water-gas
UN 1954	101	Compressed gas, n.o.s.
UN 1954	102	Compressed *or* liquefied gases
NA 1954	101	Refrigerating machine
NA 1955	101	Chloropicrin and nonflammable, nonliquefied compressed gas mixture
UN 1955	102	Compressed *or* liquefied gases
NA 1955	101	Methyl bromide and nonflammable, nonliquefied compressed gas mixture, liquid
NA 1955	101	Organic phosphate, Organic phosphate compound, *or* Organic phosphorus compound; mixed with compressed gas
(UN 1955).	102	Perchloryl fluoride
(UN 1955).	102	Phosphorus trifluoride
(UN 1955).	102	Tetrafluorohydrazine
NA 1956	101	Accumulator, pressurized
UN 1956	101	Compressed gas, n.o.s.
UN 1956	102	Compressed *or* liquefied gases
NA 1956	101	Dichlorodifluoromethane-dichlorotetrafluoroethane mixture
NA 1956	101	Dichlorodifluoromethane-monochlorodifluoromethane mixture
NA 1956	101	Dichlorodifluoromethane-trichloromonofluoromethane mixture
NA 1956	101	Dichlorodifluoromethane-trichlorotrifluoroethane mixture
NA 1956	101	Hexafluoropropylene oxide
NA 1956	101	Liquefied nonflammable gas
NA 1956	101	Water pump system
UN 1957	102	Deuterium
UN 1958	102	Dichlorotetrafluoroethane

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 1959 ...	102	1,1-Difluoroethylene
UN 1960 ...	101	Engine starting fluid
UN 1961 ...	102	Ethane
UN 1962 ...	101	Ethylene
UN 1963 ...	102	Helium
UN 1964 ...	102	Hydrocarbon gases
UN 1964 ...	101	Hydrocarbon gas, nonliquefied
UN 1965 ...	102	Hydrocarbon gases
UN 1965 ...	101	Hydrocarbon gas, liquefied
UN 1966 ...	102	Hydrogen
UN 1966 ...	101	Hydrogen, liquefied
UN 1967 ...	102	Insecticide gases
NA 1967 ...	101	Insecticide, liquefied gas, containing Poison A material *or* Poison B material
NA 1967 ...	101	Parathion and compressed gas mixture
UN 1968 ...	102	Insecticide gases
NA 1968 ...	101	Insecticide, liquefied gas
UN 1969 ...	102	Isobutane
UN 1970 ...	102	Krypton
UN 1971 ...	101	Methane
UN 1971 ...	102	Methane *or* natural gases
UN 1972 ...	102	Methane *or* natural gases
UN 1973 ...	102	Chlorodifluoromethane and chloropentafluoroethane
UN 1974 ...	102	Chlorodifluorobromomethane
UN 1975 ...	102	Nitric oxide and nitrogen tetroxide
UN 1976 ...	102	Octafluorocyclobutane
UN 1977 ...	102	Nitrogen
UN 1977 ...	101	Nitrogen, pressurized liquid
UN 1978 ...	102	Propane
UN 1979 ...	102	Rare gases
NA 1980 ...	101	Helium-oxygen mixture
UN 1980 ...	102	Rare gases
UN 1981 ...	102	Rare gases
UN 1982 ...	102	Tetrafluoromethane
UN 1983 ...	102	Trifluorochloroethane
UN 1984 ...	102	Trifluoromethane
UN 1986 ...	102	Alcohols
NA 1986 ...	101	Denatured alcohol
NA 1986 ...	101	Propargyl alcohol
NA 1986 ...	101	Rum, denatured
UN 1987 ...	101	Alcohol, n.o.s.
UN 1987 ...	102	Alcohols
UN 1988 ...	102	Aldehydes
UN 1989 ...	102	Aldehydes
UN 1989 ...	101	Benzaldehyde
UN 1990 ...	102	Benzaldehyde
UN 1991 ...	102	Chloroprene
UN 1991 ...	101	Chloroprene, inhibited
UN 1992 ...	101	Flammable liquid, poisonous, n.o.s.
UN 1992 ...	102	Flammable liquids
NA 1993 ...	101	Combustible liquid, n.o.s.
NA 1993 ...	101	Compound, cleaning, liquid
NA 1993 ...	101	Compound, tree *or* weed killing, liquid
NA 1993 ...	101	Cosmetics, n.o.s.
NA 1993 ...	101	Creosote, coal tar
NA 1993 ...	101	Crude oil, petroleum
NA 1993 ...	101	Disinfectant, liquid, n.o.s.
NA 1993 ...	101	Drugs, n.o.s.
NA 1993 ...	101	Drugs, n.o.s,
NA 1993 ...	101	Ethyl nitrate
UN 1993 ...	101	Flammable liquid, n.o.s.
UN 1993 ...	102	Flammable liquids
NA 1993 ...	101	Fuel oil
NA 1993 ...	101	Fuel oil, No. 1, 2, 4, 5 *or* 6
NA 1993 ...	101	Heater for refrigerator car, liquid fuel type
NA 1993 ...	101	Insecticide, liquid, n.o.s.
NA 1993 ...	101	Mortar stain, liquid
NA 1993 ...	101	Nitrostarch, wet with not less than 30% alcohol *or* solvent
NA 1993 ...	101	Organic peroxide liquid *or* solution, n.o.s.
NA 1993 ...	101	Plastic solvent, n.o.s.
NA 1993 ...	101	Refrigerating machine
NA 1993 ...	101	Solvent, n.o.s.
NA 1993 ...	101	Wax, liquid
UN 1994 ...	102	Iron carbonyl
UN 1995 ...	102	Pesticides
UN 1996 ...	102	Pesticides
UN 1997 ...	102	Solvents
UN 1998 ...	102	Solvents

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
NA 1999 ...	101	Asphalt
NA 1999 ...	101	Asphalt, cut back
UN 1999 ...	102	Cut-backs
UN 1999 ...	101	Tar, liquid
UN 2000 ...	102	Celluloid
UN 2001 ...	102	Cobalt naphthenates
UN 2002 ...	102	Celluloid
UN 2003 ...	102	Aluminium alkylchlorides
UN 2003 ...	102	Aluminium alkyls
UN 2003 ...	102	Aluminium tributyl
UN 2003 ...	102	Metal alkyls, n.o.s.
UN 2004 ...	102	Magnesium diamide
UN 2005 ...	102	Magnesium diphenyl
UN 2006 ...	102	Plastics
NA 2006 ...	101	Pyroxylin plastic scrap
NA 2006 ...	101	Pyroxylin plastics, rods, sheets, rolls, *or* tubes
UN 2008 ...	102	Zirconium
UN 2008 ...	101	Zirconium metal, dry
UN 2008 ...	102	Zirconium metal powder, dry
UN 2009 ...	102	Zirconium
UN 2010 ...	102	Magnesium hydride
UN 2011 ...	102	Magnesium phosphide
UN 2012 ...	102	Potassium phosphide
UN 2013 ...	102	Strontium phosphide
UN 2014 ...	102	Hydrogen peroxide
UN 2014 ...	101	Hydrogen peroxide solution
UN 2015 ...	102	Hydrogen peroxide
UN 2015 ...	101	Hydrogen peroxide solution
UN 2016 ...	102	Ammunition
UN 2016 ...	101	Chemical ammunition, nonexplosive
NA 2016 ...	101	Grenade
UN 2017 ...	102	Ammunition
UN 2017 ...	101	Chemical ammunition, nonexplosive
NA 2017 ...	101	Grenade, tear gas
UN 2018 ...	102	Chloroanilines
UN 2019 ...	102	Chloroanilines
UN 2020 ...	102	Chlorophenates
UN 2020 ...	102	Chlorophenols
NA 2020 ...	101	Pentachlorophenol
NA 2020 ...	101	Trichlorophenol
UN 2021 ...	102	Chlorophenates
UN 2021 ...	102	Chlorophenols
UN 2022 ...	102	Cresylic acid
NA 2022 ...	101	Mining reagent, liquid
UN 2023 ...	101	Epichlorohydrin
UN 2024 ...	102	Mercury compounds
NA 2025 ...	101	Mercuric subsulfate, solid
UN 2025 ...	101	Mercury compound, n.o.s., solid
UN 2025 ...	102	Mercury compounds
UN 2026 ...	102	Phenylmercuric compounds, n.o.s.
UN 2027 ...	102	Sodium arsenite
UN 2028 ...	102	Bombs, smoke
UN 2029 ...	102	Hydrazine
UN 2029 ...	101	Hydrazine, anhydrous
UN 2030 ...	102	Hydrazine
UN 2030 ...	101	Hydrazine, aqueous solution
UN 2031 ...	101	Nitric acid
UN 2032 ...	102	Nitric acid
UN 2032 ...	101	Nitric acid, fuming
UN 2033 ...	102	Potassium oxide
UN 2034 ...	102	Hydrogen and methane
UN 2035 ...	102	Trifluoroethane
UN 2036 ...	101	Xenon
UN 2037 ...	102	Cartouche
UN 2037 ...	102	Gas cartridges
UN 2037 ...	102	Receptacles
UN 2038 ...	102	Dinitrotoluenes
UN 2044 ...	102	2,2-Dimethylpropane
UN 2045 ...	102	Isobutyraldehyde
UN 2046 ...	102	p-Cymene
UN 2047 ...	101	Dichloropropene
NA 2047 ...	101	Dichloropropene and propylene dichloride mixture
UN 2048 ...	102	Dicyclopentadiene
UN 2049 ...	102	Diethylbenzene
UN 2050 ...	102	Diisobutylene
UN 2051 ...	102	Dimethylethanolamine
UN 2052 ...	102	Dipentene
UN 2053 ...	102	Methyl isobutyl carbinol
UN 2054 ...	101	Morpholine
NA 2054 ...	101	Morpholine, aqueous, mixture
UN 2055 ...	102	Styrene monomer
UN 2055 ...	101	Styrene monomer, inhibited
UN 2056 ...	101	Tetrahydrofuran

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 2057 ...	102	Tripropylene
UN 2058 ...	102	Valeraldehyde
UN 2059 ...	101	Box toe gum
NA 2059 ...	101	Collodion
UN 2059 ...	102	Nitrocellulose
NA 2059 ...	101	Nitrocellulose, colloided, granular *or* flake, wet with not less than 20% alcohol *or* solvent, *or* block, wet with not less than 25% alcohol
NA 2059 ...	101	Pyroxylin solution
NA 2059 ...	101	Pyroxylin solvent, n.o.s.
UN 2060 ...	101	Box toe gum
UN 2065 ...	102	Endrin
UN 2067 ...	101	Ammonium nitrate fertilizer
UN 2067 ...	102	Ammonium nitrate fertilizers
UN 2068 ...	101	Ammonium nitrate-carbonate mixture
UN 2069 ...	101	Ammonium nitrate mixed fertilizer
UN 2070 ...	101	Ammonium nitrate-phosphate
UN 2071 ...	102	Ammonium nitrate fertilizers
UN 2072 ...	102	Ammonium nitrate fertilizer
UN 2073 ...	102	Ammonia
UN 2073 ...	101	Ammonia solution
UN 2074 ...	102	Acrylamide
UN 2075 ...	102	Chloral
NA 2076 ...	101	Cresol
UN 2076 ...	102	Cresols
UN 2077 ...	102	Naphthylamine
UN 2078 ...	101	Toluene diisocyanate
UN 2079 ...	102	Diethylenetriamine
UN 2080 ...	101	Acetyl acetone peroxide
UN 2081 ...	101	Acetyl benzoyl peroxide
UN 2081 ...	101	Acetyl benzoyl peroxide solution
UN 2082 ...	101	Acetyl cyclohexanesulphonyl peroxide
UN 2082 ...	102	Acetyl cyclohexane sulphonyl peroxide
UN 2083 ...	101	Acetyl cyclohexanesulphonyl peroxide
UN 2083 ...	102	Acetyl cyclohexane sulphonyl peroxide
UN 2084 ...	101	Acetyl peroxide
UN 2084 ...	101	Acetyl peroxide solution
NA 2085 ...	101	Benzoyl peroxide
UN 2086 ...	102	Benzoyl peroxide
UN 2087 ...	101	Benzoyl peroxide
UN 2088 ...	101	Benzoyl peroxide
UN 2089 ...	101	Benzoyl peroxide
UN 2090 ...	101	Benzoyl peroxide
UN 2091 ...	101	tert-Butyl cumyl peroxide
NA 2091 ...	101	tert-Butyl isopropyl benzene hydroperoxide
UN 2091 ...	102	tert-Butyl cumyl peroxide
UN 2092 ...	101	tert-Butyl hydroperoxide
UN 2092 ...	102	tert-Butyl hydroperoxide
UN 2093 ...	101	tert-Butyl hydroperoxide
UN 2093 ...	102	tert-Butyl hydroperoxide
UN 2094 ...	101	tert-Butyl hydroperoxide
UN 2094 ...	102	tert-Butyl hydroperoxide
UN 2095 ...	101	tert-Butyl peroxyacetate
UN 2095 ...	102	tert-Butyl peracetate
UN 2096 ...	101	tert-Butyl peroxyacetate
UN 2096 ...	102	tert-Butyl peracetate
UN 2097 ...	101	tert-Butyl peroxybenzoate
UN 2097 ...	102	tert-Butyl perbenzoate
UN 2098 ...	101	tert-Butyl peroxybenzoate
UN 2098 ...	102	tert-Butyl perbenzoate
UN 2099 ...	101	tert-Butyl peroxymaleate
UN 2099 ...	102	tert-Butyl permaleate
UN 2100 ...	101	tert-Butyl peroxymaleate
UN 2100 ...	102	tert-Butyl permaleate
UN 2101 ...	101	tert-Butyl peroxymaleate
UN 2101 ...	102	tert-Butyl permaleate
UN 2102 ...	101	Di-tert-Butyl peroxide
UN 2102 ...	102	tert-Butyl peroxide
UN 2103 ...	101	tert-Butyl peroxyisopropyl carbonate
UN 2103 ...	102	tert-Butyl peroxy isopropyl carbonate
UN 2104 ...	101	tert-Butyl peroxy-3,5,5-trimethylhexanoate *or* tert-Butyl peroxyisononanoate
UN 2104 ...	102	tert-Butyl peroxy-3,5,5-trimethyl hexanoate
UN 2105 ...	101	tert-Butyl peroxyphthalate
UN 2105 ...	102	tert-Butyl monoperphthalate
UN 2106 ...	101	Di-(tert-butylperoxy)phthalate
UN 2106 ...	102	tert-Butyl diperphthalate

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 2107	101	Di-(tert-butylperoxy)phthalate
UN 2107	102	tert-Butyl diperphthalate
UN 2108	101	Di-(tert-butylperoxy)phthalate
UN 2108	102	tert-Butyl diperphthalate
UN 2110	101	tert-Butyl peroxypivalate
UN 2110	102	tert-Butyl perpivalate
UN 2111	102	2,2-Bis-(tert-butylperoxy) butane
UN 2111	101	2,2-Di-(tert-butylperoxy)butane
UN 2112	102	1,4-Bis-(2-tert-butylperoxy isopropyl) benzene, *or* ,1,3-bis-(2-tert-butylperoxy isopropyl) benzene
UN 2112	101	1,3-Di-(2-tert-butylperoxyisopropyl) benzene
UN 2112	101	1,3-Di-(2-tert-butylperoxyisopropyl) benzene and 1,4-Di-(2-tert-butylperoxyisopropyl) benzene mixture
UN 2113	101	p-Chlorobenzoyl peroxide
UN 2113	102	p-Chlorobenzoyl peroxide
UN 2114	101	p-Chlorobenzoyl peroxide
UN 2114	102	p-Chlorobenzoyl peroxide
UN 2115	101	p-Chlorobenzoyl peroxide
UN 2115	102	p-Chlorobenzoyl peroxide
UN 2116	101	Cumene hydroperoxide
UN 2117	102	1-Hydroxy-1'-hydroperoxy dicyclohexyl peroxide
UN 2118	102	1-Hydroxy-1'-hydroperoxy dicyclohexyl peroxide
UN 2118	101	Cyclohexanone peroxide
UN 2119	102	1-Hydroxy-1'-hydroperoxy dicyclohexyl peroxide
UN 2119	101	Cyclohexanone peroxide
UN 2120	101	Decanoyl peroxide
NA 2121	101	Dicumyl peroxide
UN 2121	101	Dicumyl peroxide, dry
UN 2122	102	Di-(2-ethylhexyl) perdicarbonate
UN 2122	101	Di-(2-ethylhexyl) peroxydicarbonate
UN 2123	102	Di-(2-ethylhexyl) perdicarbonate
UN 2123	101	Di-(2-ethylhexyl) peroxydicarbonate
UN 2124	101	Lauroyl peroxide
UN 2125	101	p-Menthane hydroperoxide
UN 2125	101	Paramenthane hydroperoxide
UN 2125	102	p-Menthane hydroperoxide
UN 2126	102	Isobutyl methyl ketone peroxide
UN 2126	101	Methyl isobutyl ketone peroxide
UN 2127	102	Ethyl methyl ketone peroxide(s)
UN 2128	102	Isononanoyl peroxide
UN 2128	101	Isononanyl peroxide
NA 2129	101	Caprylyl peroxide solution
UN 2129	102	n-Octanoyl peroxide
UN 2129	101	n-Octanoyl peroxide
UN 2130	102	n-Nonanoyl peroxide
UN 2130	101	Pelargonyl peroxide
UN 2131	102	Peracetic acid
NA 2131	101	Peracetic acid solution
UN 2131	101	Peroxyacetic acid
UN 2132	101	Propionyl peroxide
UN 2133	102	Diisopropyl perdicarbonate
NA 2133	101	Isopropyl percarbonate, unstabilized
UN 2133	101	Isopropyl peroxydicarbonate
UN 2134	102	Diisopropyl perdicarcbonate
NA 2134	101	Isopropyl percarbonate, stabilized
UN 2134	101	Isopropyl peroxydicarbonate
UN 2135	101	Succinic acid peroxide
UN 2136	101	Tetralin hydroperoxide
UN 2137	102	2,4-Dichlorobenzoyl peroxide
UN 2137	101	2,4-Dichlorobenzoyl peroxide
UN 2138	102	2,4-Dichlorobenzoyl peroxide
UN 2138	101	2,4-Dichlorobenzoyl peroxide
UN 2139	102	2,4-Dichlorobenzoyl peroxide
UN 2139	101	2,4-Dichlorobenzoyl peroxide
UN 2140	101	n-Butyl-4,4-di-(tert-butylperoxy)valerate
UN 2140	102	n-Butyl-4,4-bis-(tert-butyl-peroxy) valerate
UN 2141	101	n-Butyl-4,4-di-(tert-butylperoxy)valerate
UN 2141	102	n-Butyl-4,4-bis-(tert-butyl-peroxy) valerate
UN 2142	101	tert-Butyl peroxyisobutyrate
UN 2142	102	tert-Butyl perisobutyrate
UN 2143	101	tert-Butyl peroxy-2-ethylhexanoate
UN 2143	102	tert-Butyl per-(2-ethyl) hexanoate
UN 2144	101	tert-Butyl peroxydiethylacetate
UN 2144	102	tert-Butyl perdiethylacetate
UN 2145	102	1,1-Bis-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane
UN 2145	101	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane
UN 2146	102	1,1-Bis-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane
UN 2146	101	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane
UN 2147	102	1,1-Bis-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane
UN 2147	101	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane
UN 2148	102	Bis-(1-hydroxy cyclohexyl) peroxide
UN 2148	101	Di-(1-hydroxycyclohexyl) peroxide
UN 2149	102	Dibenzyl perdicarbonate
UN 2149	101	Dibenzyl peroxydicarbonate
UN 2150	102	Di-sec-butyl perdicarbonate
UN 2150	101	Di-sec-butyl peroxydicarbonate
UN 2151	102	Di-sec-butyl perdicarbonate
UN 2151	101	Di-sec-butyl peroxydicarbonate
UN 2152	102	Dicyclohexyl perdicarbonate
UN 2152	101	Dicyclohexyl peroxydicarbonate
UN 2153	102	Dicyclohexyl perdicarbonate
UN 2153	101	Dicyclohexyl peroxydicarbonate
UN 2154	102	Bis-(4-tert-butyl cyclohexyl) perdicarbonate
UN 2154	101	Di-(4-tert-butylcyclohexyl)peroxydicarbonate
UN 2155	102	2,5-Dimethyl-2,5-bis-(tert-butylperoxy) hexane
UN 2155	101	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane
UN 2156	102	2,5-Dimethyl-2,5-bis-(tert-butylperoxy) hexane
UN 2156	101	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane
UN 2157	102	2,5-Dimethyl-2,5-bis-(2-ethylhexanoylperoxy) hexane
UN 2157	101	2,5-Dimethyl-2,5-di-(2-ethylhexanoylperoxy)hexane
UN 2158	102	2,5-Dimethyl-2,5-bis-(tert-butylperoxy) hexyne-3
UN 2158	101	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3
UN 2159	102	2,5-Dimethyl-2,5-bis-(tert-butylperoxy) hexyne-3
UN 2159	101	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3
UN 2160	102	1,1,3,3-Tetramethyl butyl hydroperoxide
UN 2160	101	1,1,3,3-Tetramethylbutyl hydroperoxide
UN 2161	102	1,1,3,3-Tetramethyl butyl peroxy-2-ethyl hexanoate
UN 2161	101	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate
UN 2162	101	Pinane hydroperoxide
UN 2162	101	Pinane hydroperoxide solution
UN 2163	101	Diacetone alcohol peroxide
UN 2163	102	Diacetone alcohol peroxides
UN 2164	102	Dicetyl perdicarbonate
UN 2164	101	Dicetyl peroxydicarbonate
UN 2165	102	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetroxonane
UN 2165	101	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxocyclononane
UN 2166	102	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetroxonane
UN 2166	101	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxocyclononane
UN 2167	102	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetroxonane
UN 2167	101	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxocyclononane
UN 2168	102	2,2-Bis-(4,4-di-tert-butylperoxy cyclohexyl) propane
UN 2168	101	2,2-Di-(4,4-di-tert-butylperoxycyclohexyl)propane
UN 2169	101	n-Butyl peroxydicarbonate
UN 2169	102	n-Butyl perdicarbonate
UN 2170	101	n-Butyl peroxydicarbonate
UN 2170	102	n-Butyl perdicarbonate
UN 2171	101	Diisopropylbenzene hydroperoxide
UN 2171	101	Diisopropylbenzene hydroperoxide solution
UN 2172	102	2,5-Dimethyl-2,5-bis-(benzoylperoxy) hexane
UN 2172	101	2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane
UN 2173	102	2,5-Dimethyl-2,5-bis-(benzoylperoxy) hexane
UN 2173	101	2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane
UN 2174	102	2,5-Dimethyl-2,5-dihydroperoxy hexane
UN 2174	101	2,5-Dimethyl-2,5-dihydroperoxy hexane
UN 2174	101	Dimethylhexane dihydroperoxide, (with 18% or more water)
UN 2175	102	Diethyl perdicarbonate
UN 2175	101	Diethyl peroxydicarbonate
UN 2176	101	Di-n-propyl peroxydicarbonate
UN 2177	101	tert-Butyl peroxyneodecanoate
UN 2177	102	tert-Butyl per-neodecanoate
UN 2178	102	2,2-Dihydroperoxy propane
UN 2178	101	2,2-Dihydroperoxy propane
UN 2179	102	1,1-Bis-(tert-butylperoxy) cyclohexane
UN 2179	101	1,1-Di-(tert-butylperoxy)cyclohexane
UN 2180	102	1,1-Bis-(tert-butylperoxy) cyclohexane
UN 2180	101	1,1-Di-(tert-butylperoxy)cyclohexane
UN 2181	102	1,2-Bis-(tert-butylperoxy) cyclohexane
UN 2181	101	1,2-Di-(tert-butylperoxy)cyclohexane
UN 2182	101	Diisobutyryl peroxide
UN 2182	102	Isobutyryl peroxide
UN 2183	101	tert-Butyl peroxycrotonate
UN 2183	102	tert-Butyl percrotonate
UN 2184	102	Ethyl-3,3-bis-(tert-butylperoxy) butyrate
UN 2184	101	Ethyl-3,3-di-(tert-butylperoxy)butyrate
UN 2185	102	Ethyl-3,3-bis-(tert-butylperoxy) butyrate
UN 2185	101	Ethyl-3,3-di-(tert-butylperoxy)butyrate
UN 2187	101	Carbon dioxide, liquefied
UN 2188	101	Arsine
UN 2189	102	Dichlorosilane
UN 2190	102	Oxygen difluoride
UN 2191	101	Sulfuryl fluoride
UN 2191	102	Sulphuryl fluoride
UN 2192	101	Germane
UN 2194	102	Selenium hexafluoride
UN 2195	102	Tellurium hexafluoride
UN 2196	101	Tungsten hexafluoride
UN 2197	102	Hydrogen iodide
UN 2198	102	Phosphorus pentafluoride
UN 2199	101	Phosphine
UN 2202	101	Hydrogen selenide
UN 2203	102	Silane
UN 2204	102	Carbonyl sulfide
UN 2205	102	Adiponitrile
UN 2206	102	Isocyanates
UN 2207	102	Isocyanates
UN 2208	101	Bleaching powder
UN 2208	102	Calcium hypochlorite mixtures
UN 2209	102	Formaldehyde
UN 2209	101	Formaldehyde solution
UN 2210	102	Maneb, *or* maneb preparation(s)
NA 2210	101	Pesticide, water reactive
UN 2211	102	Plastics moulding materials
UN 2212	102	Asbestos, blue
UN 2213	101	Paraformaldehyde
UN 2214	102	Phthalic anhydride
NA 2215	101	Maleic acid
UN 2215	101	Maleic anhydride
UN 2216	102	Fishmeal *or* fishscrap
NA 2216	101	Fish meal *or* fish scrap containing 6% to 12% water
UN 2217	102	Seed cake
UN 2218	101	Acrylic acid
UN 2219	102	Allyl glycidyl ether
UN 2220	102	Aluminium alkyl halides, in solution
UN 2221	102	Aluminium alkyl halides
UN 2222	102	Anisole
UN 2224	101	Benzonitrile
UN 2225	102	Benzene sulphonyl chloride
UN 2226	102	Benzotrichloride
UN 2227	102	n-Butyl methacrylate
UN 2228	102	Butylphenols

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 2229 ...	102	Butylphenols
UN 2230 ...	102	Chlorinated anthracene oil
UN 2232 ...	102	Chloroacetaldehyde
UN 2233 ...	102	p-Chloro-o-anisidine
UN 2234 ...	102	Chlorobenzotrifluorides
UN 2235 ...	102	p-Chlorobenzyl chloride
UN 2236 ...	102	3-Chloro-4-methylphenyl isocyanate
UN 2237 ...	102	Chloronitroanilines
UN 2238 ...	102	Chlorotoluenes
UN 2239 ...	102	Chlorotoluidines
UN 2240 ...	102	Chromosulphuric acid
UN 2241 ...	102	Cycloheptane
UN 2242 ...	102	Cycloheptene
UN 2243 ...	102	Cyclohexyl acetate
UN 2244 ...	102	Cyclopentanol
UN 2245 ...	102	Cyclopentanone
UN 2246 ...	102	Cyclopentene
UN 2247 ...	102	n-Decane
UN 2248 ...	102	Di-(n-butyl)amine
UN 2249 ...	102	sym-Dichlorodimethyl ether
UN 2250 ...	102	Dichlorophenyl isocyanates
UN 2252 ...	102	1,2-Dimethoxyethane
UN 2253 ...	102	N,N-Dimethylaniline
UN 2254 ...	102	Matches
UN 2255 ...	101	Organic peroxide, sample, n.o.s.
UN 2255 ...	102	Organic peroxides, n.o.s.
UN 2256 ...	102	Cyclohexene
UN 2257 ...	102	Potassium metal
UN 2257 ...	101	Potassium, metal *or* metallic
UN 2258 ...	102	Propylene diamine
UN 2258 ...	101	Propylenediamine
UN 2259 ...	102	Triethylenetetramine
UN 2260 ...	102	Tripropylamine
UN 2261 ...	101	Xylenol
UN 2261 ...	102	Xylenols
UN 2263 ...	101	1,4-Dimethylcyclohexane
UN 2263 ...	102	Dimethylcyclohexanes
UN 2264 ...	102	N, N-Dimethylcyclohexylamine
UN 2265 ...	102	N,N-Dimethylformamide
UN 2266 ...	102	Dimethyl-N-propylamine
UN 2267 ...	102	Dimethyl thiophosphoryl chloride
UN 2269 ...	102	Dipropylene triamine
UN 2269 ...	101	Iminobispropylamine
UN 2270 ...	102	Ethylamine solution
UN 2271 ...	102	Ethyl amyl ketone
UN 2272 ...	102	N-Ethylaniline
UN 2273 ...	102	2-Ethylaniline
UN 2274 ...	102	N-Ethyl-n-benzylaniline
UN 2275 ...	102	2-Ethylbutanol
UN 2276 ...	102	2-Ethylhexylamine
UN 2277 ...	102	Ethyl methacrylate
UN 2278 ...	102	n-Heptene
UN 2279 ...	102	Hexachlorobutadiene
UN 2280 ...	102	Hexamethylenediamine
UN 2280 ...	101	Hexamethylenediamine, solid
UN 2282 ...	102	Hexanols
UN 2283 ...	102	Isobutyl methacrylate
UN 2284 ...	102	Isobutyronitrile
UN 2286 ...	102	Isododecane
UN 2287 ...	102	Isoheptene
UN 2288 ...	102	Isohexene
UN 2289 ...	102	Isophoronediamine
UN 2290 ...	102	Isophorone diisocyanate
NA 2291 ...	101	Lead chloride
UN 2291 ...	102	Lead compounds
NA 2291 ...	101	Lead fluoborate
NA 2291 ...	101	Lead sulfide
NA 2291 ...	101	Lead thiocyanate
UN 2293 ...	102	4-Methoxy-4-methylpentan-2-one
UN 2294 ...	102	N-Methylaniline
UN 2295 ...	102	Methyl chloroacetate
UN 2296 ...	102	Methyl cyclohexane
UN 2296 ...	101	Methylcyclohexane
UN 2297 ...	102	Methyl cyclohexanone
UN 2298 ...	101	Cyclopentane, methyl
UN 2298 ...	102	Methyl cyclopentane
UN 2298 ...	101	Methylcyclopentane
UN 2299 ...	101	Methyl dichloroacetate
UN 2300 ...	102	2-Methyl-5-ethylpyridine
UN 2300 ...	101	Methyl ethyl pyridine
UN 2301 ...	102	2-Methylfuran
UN 2301 ...	101	Methylfuran
UN 2302 ...	102	5-Methylhexan-2-one
UN 2303 ...	102	Isopropenylbenzene
UN 2304 ...	102	Napthalene, molten

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 2305 ...	102	Nitrobenzenesulphonic acid
UN 2306 ...	102	Nitrobenzotrifluoride
UN 2307 ...	102	3-Nitro-4-chlorobenzotrifluoride
UN 2308 ...	102	Nitrosylsulphuric acid
UN 2309 ...	102	Octadiene
UN 2310 ...	102	2,4-Pentanedione
UN 2311 ...	102	Phenetidines
UN 2313 ...	102	Picolines
UN 2315 ...	101	Polychlorinated biphenyls
UN 2316 ...	102	Sodium cuprocyanide
UN 2318 ...	101	Sodium hydrosulfide, solid
UN 2318 ...	102	Sodium hydrosulphide
UN 2319 ...	102	Terpene hydrocarbons n.o.s.
UN 2320 ...	102	Tetraethylenepentamine
UN 2321 ...	102	Trichlorobenzene
UN 2322 ...	102	Trichlorobutene
UN 2323 ...	102	Triethyl phosphite
UN 2324 ...	102	Triisobutylene
UN 2325 ...	102	1,3,5-Trimethylbenzene
UN 2326 ...	102	Trimethylcyclohexylamine
UN 2327 ...	102	3,3,5-Trimethylhexamethylene diamine
UN 2328 ...	102	Trimethylhexamethylene diisocyanate
UN 2329 ...	102	Trimethyl phosphite
UN 2330 ...	102	Undecane
UN 2331 ...	102	Zinc chloride
UN 2331 ...	101	Zinc chloride, solid
UN 2332 ...	102	Acetaldehyde oxime
UN 2333 ...	102	Allyl acetate
UN 2334 ...	102	Allylamine
UN 2335 ...	102	Allyl ethyl ether
UN 2336 ...	102	Allyl formate
UN 2337 ...	102	Phenyl mercaptan
UN 2338 ...	102	Benzotrifluoride
UN 2339 ...	102	2-Bromobutane
UN 2340 ...	102	2-Bromoethyl ethyl ether
UN 2341 ...	102	1-Bromo-3-methylbutane
UN 2342 ...	102	Bromomethylpropanes
UN 2343 ...	102	2-Bromopentane
UN 2344 ...	102	Bromopropanes
UN 2345 ...	102	3-Bromopropyne
UN 2346 ...	102	Butanedione
UN 2346 ...	101	Diacetyl
UN 2347 ...	102	Butane-1-thiol
UN 2347 ...	101	Butyl mercaptan
UN 2348 ...	102	Butylacrylate
UN 2350 ...	102	Butyl methyl ether
UN 2351 ...	102	Butyl nitrite
UN 2352 ...	102	Butyl vinyl ether
UN 2353 ...	102	Butyryl chloride
UN 2354 ...	102	Chloromethyl ethyl ether
UN 2356 ...	102	2-Chloropropane
UN 2357 ...	101	Cyclohexylamine
UN 2358 ...	102	Cyclooctatetraene
UN 2359 ...	102	Diallylamine
UN 2360 ...	102	Diallylether
UN 2361 ...	102	Diisobutylamine
UN 2362 ...	102	1,1-Dichloroethane
UN 2363 ...	101	Ethyl mercaptan
UN 2364 ...	102	Propyl benzene
UN 2366 ...	102	Diethyl carbonate
UN 2367 ...	102	alpha-Methyl valeraldehyde
UN 2368 ...	102	alpha-Pinene
UN 2368 ...	101	Pinene
UN 2369 ...	102	Ethylene glycol monobutyl ether
UN 2370 ...	102	Hex-1-ene
UN 2371 ...	102	Isopentenes
UN 2373 ...	102	Diethoxymethane
UN 2375 ...	102	Diethyl sulfide
UN 2376 ...	102	2,3-Dihydropyran
UN 2376 ...	101	Dihydropyran
UN 2377 ...	102	1,1-Dimethoxyethane
UN 2379 ...	102	1,3-Dimethylbutylamine
UN 2380 ...	102	Dimethyldiethoxysilane
UN 2381 ...	102	Dimethyl disulfide
UN 2382 ...	102	Dimethylhydrazine
UN 2383 ...	102	Dipropylamine
UN 2384 ...	102	Dipropyl ether
UN 2385 ...	102	Ethylisobutyrate
UN 2386 ...	102	1-Ethyl piperidine
UN 2387 ...	102	Fluorobenzene
UN 2388 ...	102	Fluorotoluenes
UN 2389 ...	101	Furan
UN 2390 ...	102	2-Iodobutane

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 2391 ...	102	Iodomethylpropanes
UN 2392 ...	102	Iodopropanes
UN 2393 ...	102	Isobutyl formate
UN 2394 ...	102	Isobutyl propionate
UN 2395 ...	102	Isobutyryl chloride
UN 2396 ...	102	Methacraldehyde
UN 2397 ...	102	3-Methyl butan-2-one
UN 2398 ...	102	Methyl-tert-butyl ether
UN 2399 ...	102	1-Methylpiperidine
UN 2400 ...	102	Methylisovalerate
UN 2401 ...	102	Piperidine
UN 2402 ...	102	Propanethiols
UN 2403 ...	102	Isopropenyl acetate
UN 2404 ...	102	Propionitrile
UN 2405 ...	102	Isopropyl butyrate
UN 2406 ...	102	Isopropyl isobutyrate
UN 2407 ...	102	Isopropyl chloroformate
UN 2408 ...	102	Isopropyl formate
UN 2409 ...	102	Isopropyl propionate
UN 2410 ...	102	1,2,3,6-Tetrahydropyridine
UN 2411 ...	102	Butyronitrile
UN 2412 ...	102	Tetrahydrothiophene
UN 2414 ...	102	Thiophene
UN 2416 ...	102	Trimethyl borate
UN 2417 ...	102	Carbonyl fluoride
UN 2418 ...	102	Sulphur tetrafluoride
UN 2420 ...	102	Hexafluoroacetone
UN 2421 ...	102	Nitrogen trioxide
NA 2422 ...	101	Perfluoro-2-butene
NA 2426 ...	101	Ammonium nitrate, solution
UN 2427 ...	102	Potassium chlorate
UN 2428 ...	102	Sodium chlorate
UN 2429 ...	102	Calcium chlorate
UN 2431 ...	102	o-Anisidine
UN 2432 ...	102	N,N-Diethylaniline
UN 2433 ...	102	Chloro-o-nitrotoluene
UN 2434 ...	102	Dibenzyldichlorosilane
UN 2435 ...	101	Ethyl phenyl dichlorosilane
UN 2435 ...	102	Ethylphenyldichlorosilane
UN 2436 ...	102	Thioacetic acid
UN 2437 ...	102	Methylphenyldichlorosilane
UN 2438 ...	102	Pivaloyl chloride
UN 2438 ...	101	Trimethylacetyl chloride
UN 2439 ...	101	Sodium bifluoride, solid
UN 2439 ...	101	Sodium bifluoride, solution
UN 2439 ...	102	Sodium hydrogen fluoride
UN 2440 ...	102	Stannic chloride pentahydrate
UN 2441 ...	102	Titanium trichloride
UN 2442 ...	102	Trichloroacetyl chloride
UN 2443 ...	102	Vanadium oxitrichloride
UN 2443 ...	101	Vanadium oxytrichloride
NA 2443 ...	101	Vanadium oxytrichloride and titanium tetrachloride mixture
UN 2444 ...	101	Vanadium tetrachloride
UN 2445 ...	102	Lithium alkyls
UN 2446 ...	102	Nitrocresols
UN 2447 ...	102	Phosphorus white, molten
UN 2448 ...	102	Sulphur, molten
NA 2449 ...	101	Ammonium oxalate
NA 2449 ...	101	Cupric oxalate
UN 2449 ...	102	Oxalates
UN 2451 ...	101	Nitrogen trifluoride
UN 2456 ...	102	2-Chloropropene
UN 2456 ...	101	2-Chloropropene
UN 2457 ...	101	2,3-Dimethylbutane
UN 2458 ...	101	Hexadiene
UN 2459 ...	102	2-Methyl-1-butene
UN 2460 ...	102	2-Methyl-2-butene
NA 2460 ...	101	Methyl butene
UN 2461 ...	101	Methylpentadiene
UN 2462 ...	101	Methyl pentane
UN 2462 ...	102	Methylpentanes
UN 2463 ...	102	Aluminium hydride
UN 2463 ...	101	Aluminum hydride
UN 2464 ...	101	Beryllium nitrate
UN 2465 ...	102	Dichloroisocyanuric acid
NA 2465 ...	101	Potassium dichloro-s-triazinetrione
UN 2465 ...	101	Sodium dichloro-s-triazinetrione
UN 2466 ...	102	Potassium superoxide
UN 2467 ...	102	Sodium percarbonates
UN 2468 ...	102	Trichloroisocyanuric acid
UN 2468 ...	101	Trichloro-s-triazinetrione
NA 2468 ...	101	(mono-(Trichloro) tetra-(monopotassium dichloro)-penta-s-triazinetrione, dry

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
UN 2469 ...	102	Zinc bromate
UN 2470 ...	102	Benzyl cyanide
UN 2471 ...	102	Osmium tetroxide
UN 2473 ...	102	Sodium arsanilate
UN 2474 ...	101	Thiophosgene
UN 2475 ...	102	Vanadium trichloride
UN 2477 ...	102	Methyl isothiocyanate
UN 2478 ...	102	Isocyanates
UN 2480 ...	102	Methyl isocyanate
UN 2481 ...	102	Ethyl isocyanate
UN 2482 ...	102	n-Propyl isocyanate
UN 2483 ...	102	Isopropyl isocyanate
UN 2484 ...	102	tert-Butyl isocyanate
UN 2485 ...	101	n-Butyl isocyanate
UN 2485 ...	102	n-Butyl isocyanate
UN 2486 ...	102	Isobutyl isocyanate
UN 2487 ...	102	Phenyl isocyanate
UN 2488 ...	102	Cyclohexyl isocyanate
UN 2489 ...	102	Diphenylmethane diisocyanate
UN 2490 ...	101	Dichloroisopropyl ether
UN 2491 ...	102	Ethanolamine
UN 2491 ...	101	Monoethanolamine
UN 2493 ...	101	Hexamethyleneimine
UN 2495 ...	101	Iodine pentafluoride
UN 2496 ...	101	Propionic anhydride
UN 2497 ...	102	Sodium phenolate
UN 2497 ...	101	Sodium phenolate, solid
UN 2498 ...	102	1,2,3,6-Tetrahydrobenzaldehyde
UN 2498 ...	101	1,2,3,6-Tetrahydrobenzaldehyde
UN 2501 ...	102	Tris-(1-aziridinyl)phosphine oxide
UN 2501 ...	101	Tris-(1-aziridinyl) phosphine oxide
UN 2502 ...	101	Valeryl chloride
UN 2502 ...	102	Valeryl chlorides
UN 2503 ...	102	Zirconium tetrachloride
UN 2503 ...	101	Zirconium tetrachloride, solid
UN 2504 ...	101	Acetylene tetrabromide
UN 2505 ...	101	Ammonium fluoride
UN 2506 ...	101	Ammonium hydrogen sulfate
UN 2507 ...	102	Chloroplatinic acid
UN 2507 ...	101	Chloroplatinic acid, solid
UN 2508 ...	101	Molybdenum pentachloride
UN 2509 ...	101	Potassium hydrogen sulfate, solid
UN 2511 ...	102	Chloropropionic acid
UN 2512 ...	102	Aminophenols
UN 2513 ...	102	Bromoacetyl bromide
UN 2514 ...	101	Bromobenzene
UN 2515 ...	102	Bromoform
UN 2516 ...	102	Carbon tetrabromide
UN 2517 ...	101	Difluoromonochloroethane
UN 2518 ...	102	1,5,9-Cyclododecatriene
UN 2520 ...	102	Cyclooctadienes
UN 2521 ...	102	Diketene
UN 2522 ...	102	Dimethylaminoethyl methacrylate
UN 2524 ...	102	Ethyl orthoformate
UN 2525 ...	102	Ethyl oxalate
UN 2526 ...	102	Furfurylamine
UN 2527 ...	102	Isobutyl acrylate
UN 2528 ...	102	Isobutylisobutyrate
UN 2529 ...	101	Isobutyric acid
UN 2530 ...	101	Isobutyric anhydride
UN 2531 ...	102	Methacrylic acid
UN 2533 ...	102	Methyl trichloroacetate
UN 2534 ...	102	Methyl chlorosilane
UN 2535 ...	102	Methylmorpholine
UN 2536 ...	102	Methyltetrahydrofuran
UN 2538 ...	102	Nitronapthalene
UN 2541 ...	102	Terpinolene
UN 2542 ...	102	Tributylamine
UN 2545 ...	101	Hafnium metal, dry.
UN 2545 ...	102	Hafnium metal powder, dry
UN 2546 ...	102	Titanium metal powder, dry
NA 2546 ...	101	Titanium metal powder, dry *or* wet
UN 2547 ...	102	Sodium superoxide
UN 2550 ...	102	Ethyl methyl ketone peroxide(s)
UN 2550 ...	101	Methyl ethyl ketone peroxide
UN 2551 ...	101	tert-Butyl peroxydiethylacetate
UN 2551 ...	102	tert-Butyl perdiethylacetate
UN 2552 ...	102	Hexafluoroacetone hydrate
UN 2553 ...	102	Coal tar naphtha
NA 2553 ...	101	Coal tar naptha
UN 2553 ...	101	Naphtha
UN 2554 ...	102	Methyl allyl chloride
UN 2555 ...	102	Nitrocellulose
NA 2555 ...	101	Nitrocellulose, colloided, granular *or* flake, wet with not less than 20% water
NA 2555 ...	101	Nitrocellulose, wet with not less than 20% water
UN 2556 ...	102	Nitrocellulose
NA 2556 ...	101	Nitrocellulose, wet with not less than 30% alcohol *or* solvent
NA 2557 ...	101	Lacquer base, *or* Lacquer chips, dry
UN 2557 ...	102	Nitrocellulose
UN 2558 ...	102	1-Bromo-2,3-epoxypropane
UN 2562 ...	101	tert-Butyl peroxyisobutyrate
UN 2562 ...	102	tert-Butyl perisobutyrate
UN 2564 ...	102	Trichloroacetic acid
UN 2564 ...	101	Trichloroacetic acid solution
UN 2565 ...	102	Dicyclohexylamine
UN 2567 ...	101	Sodium pentachlorophenate
NA 2570 ...	101	Cadmium acetate
NA 2570 ...	101	Cadmium bromide
NA 2570 ...	101	Cadmium chloride
UN 2570 ...	102	Cadmium compounds
UN 2572 ...	102	Phenylhydrazine
UN 2573 ...	102	Thallium chlorate
UN 2574 ...	102	Tricresylphosphate
UN 2582 ...	101	Ferric chloride solution
UN 2584 ...	101	Alkanesulfonic acid
NA 2584 ...	101	Dodecylbenzenesulfonic acid
NA 2584 ...	101	Toluene sulfonic acid, liquid
NA 2588 ...	101	Insecticide, dry, n.o.s.
UN 2588 ...	102	Pesticides
UN 2590 ...	102	Asbestos, white
UN 2592 ...	101	Distearyl peroxydicarbonate
UN 2592 ...	102	Distearylperoxydicarbonate
UN 2593 ...	102	Bis-(2-methylbenzoyl)peroxide
UN 2593 ...	101	Di-(2-methylbenzoyl)peroxide
UN 2594 ...	101	tert-Butyl peroxyneodecanoate
UN 2594 ...	102	tert-Butylperneodecanoate
UN 2595 ...	101	Dimyristyl peroxydicarbonate
UN 2595 ...	102	Dimyristylperoxydicarbonate
UN 2596 ...	102	3-tert-Butylperoxy-3-phenyl phthalide
UN 2596 ...	101	3-tert-Butyl peroxy-3-phenylphthalide
UN 2597 ...	102	Bis-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide
UN 2597 ...	101	Di-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide
UN 2598 ...	102	Ethyl-3,3-bis(tert-butylperoxy)butyrate
UN 2598 ...	101	Ethyl-3,3-di-(tert-butylperoxy)butyrate
UN 2602 ...	101	Dichlorodifluoromethane and difluoroethane mixture
UN 2603 ...	102	Cycloheptatriene
UN 2604 ...	102	Boron trifluoride diethyl etherate
UN 2605 ...	102	Methoxymethyl isocyanate
UN 2606 ...	102	Methyl orthosilicate
UN 2607 ...	102	Acrolein dimer
UN 2608 ...	102	Nitropropanes
UN 2610 ...	102	Triallylamine
UN 2612 ...	102	Methyl propyl ether
UN 2614 ...	102	Methallyl alcohol
UN 2615 ...	102	Ethyl propyl ether
UN 2616 ...	102	Triisopropyl borate
UN 2617 ...	102	Methyl cyclohexanol
UN 2618 ...	102	Vinyl Toluenes
UN 2619 ...	102	Benzyl dimethylamine
UN 2621 ...	102	Acetyl methyl carbinol
UN 2622 ...	102	Glycidaldehyde
NA 2626 ...	101	Chloric acid
UN 2630 ...	101	Sodium selenite
UN 2646 ...	101	Hexachlorocyclopentadiene
UN 2655 ...	102	Potassium silicofluoride
UN 2656 ...	101	Quinoline
UN 2670 ...	102	Cyanuric chloride
UN 2672 ...	102	Ammonia solutions
NA 2672 ...	101	Ammonium hydroxide
UN 2674 ...	102	Sodium silicofluoride
NA 2683 ...	101	Ammonium hydrosulfide solution
UN 2683 ...	101	Ammonium sulfide solution
UN 2686 ...	102	Diethylaminoethanol
UN 2692 ...	101	Boron tribromide
NA 2693 ...	101	Ammonium bisulfite, solid
NA 2693 ...	101	Ammonium bisulfite solution
NA 2693 ...	101	Calcium hydrogen sulfite solution
NA 2693 ...	101	Potassium metabisulfite
NA 2693 ...	101	Sodium hydrogen sulfite, solid
NA 2693 ...	101	Sodium metabisulfite
UN 2703 ...	101	Isopropyl mercaptan
UN 2704 ...	101	Propyl mercaptan
UN 2706 ...	102	Diethylcarbinol
UN 2707 ...	102	Dimethyldioxanes
UN 2708 ...	102	Butoxyl
UN 2709 ...	102	Butyl benzenes
UN 2710 ...	102	Butyrone
UN 2711 ...	102	Dibromobenzene
UN 2725 ...	101	Nickel nitrate
UN 2728 ...	101	Zirconium nitrate
UN 2733 ...	102	Alkylamines and polyamines
UN 2740 ...	102	n-Propyl chloroformate
UN 2749 ...	102	Tetramethylsilane
UN 2752 ...	102	1,2-Epoxy-3-ethyloxy propane
UN 2755 ...	101	3-Chloroperoxybenzoic acid
UN 2755 ...	102	m-Chloroperoxybenzoic acid
UN 2756 ...	101	Organic peroxide, mixture.
UN 2756 ...	102	Organic peroxides, mixture
UN 2757 ...	101	Carbamate pesticide
NA 2757 ...	101	Carbaryl
NA 2757 ...	101	Carbofuran
NA 2757 ...	101	Mercaptodimethur
NA 2757 ...	101	Mexacarbate
UN 2758 ...	101	Carbamate pesticide
UN 2759 ...	101	Arsenical pesticide
NA 2759 ...	101	Bordeaux arsenite, liquid
NA 2759 ...	101	Bordeaux arsenite, solid
UN 2760 ...	101	Arsenical pesticide
NA 2761 ...	101	Aldrin
NA 2761 ...	101	Aldrin, cast solid
NA 2761 ...	101	Aldrin mixture, dry
NA 2761 ...	101	Aldrin mixture, dry, with 65% or less aldrin
NA 2761 ...	101	DDT *or* Dichlorodiphenyltrichloroethane
NA 2761 ...	101	Dichlone
NA 2761 ...	101	Dieldrin
NA 2761 ...	101	Endosulfan
NA 2761 ...	101	Endrin
NA 2761 ...	101	Heptachlor
NA 2761 ...	101	Keithane
NA 2761 ...	101	Kepone
NA 2761 ...	101	Lindane
NA 2761 ...	101	Methoxychlor
UN 2761 ...	101	Organochlorine pesticide
NA 2761 ...	101	TDE
NA 2761 ...	101	Toxaphene
NA 2762 ...	101	Aldrin mixture, liquid
NA 2762 ...	101	Aldrin mixture, liquid, with 60% or less aldrin
NA 2762 ...	101	Chlordane, liquid
UN 2762 ...	101	Organochlorine pesticide
UN 2763 ...	101	Triazine pesticide
UN 2764 ...	101	Triazine pesticide
NA 2765 ...	101	2,4-Dichlorophenoxyacetic acid
NA 2765 ...	101	2,4-Dichlorophenoxyacetic acid ester
UN 2765 ...	101	Phenoxy pesticide
NA 2765 ...	101	Propargite
NA 2765 ...	101	2,4,5-Trichlorophenoxyacetic acid
NA 2765 ...	101	2,4,5-Trichlorophenoxyacetic acid amine, ester, *or* salt
NA 2765 ...	101	2,4,5-Trichlorophenoxypropionic acid
NA 2765 ...	101	2,4,5-Trichlorophenoxypropionic acid ester
UN 2766 ...	101	Phenoxy pesticide
NA 2767 ...	101	Diuron
UN 2767 ...	101	Phenylurea pesticide
UN 2768 ...	101	Phenylurea pesticide
UN 2769 ...	101	Benzoic derivative pesticide
NA 2769 ...	101	Dicamba
NA 2769 ...	101	Dichlobenil
UN 2770 ...	101	Benzoic derivative pesticide
UN 2771 ...	101	Dithiocarbamate pesticide
NA 2771 ...	101	Thiram
UN 2772 ...	101	Dithiocarbamate pesticide
UN 2773 ...	101	Phthalimide derivative pesticide
UN 2774 ...	101	Phthalimide derivative pesticide
UN 2775 ...	101	Copper based pesticide
UN 2776 ...	101	Copper based pesticide
UN 2777 ...	101	Mercury based pesticide
UN 2778 ...	101	Mercury based pesticide
UN 2779 ...	101	Substituted nitrophenol pesticide
UN 2780 ...	101	Substituted nitrophenol pesticide
UN 2781 ...	101	Bipyridilium pesticide
NA 2781 ...	101	Diquat
UN 2782 ...	101	Bipyridilium pesticide
NA 2783 ...	101	Azinphos methyl
NA 2783 ...	101	Chlorpyrifos

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
NA 2783 ...	101	Coumaphos
NA 2783 ...	101	Diazinon
NA 2783 ...	101	Dichlorvos
NA 2783 ...	101	Disulfoton
NA 2783 ...	101	Ethion
NA 2783 ...	101	Hexaethyl tetraphosphate mixture, dry
NA 2783 ...	101	Hexaethyl tetraphosphate mixture, liquid
NA 2783 ...	101	Malathion
NA 2783 ...	101	Methyl parathion, liquid
NA 2783 ...	101	Methyl parathion mixture, dry
NA 2783 ...	101	Methyl parathion mixture, liquid
NA 2783 ...	101	Methyl parathion mixture, liquid, (containing 25% or less methyl parathion)
NA 2783 ...	101	Mevinphos
UN 2783 ...	101	Mipafox
NA 2783 ...	101	Naled
NA 2783 ...	101	Organic phosphate mixture, Organic phosphate compound mixture, *or* Organic phosphorus compound mixture; liquid
NA 2783 ...	101	Organic phosphate, Organic phosphate compound, *or* Organic phosphorus compound; liquid
UN 2783 ...	101	Organophosphorus pesticide
NA 2783 ...	101	Parathion, liquid
NA 2783 ...	101	Parathion mixture, dry
NA 2783 ...	101	Parathion mixture, liquid
NA 2783 ...	101	Phencapton
NA 2783 ...	101	Tetraethyl pyrophosphate, liquid
NA 2783 ...	101	Tetraethyl pyrophosphate mixture, dry
NA 2783 ...	101	Tetraethyl pyrophosphate mixture, liquid
NA 2783 ...	101	Trichlorfon
UN 2784 ...	101	Organophosphorus pesticide
UN 2785 ...	102	4-Thiopentenal
UN 2786 ...	101	Organotin pesticide
UN 2787 ...	101	Organotin pesticide
UN 2789 ...	101	Acetic acid, glacial
UN 2790 ...	101	Acetic acid
NA 2791 ...	101	Aircraft rocket engine
UN 2792 ...	101	Aircraft rocket engine igniter
UN 2793 ...	102	Iron swarf
NA 2793 ...	101	Magnesium scrap
NA 2793 ...	101	Metal borings, shavings, turnings, *or* cuttings
NA 2794 ...	101	Battery charger with electrolyte (acid) *or* alkaline battery fluid
NA 2794 ...	101	Battery, electric storage, wet
NA 2794 ...	101	Battery, electric storage, wet, with automobile, auto parts, engine
NA 2794 ...	101	Battery, electric storage, wet, with containers of electrolyte (acid) *or* alkaline battery fluid
UN 2796 ...	101	Electrolyte (acid) battery fluid
NA 2797 ...	101	Alkaline battery fluid
NA 2797 ...	101	Alkaline battery fluid with empty storage battery
NA 2797 ...	101	Electrolyte (acid) *or* alkaline battery fluid, packed with dry-storage battery
UN 2798 ...	101	Benzene phosphorus dichloride
UN 2799 ...	101	Benzene phosphorus thiodichloride
NA 2801 ...	101	Coal tar dye, liquid
UN 2801 ...	101	Dye intermediate, liquid
UN 2802 ...	101	Copper chloride
UN 2803 ...	101	Gallium metal, liquid
UN 2803 ...	101	Gallium metal, solid
UN 2805 ...	101	Lithium hydride in fused solid form
UN 2806 ...	101	Lithium nitride
UN 2807 ...	101	Magnetized material
NA 2809 ...	101	Mercury, metallic
NA 2810 ...	101	Arsenious and mercuric iodide solution
NA 2810 ...	101	Compound, tree *or* weed killing, liquid
NA 2810 ...	101	Drugs, n.o.s. liquid
NA 2810 ...	101	Poisonous liquid, n.o.s. *or* Poison B, liquid, n.o.s.
UN 2810 ...	102	Poisonous liquids, n.o.s.
(UN 2810).	102	Sodium fluoride
NA 2811 ...	101	Drugs, n.o.s. solid
NA 2811 ...	101	Flue dust, poisonous
NA 2811 ...	101	Lead fluoride
NA 2811 ...	101	Lead iodide
NA 2811 ...	101	Lead stearate
NA 2811 ...	101	Poisonous solid, n.o.s. *or* Poison B, solid, n.o.s.
UN 2811 ...	102	Poisonous solids, n.o.s.
NA 2811 ...	101	Selenium oxide
(UN 2811).	102	Silicofluorides
UN 2812 ...	101	Sodium aluminate, solid
NA 2813 ...	101	Lithium acetylide-ethylene diamine complex
UN 2813 ...	101	Water reactive solid, n.o.s.
NA 2814 ...	101	Etiologic agent, n.o.s.
UN 2815 ...	101	N-Aminoethylpiperazine
UN 2817 ...	101	Ammonium hydrogen fluoride solution
UN 2818 ...	101	Ammonium polysulfide solution
UN 2819 ...	101	Amyl acid phosphate
UN 2820 ...	101	Butyric acid
NA 2821 ...	101	Phenol, liquid *or* solution
UN 2823 ...	101	Crotonic acid
UN 2826 ...	101	Ethyl chlorothioformate
UN 2830 ...	101	Lithium ferrosilicon
UN 2831 ...	101	1,1,1-Trichloroethane
UN 2835 ...	101	Sodium aluminum hydride
UN 2837 ...	101	Sodium hydrogen sulfate solution
UN 2845 ...	101	Pyrophoric liquid, n.o.s. *or* Pyroforic liquid, n.o.s.
UN 2854 ...	101	Ammonium silicofluoride
UN 2855 ...	101	Zinc silicofluoride
UN 2857 ...	101	Refrigerating machine
UN 2859 ...	102	Ammonium metavanadate
UN 2860 ...	102	Vanadium trioxide
UN 2861 ...	102	Ammonium polyvanadate
UN 2862 ...	101	Vanadium pentoxide
UN 2863 ...	102	Sodium-ammonium-vanadate
UN 2864 ...	102	Potassium metavanadate
UN 2867 ...	101	Ink
UN 2868 ...	101	Resin solution
UN 2876 ...	101	Resorcinol
UN 2880 ...	101	Calcium hypochlorite, hydrated
UN 2883 ...	101	2,2-Di-(tert-butylperoxy)propane
UN 2884 ...	101	2,2-Di-(tert-butylperoxy)propane
UN 2885 ...	101	1,1-Di-(tert-butylperoxy)cyclohexane
UN 2886 ...	101	tert-Butyl peroxy-2-ethylhexanoate
UN 2887 ...	101	tert-Butyl peroxy-2-ethylhexanoate
UN 2888 ...	101	tert-Butyl peroxy-2-ethylhexanoate
UN 2889 ...	101	Diisotridecyl peroxydicarbonate
UN 2890 ...	101	tert-Butyl peroxybenzoate
UN 2891 ...	101	tert- Amyl peroxyneodecanoate
UN 2892 ...	101	Dimyristyl peroxydicarbonate
UN 2893 ...	101	Lauroyl peroxide
UN 2894 ...	101	Di-(4-tert-butylcyclohexyl)peroxydicarbonate
UN 2895 ...	101	Dicetyl peroxydicarbonate
UN 2896 ...	101	Cyclohexanone peroxide
UN 2897 ...	101	1,1-Di-(tert-butylperoxy)cyclohexane
UN 2898 ...	101	tert-Amyl peroxy-2-ethylhexanoate
UN 2899 ...	101	Organic peroxide, trial quantity, n.o.s.
NA 2902 ...	101	Insecticide, liquid, n.o.s.
UN 2910 ...	101	Radioactive material, limited quantity, n.o.s.
UN 2911 ...	101	Radioactive device, n.o.s.
UN 2912 ...	101	Radioactive material, low specific activity *or* LSA, n.o.s.
UN 2918 ...	101	Radioactive material, fissile, n.o.s.
UN 2922 ...	101	Corrosive liquid, poisonous, n.o.s.
NA 2922 ...	101	Dimethyl chlorothiophosphate
NA 2922 ...	101	Sodium hydrosulfide, solution
NA 2924 ...	101	Dichlorobutene
UN 2924 ...	101	Flammable liquid, corrosive, n.o.s.
UN 2925 ...	101	Flammable solid, corrosive, n.o.s.
UN 2926 ...	101	Flammable solid, poisonous, n.o.s.
UN 2928 ...	101	Poisonous solid, corrosive, n.o.s.
NA 9011 ...	101	Camphene
NA 9018 ...	101	Dichlorodifluoroethylene
NA 9026 ...	101	Dinitrocyclohexylphenol
NA 9035 ...	101	Gas identification set
NA 9035 ...	101	Poisonous liquid *or* gas, n.o.s.
NA 9037 ...	101	Hexachloroethane
NA 9053 ...	101	Oiled material
NA 9069 ...	101	Tetramethylmethylenediamine
NA 9077 ...	101	Adipic acid
NA 9078 ...	101	Aluminum sulfate, solid
NA 9079 ...	101	Ammonium acetate
NA 9080 ...	101	Ammonium benzoate
NA 9081 ...	101	Ammonium bicarbonate
NA 9083 ...	101	Ammonium carbamate
NA 9084 ...	101	Ammonium carbonate
NA 9085 ...	101	Ammonium chloride
NA 9086 ...	101	Ammonium chromate
NA 9087 ...	101	Ammonium citrate
NA 9088 ...	101	Ammonium fluoborate
NA 9089 ...	101	Ammonium sulfamate
NA 9090 ...	101	Ammonium sulfite
NA 9091 ...	101	Ammonium tartrate
NA 9092 ...	101	Ammonium thiocyanate
NA 9093 ...	101	Ammonium thiosulfate
NA 9094 ...	101	Benzoic acid
NA 9095 ...	101	n-Butyl phthalate
NA 9096 ...	101	Calcium chromate
NA 9097 ...	101	Calcium dodecylbenzenesulfonate
NA 9099 ...	101	Captan
NA 9100 ...	101	Chromic sulfate
NA 9101 ...	101	Chromic acetate
NA 9102 ...	101	Chromous chloride
NA 9103 ...	101	Cobaltous bromide
NA 9104 ...	101	Cobaltous formate
NA 9105 ...	101	Cobaltous sulfamate
NA 9106 ...	101	Cupric acetate
NA 9109 ...	101	Cupric sulfate
NA 9110 ...	101	Cupric sulfate, ammoniated
NA 9111 ...	101	Cupric tartrate
NA 9117 ...	101	Ethylenediaminetetraacetic acid
NA 9118 ...	101	Ferric ammonium citrate
NA 9119 ...	101	Ferric ammonium oxalate
NA 9120 ...	101	Ferric fluoride
NA 9121 ...	101	Ferric sulfate
NA 9122 ...	101	Ferrous ammonium sulfate
NA 9125 ...	101	Ferrous sulfate
NA 9126 ...	101	Fumaric acid
NA 9127 ...	101	Isopropanolamine dodecylbenzenesulfonate
NA 9134 ...	101	Lithium chromate
NA 9137 ...	101	Naphthenic acid
NA 9138 ...	101	Nickel ammonium sulfate
NA 9139 ...	101	Nickel chloride
NA 9140 ...	101	Nickel hydroxide
NA 9141 ...	101	Nickel sulfate
NA 9142 ...	101	Potassium chromate
NA 9145 ...	101	Sodium chromate
NA 9146 ...	101	Sodium dodecylbenzenesulfonate
NA 9147 ...	101	Sodium phosphate, dibasic
NA 9148 ...	101	Sodium phosphate, tribasic
NA 9149 ...	101	Strontium chromate
NA 9151 ...	101	Triethanolamine dodycylbenzenesulfonate
NA 9152 ...	101	Vanadyl sulfate
NA 9153 ...	101	Zinc acetate
NA 9154 ...	101	Zinc ammonium chloride
NA 9155 ...	101	Zinc borate
NA 9156 ...	101	Zinc bromide
NA 9157 ...	101	Zinc carbonate
NA 9158 ...	101	Zinc fluoride
NA 9159 ...	101	Zinc formate
NA 9160 ...	101	Zinc phenolsulfonate
NA 9161 ...	101	Zinc sulfate
NA 9162 ...	101	Zirconium potassium fluoride
NA 9163 ...	101	Zirconium sulfate
NA 9170 ...	101	Thorium metal, pyrophoric
NA 9171 ...	101	Thorium nitrate
NA 9173 ...	101	Uranium hexafluoride, fissile
NA 9174 ...	101	Uranium hexafluoride, low specific activity
NA 9175 ...	101	Uranium metal, pyrophoric
NA 9177 ...	101	Uranyl nitrate, solid
NA 9178 ...	101	Uranyl nitrate hexahydrate solution
NA 9180 ...	101	Uranyl acetate
NA 9181 ...	101	Radioactive material, n.o.s.
NA 9182 ...	101	Radioactive material, special form, n.o.s.
NA 9183 ...	101	Organic peroxide, liquid, *or* solution, n.o.s.
NA 9184 ...	101	Pyrethrins
NA 9185 ...	101	Plutonium nitrate solution
NA 9188 ...	101	Hazardous substance, liquid *or* solid, n.o.s.
NA 9189 ...	101	Hazardous waste, liquid *or* solid, n.o.s.

APPENDIX A - IDENTIFICATION NUMBER CROSS REFERENCE TO PROPER SHIPPING NAMES IN §172.101 AND §172.102—Continued

This listing is provided for information purposes only.

(1) Identification Number	(2) Source 172.***	(3) Description
NA 9190 ...	101	Ammonium permanganate
NA 9191 ...	101	Chlorine dioxide hydrate, frozen
NA 9193 ...	101	Oxidizer, corrosive, liquid, n.o.s.
NA 9194 ...	101	Oxidizer, corrosive, solid, n.o.s.
NA 9195 ...	101	Metal alkyl solution, n.o.s.
NA 9199 ...	101	Oxidizer, poisonous, liquid, n.o.s.
NA 9200 ...	101	Oxidizer, poisonous, solid, n.o.s.
NA 9201 ...	101	Antimony trioxide

15. In § 172.200 the introductory text of paragraph (b) is revised and paragraph (c) is added to read as follows:

§ 172.200 Applicability.

* * * * *

(b) This subpart does not apply to any material, other than a hazardous waste or a hazardous substance, that is—

* * * * *

(c) The requirement of § 172.202(a)(3) pertaining to the display of identification numbers on shipping papers does not apply prior to July 1, 1981.

16. In § 172.201 paragraphs (a)(1)(ii), (a)(1)(iii), the introductory text of (a)(4), and (a)(4)(i) are revised to read as follows:

§ 172.201 General entries.

(a) * * *

(1) * * *

(ii) Must be entered in a color that clearly contrasts with any description on the shipping paper of a material not subject to the requirements of this subchapter, except that a description on a reproduction of a shipping paper may be highlighted, rather than printed, in a contrasting color (the provisions of this paragraph apply only to the basic description required by §§ 172.202(a) (1), (2), and (3)), or

(iii) Must be identified by the entry of an "X" (or "RQ" if appropriate) placed before the proper shipping name in a column captioned "HM".

* * * * *

(4) A shipping paper may contain additional information concerning the material provided the information is not inconsistent with the required description. Unless otherwise permitted or required by this subpart, additional information must be placed after the basic description required by § 172.202(a).

(i) When appropriate, the entries "IMCO" or "IMCO Class" may be entered immediately before or immediately following the class entry in the basic description.

* * * * *

17. In § 172.202, paragraph (a) is amended, paragraphs (b) and (c) are revised and paragraph (d) is added to read as follows:

§ 172.202 Description of hazardous material on shipping papers.

(a) The basic description of a hazardous material on a shipping paper must include—

(1) The proper shipping name prescribed for the material in the Hazardous Materials Table in § 172.101 or the Optional Hazardous Materials Table in § 172.102;

(2) The hazard class prescribed for the material in the same Table. Inclusion of the hazard class is not required when the words of the proper shipping name contain the key word or words of the class, such as Flammable liquid; Poison B, liquid; Radioactive device; or Corrosive liquid; and

(3) The identificatjon number (proceeded by "UN" or "NA" as appropriate) prescribed for the material in the same Table.

* * * * *

(b) Except as provided in this subpart, the basic description specified in paragraphs (a) (1), (2) and (3) of this section must be shown in sequence. For example: "Gasoline, Flammable liquid, UN 1203."

(c) The total quantity of the material covered by one description must appear before or after, or both before and after, the basic description required and authorized by this subpart.

(1) Abbreviations may be used to specify the type of packaging and weight or volume. For example: "40 cyl. Nitrogen, Nonflammable gas, UN 1066, 800 pounds"; "1 box Cement, liquid, n.o.s., Flammable liquid, NA 1133, 25 lbs."

(2) The type of packaging may be entered in any appropriate manner.

(d) Technical and chemical group names may be entered in parentheses between the proper shipping name and hazard class.

18. In § 172.203 paragraphs (d), (1)(ii), (e), and (i)(2) are revised; paragraphs (c), (j) and (k) are added to read as follows:

§ 172.203 Additional description requirements.

* * * * *

(c) *Hazardous substances.*

(1) If the proper shipping name for a mixture or solution that is a hazardous substance does not identify the constituents making it a hazardous substance, the name or names of such constituents shall be entered in association with the basic description. This requirement also applies to descriptions from the Optional Table in § 172.102.

(2) The letters "RQ" shall be entered on the shipping paper either before or after the basic description required by § 172.202 for each hazardous substance (see definition in § 171.8). For example: "RQ, Cresol, Corrosive material, NA 2076"; or "Adipic acid, ORM–E, NA 9077, RQ."

(d) * * *

(1) * * *

(ii) A description of the physical and chemical form of the material, if the material is not in special form (generic chemical description is acceptable for chemical form).

* * * * *

(e) *Empty packagings:*

(1) Except for a tank car or any packaging that contains a hazardous substance, the description on the shipping paper for an empty packaging containing the residue of a hazardous material may contain the word(s) "EMPTY" or "EMPTY: Last contained * * *" followed by the name of the hazardous material last contained in the packaging. This entry may be before or after the basic description.

(2) For empty tank cars, see § 174.25(c), of this subchapter.

(3) If a packaging, including a tank car, contains a residue that is a hazardous substance, the description on the shipping paper shall be prefaced with the phrase "EMPTY: Last contained * * *" and shall have "RQ" entered before or after the basic description.

* * * * *

(i) * * *

(2) The shipping paper for a hazardous material offered for transportation by vessel to any country outside the United States must have in parentheses the technical name of the material immediately following the proper shipping name when the material is described by an n.o.s. entry in § 172.101 or § 172.102. For example: "Corrosive liquid, n.o.s. (Caprylyl chloride), UN 1760." If the material is a mixture of two or more hazardous materials, the names of at least two components most predominately contributing to the hazard or hazards of the mixture shall be entered in parentheses. For example: "Flammable liquid, corrosive, n.o.s. (Methyl alcohol, Potassium hydroxide), UN 2924." The provisions of this paragraph do not apply if—

(i) The n.o.s. description for the material (other than a mixture of hazardous materials of different classes meeting the definition of more than one

hazard class) contains the name of the chemical element or group which is primarily responsible for the material being included in the hazard class indicated. For example: "Mercury compound, n.o.s., solid, Poison B, UN 2025."

(ii) The n.o.s. description for the material (which is a mixture of hazardous materials of different classes meeting the definition of more than one hazard class) contains the name of the chemical element or group responsible for the material meeting the definition of one of these classes. In such cases, only the technical name of the component that is not appropriately identified in the n.o.s. description shall be entered in parentheses.

For example: "Carbamate pesticide, liquid, n.o.s. (contains Xylene), Flammable liquid, UN 2758."

* * * * *

(j) *Dangerous When Wet.* The words "Dangerous When Wet" shall be entered on the shipping paper in association with the basic description when a package covered by the basic description is required to be labeled with a DANGEROUS WHEN WET label.

(k) *Poisonous materials.* Notwithstanding the class to which a material is assigned—

(1) If the name of the compound or principal constituent that causes the material to meet the definition of a poison (according to this subchapter) is not included in the proper shipping name for the material, the name of that compound or constituent shall be entered on the shipping paper in association with the shipping description for the material. The name of the compound or principal constituent may be either a technical name or any name for the material that is listed in the NIOSH Registry. This subparagraph does not apply to—

(i) A material having a proper shipping name that includes the chemical element or group which causes the material to be a poison.

(ii) Limited Quantities.

(2) If the material in a package meets the definition of a poison according to this subchapter, and the fact that it is a poison is not disclosed in the shipping name or class entry, the word "Poison" shall be entered on the shipping paper in association with the shipping description.

(3) The provisions of paragraphs (k)(1) and (2) of this section do not apply—

(i) To consumer commodities, ORM-D, or

(ii) To compounds or principal constituents that would cause death by corrosive destruction to tissue rather than by systemic poisoning.

(iii) Prior to July 1, 1981.

19. In § 172.204, the note following paragraph (a) is deleted and a new note is added; the introductory text to paragraph (b)(1) is revised to read as follows:

§ 172.204 Shipper's certification.

(a) * * *

Note.—In line one of the certification in paragraph (a) of this section, the words "herein-named" may be substituted for the words "above-named."

(b) * * *

(1) Except for a hazardous waste, no certification is required for a hazardous material offered for transportation by motor vehicle and transported—

* * * * *

20. Section 172.205 is added to read as follows:

§ 172.205 Hazardous waste manifest.

(a) No person may offer, transport, transfer, or deliver a hazardous waste (waste) unless a hazardous waste manifest (manifest) is prepared, signed, carried, and given as required of that person by this section.

(b) The shipper (generator) shall prepare the manifest in accordance with 40 CFR Part 262.

(c) The original copy of the manifest must be dated by, and bear the handwritten signature of, the person representing—

(1) The shipper (generator) of the waste at the time it is offered for transportation, and

(2) The initial carrier accepting the waste for transportation.

(d) A copy of the manifest must be dated by, and bear the handwritten signature of the person representing—

(1) Each subsequent carrier accepting the waste for transportation, at the time of acceptance, and

(2) The designated facility receiving the waste, upon receipt.

(e) A copy of the manifest bearing all required dates and signatures must be—

(1) Given to a person representing each carrier accepting the waste for transportation,

(2) Carried during transportation in the same manner as required by this subchapter for shipping papers,

(3) Given to a person representing the designated facility receiving the waste,

(4) Returned to the shipper (generator) by the carrier that transported the waste from the United States to a foreign destination with a notation of the date of departure from the United States, and

(5) Retained by the shipper (generator) and by the initial and each subsequent carrier for three years from the date the waste was accepted by the initial carrier. Each retained copy must bear all required signatures and dates up to and including those entered by the next person who received the waste.

(f) The requirements of paragraphs (d) and (e) of this section do not apply to a rail carrier when waste is delivered to a designated facility by railroad if—

(1) All of the information required to be entered on the manifest (except generator and carrier identification numbers and the generator's certification) is entered on the shipping paper carried in accordance with § 174.26(c) of this subchapter;

(2) The delivering rail carrier obtains and retains a receipt for the waste that is dated by and bears the handwritten signature of the person representing the designated facility; and

(3) A copy of the shipping paper is retained for three years by each railroad transporting the waste.

(g) The person delivering a hazardous waste to an initial rail carrier shall send a copy of the manifest, dated and signed by a representative of the rail carrier, to the person representing the designated facility.

(h) A hazardous waste manifest required by 40 CFR Part 262, containing all of the information required by this subpart, may be used as the shipping paper required by this subpart.

Subpart D—Marking

21. Section 172.300 is revised to read as follows:

§ 172.300 General marking requirements.

(a) Except as provided by this subchapter, each person who offers a package containing a hazardous material for transportation shall mark the package with the proper shipping name and identification number assigned to the material in § 172.101 or § 172.102.

(b) When it has been determined by the shipper that a package has been previously marked as required for the material it contains, it need not be remarked. (For empty packagings, see § 173.29 of this subchapter.)

(c) This section does not apply to—

(1) A portable tank, cargo tank, or tank car,

(2) The display of identification numbers on packages containing Limited Quantities (see § 171.8 of this subchapter), and

(3) The display of identification numbers on packages prior to July 1, 1983.

22. In § 172.316 the introductory text of paragraph (a) and paragraph (c) are

revised; paragraph (a)(7) is added to read as follows:

§ 172.316 Packagings containing material classed as ORM.

(a) Each package containing a material classed as ORM–A, B, C, D, or E must be plainly, durably, and legibly marked on at least one side or end with the appropriate ORM designation immediately following or below the proper shipping name of the material. The appropriate ORM designation must be placed within a rectangle that is approximately ¼ inch (6.3 mm.) larger on each side than the designation. The appropriate designation for each ORM must be:

* * * * *

(7) ORM–E for an ORM–E.

* * * * *

(c) The marking ORM–A, B, C, D, or E is the certification by the person offering the package for transportation that the material is properly described, classed, packaged, marked and labeled (when appropriate) and in proper condition for transportation according to the applicable regulations of this subchapter. This form of certification does not preclude the requirement for a certificate on a shipping paper when required by § 172.204.

23. Section 172.324 is added to read as follows:

§ 172.324 Package containing a hazardous substance.

(a) If the proper shipping name for a mixture or solution that is a hazardous substance does not identify the constituents making it a hazardous substance, the name or names of such constituents shall be entered in association with the basic description. This requirement also applies to descriptions from the Optional Table in § 172.102.

(b) The letters RQ shall be displayed in association with the proper shipping name on a package containing a hazardous substance before the package may be offered for transportation.

(c) This section does not apply—

(1) To a portable tank, cargo tank, or tank car.

(2) Until July 1, 1983.

24. In § 172.326 paragraphs (a) and (b) are revised; paragraphs (d) and (e) are added to read as follows:

§ 172.326 Portable tanks.

(a) No person may offer for transportation or transport a portable tank containing a hazardous material unless it is legibly marked with letters or numerals, as required, measuring no less than two inches (50.8 mm.) in height—

(1) On two opposing sides with the proper shipping name of the material, and

(2) As prescribed by § 172.332, with the identification number specified for the material in § 172.101 or § 172.102, and

(i) On each side and each end, if the tank has a capacity of 1,000 gallons or more, or

(ii) On two opposing sides or ends in association with the proper shipping name, if the tank has a capacity of less than 1,000 gallons.

(b) A portable tank marked with the name or identification number of a hazardous material may not be used to transport any other material unless the marking is removed, or changed to identify the hazardous material in the portable tank, whichever is appropriate.

* * * * *

(d) If the marking required by paragraph (a) of this section is not visible, a transport vehicle, or freight container used to transport a portable tank must be marked on each side and each end as required by § 172.332 with the identification number specified for the material in § 172.101 or § 172.102.

(e) Each portable tank marked as required by paragraph (a) of this section must remain marked unless it is—

(1) Filled with a material not subject to this subchapter; or

(2) Sufficiently cleaned of residue and purged of vapor to remove any potential hazard.

25. In § 172.328 paragraphs (a), (b) and (e) are revised and paragraph (f) is added to read as follows:

§ 172.328 Cargo tanks.

(a) Except as provided in this subpart, no person may offer for transportation or transport a hazardous material in a cargo tank unless the cargo tank is marked as required by § 172.332 on each side and each end with the identification number specified for the material in § 172.101 or § 172.102.

(1) A person who offers a motor carrier a hazardous material for transportation in a cargo tank shall provide to the motor carrier the required identification numbers on panels or placards, as appropriate, prior to or at the time the material is offered for transportation unless the cargo tank is already marked with the identification number required by this subpart.

(2) A person who offers a cargo tank containing a hazardous material for transportation shall affix the required identification numbers on panels or placards prior to or at the time the cargo tank is offered for transportation unless it is already marked with identification numbers as required by this subpart.

(b) Except as specified in paragraph (a) of this section, when the name of a material or other marking is required by this subchapter to be marked on a cargo tank, it must be legibly displayed in lettering or numbers no less than two inches (50.8 mm.) in height.

* * * * *

(e) A cargo tank marked with the name or identification number of a hazardous material may not be used to transport any other material unless the marking is removed, or changed to identify the hazardous material in the cargo tank, whichever is appropriate.

(f) A cargo tank that is required to be marked with the name or identification number of a hazardous material must remain marked when empty unless it is—

(1) Reloaded with a material not subject to this subchapter; or

(2) Sufficiently cleaned of residue and purged of vapor to remove any potential hazard.

26. Section 172.330 is revised to read as follows:

§ 172.330 Tank cars and multi-unit tank car tanks.

(a) No person may offer for transportation or transport a hazardous material in a tank car (other than a multi-unit tank car tank) unless the tank car is—

(1) Marked on each side, when required by Part 173 or 179 of this subchapter, with the—

(i) Proper shipping name of the material, or

(ii) Common name authorized in this subchapter for the material such as "Refrigerant Gas."

(2) Marked on each side and each end, as required by § 172.332, with the identification number specified for the material in § 172.101 or § 172.102.

(b) The letters in the marking of a proper shipping name or common name must be 4 inches (101.6 mm.) or more in height with at least a ⅝ inch (15.9 mm.) stroke. The separation between each letter must be at least ¾ inch (19.0 mm.).

(c) No person may offer for transportation or transport a hazardous material in a multi-unit tank car tank unless it is marked on opposing sides, in letters and numerals no less than two inches high, with the—

(1) Proper shipping name specified for the material in § 172.101 or § 172.102, or common name authorized for the material in this subchapter, and

(2) Identification number specified for the material in § 172.101 or § 172.102.

(d) A tank car or a multi-unit tank car tank marked with the identification number or name of a hazardous material may not be used to transport any other

material unless the marking is removed, or changed to identify the hazardous material that the tank car or multi-unit tank car tank contains, whichever is appropriate.

(e) A motor vehicle or rail car used to transport a multi-unit tank car tank must be marked on each side and each end, as required by § 172.332, with the identification number specified for the material in § 172.101 or § 172.102.

(f) If a multi-unit tank car tank contains chlorine, marking of the name "Chlorine" is not required when the CHLORINE label is used as provided in § 172.405(b).

(g) Each tank car and multi-unit tank car tank marked as required by this section must remain marked when empty unless—

(1) Reloaded with a material not subject to this subchapter, or

(2) Sufficiently cleaned of residue and purged of vapor to remove any potential hazard.

(h) Display of identification numbers on multi-unit tank car tanks is not required prior to July 1, 1983.

27. Section 172.332 is added to read as follows:

§ 172.332 Identification number markings.

(a) Identification numbers on portable tanks, cargo tanks and tank cars shall be displayed on orange panels 5⅞ inches (15 cm.) high by 15¾ inches (40 cm.) wide with a ⅜ of an inch (9.5 mm.) black outer border. The indentification number shall be displayed in 4-inch (10 cm.) black Helvetica Medium numerals. Measurements may vary from those specified plus or minus 0.1 of an inch (3 mm.).

(b) The orange display panel may be made of any durable material prescribed for placards in § 172.519, and shall be of the orange color specified for labels or placards in Appendix A to this Part.

(c) The name and hazard class of a material represented by the identification number may be shown in the upper left border of the orange panel in letters not more than 18 point (¼-inch) high.

(d) Except for size and color, the orange panel and identification numbers shall be as illustrated for Liquefied petroleum gas:



(e) The identification number on an orange panel shall be displayed in proximity to any placard required by § 172.504.

28. Section 172.334 is added to read as follows:

§ 172.334 Identification numbers; alternative display.

(a) As an alternative to the display of an identification number on an orange panel as required by § 172.332, an identification number may be displayed on the placard specified for the material subject to the following conditions:

(1) The placard may not be a POISON GAS or RADIOACTIVE placard.

(2) The identification number shall be displayed across the center area of the placard in 3½ inch (89 mm.) black Helios Bold Condensed numerals on a white background 4 inches (10 cm.) high and approximately 8½ inches (21.5 cm.) wide.

(3) The top of the 4-inch (10 cm.) high white background shall be approximately 1⅝ inches (40.0 mm.) above the placard horizontal center line.

(4) Whenever this alternative is used, the United Nations hazard class number for the material shall be displayed in the lower corner of each placard as specified in § 172.519(d).

(5) Whenever the alternate identification number marking procedure is used for marking a cargo tank or tank car transporting a combustible liquid, the entire area below the white background for the identification number on the placard must be white, except for the hazard class number.

(6) If an identification number is placed over the word(s) on a placard, the word(s) should be substantially covered to maximize the effectiveness of the identification number.

(7) The name of the hazardous material and the hazard class may be shown in letters not more than 18 points (¼) inch) high immediately within the upper border of the space on the placard bearing the identification number of the material.

(b) Except for size and color, the alternative display of an identification number on a placard shall be as illustrated for Acetone:



28A. Section 172.336 is added to read as follows:

§ 172.336 Identification numbers; special provisions and exceptions.

(a) When not required by this subpart, identification numbers may be displayed on a transport vehicle or a freight container in the manner prescribed by this subpart when all hazardous materials contained therein are identified by the identification numbers displayed.

(b) For hazardous materials in hazard classes for which placards are not authorized or required, identification numbers may be displayed on a plain white square-on-point configuration

having the same outside dimensions as those prescribed for a hazard warning placard. [Note: A display containing an identification number as authorized in this paragraph is not considered a placard.]

(c) Identification numbers are not required—

(1) On the ends of a portable tank, cargo tank or tank car having more than one compartment if hazardous materials having different identification numbers are being transported therein. In such a circumstance, the identification numbers on the sides of the tank must be displayed in the same sequence as the compartments containing the materials they identify.

(2) On a cargo tank containing only fuel oil, if the cargo tank is marked "Fuel Oil" on each side and rear in letters no less than 2 inches high.

(3) for different distillate fuels in the same cargo tank or tank car, if the identification number is displayed for the distillate fuel having the lowest flash point.

(4) On nurse tanks meeting the provisions of § 173.315(m) of this subchapter.

(5) On the forward end of cargo tank trucks or semi-trailers.

(6) On mulit-unittank car tanks prior to July 1, 1983.

(7) On orange panels or placards prior to July 1, 1981.

29. Section 172.338 is added to read as follows:

§ 172.338 Replacement of identification numbers.

If an identification number on a vehicle or portable tank is lost or destroyed during transportation, the carrier shall replace the missing identification number as soon as practicable. However, in such a case, the numerals may be entered legibly by hand using an indelible marking material.

30. In § 172.400, paragraph (a) is amended by inserting "or § 172.102" immediately following "§ 172.101"; paragraph (b)(3) is amended by inserting the words "freight containerload," in the third line immediately before the word "carload"; and a new paragraph (d) is added to read as follows:

§ 172.400 General labeling requirements.

* * * * *

(d) Except as provided in paragraph (b) of this section, when the proper shipping name marked on a package is a proper shipping name from § 172.102 that does not appear in § 172.101, the package must be labeled as provided in § 172.102.

31. In § 172.402 subparagraphs (a)(5) to (a)(10) are added to read as follows:

§ 172.402 Additional labeling requirements.

(a) * * *

(5) A material classed as a Corrosive material that also meets the definition of a Poison B shall be labeled with a POISON label in addition to the class label. This subparagraph does not apply to a material that would cause death due to corrosive destruction of tissue rather than by systemic poisoning.

(6) A material classed as a Poison B that also meets the definition of a corrosive material shall be labeled with a CORROSIVE label in addition to the class label.

(7) A material classed as a Flammable liquid that also meets the definition of a Corrosive material shall be labeled with a CORROSIVE label in addition to the class label.

(8) A material classed as a Flammable solid that also meets the definition of a Corrosive material shall be labeled with a CORROSIVE label in addition to the class label.

(9) A material classed as an Oxidizer that also meets the definition of a Corrosive material shall be labeled with a CORROSIVE label in addition to the class label.

(10 The requirements of subparagraphs (5) through (9) of this paragraph do not apply prior to July 1, 1983.

32. In § 172.407 paragraph (h) is revised to read as follows:

§ 172.407 Label specifications.

* * * * *

(h) Except for EXPLOSIVE A and EXPLOSIVE B labels, IMCO specifications for labels may be used provided the labels bear English language inscriptions as prescribed in this subpart, and color tolerances are as prescribed by paragraph (d) of this section. EXPLOSIVE A and EXPLOSIVE B labels may bear inscriptions in addition to those prescribed in this subpart if required for purposes of import or export. A label may contain inscriptions required by the country of origin subject to the limitations specified in § 172.401.

* * * * *

33. A new § 172.503 is added to read as follows:

§ 172.503 Identification number display on placards.

For procedures and limitations pertaining to the display of identification numbers on placards, see § 172.334.

34. In § 172.504 Table 2 of paragraph (a) is revised and paragraph (d) is added to read as follows:

§ 172.504 General placarding requirements.

(a) * * *

Table 2

If the motor vehicle, rail car, or freight container contains a material classed (described) as—	The motor vehicle, rail car, or freight container must be placarded on each side and each end—
Class C explosives	DANGEROUS.[1,9]
Blasting agents	BLASTING AGENTS.[9]
Nonflammable gas	NON-FLAMMABLE GAS.[6]
Nonflammable gas (Chlorine)	CHLORINE.[7]
Nonflammable gas (Fluorine)	POISON.
Nonflammable gas (Oxygen, pressurized liquid)	OXYGEN.[2]
Flammable gas	FLAMMABLE GAS.[6]
Combustible liquid	COMBUSTIBLE.[3,4]
Flammable liquid	FLAMMABLE.
Flammable solid	FLAMMABLE SOLID.[5]
Oxidizer	OXIDIZER.[9]
Organic peroxide	ORGANIC PEROXIDE.
Poison B	POISON.
Corrosive material	CORROSIVE.[8]
Irritating material	DANGEROUS.

[6]A NON-FLAMMABLE GAS placard is not required on a motor vehicle displaying a FLAMMABLE GAS placard.

[9]BLASTING AGENTS, OXIDIZER and DANGEROUS placards need not be displayed if a freight container, motor vehicle, or rail car also contains Class A or B explosives and is placarded EXPLOSIVES A or EXPLOSIVES B as required.

* * * * *

(d) Any packaging having a capacity of 110 gallons or less that contains only the residue of a hazardous material covered by Table 2 of this section need not be included in determining the applicability of the placarding requirements.

35. In § 172.519 paragraphs (d) and (f) are revised to read as follows:

§ 172.519 General specifications for placards.

* * * * *

(d) The hazard class and division number prescribed for dangerous goods in the UN Recommendations titled "Transport of Dangerous Goods" may be entered on each placard in the lower corner of the diamond. If a placard is used to display identification numbers as authorized by § 172.334, the class number must be entered in a numeral approximately 1¾-inches (45 mm.) in height (numeral height may be between 1⅝ inches (41 mm.) and 1¾ inches (45 mm.)). They must be black on each placard except on NON-FLAMMABLE GAS, FLAMMABLE GAS, FLAMMABLE, COMBUSTIBLE and CORROSIVE placards. The class numbers on NON-FLAMMABLE GAS, FLAMMABLE GAS and FLAMMABLE placards may be white, and the class numbers on the CORROSIVE placard must be white.

* * * * *

(f) Except as provided in § 172.334, placards shall be as described in this section and as prescribed in Appendix B to this Part.

* * * * *

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

36. In § 173.2 the section title is changed; the introductory text of paragraph (a) is revised; paragraph (a)(16) is added, to read as follows:

§ 173.2 Classification of material.

(a) *Classification of material having more than one hazard as defined in this Part.* Except as provided in paragraph (b) of this section, a hazardous material, having more than one hazard as defined in this Part, must be classed according to the following order of hazards:

* * * * *

(16) ORM–E

* * * * *

37. Section 173.21 is revised to read as follows:

§ 173.21 Forbidden materials and packages.

Unless otherwise provided in this subchapter, the offering for transportation of the following is forbidden:

(a) A hazardous material in the same packaging, freight container, or overpack with another hazardous material, the mixing of which would be liable to cause a dangerous evolution of heat or gas, or produce corrosive materials, except as provided in §§ 173.152(a) and 173.242(a) and (b).

(b) A package containing a material which is liable to decompose or polymerize at a temperature of 130°F. (54.4°C.) or less with an evolution of a dangerous quantity of heat or gas unless stabilized or inhibited in a manner that will preclude such evolution.

(1) The determination of whether a material is forbidden under this paragraph may be made by one of the following methods: Standard Method of Test for Constant Temperature Stability of Chemical Materials (ASTM E–487–74) or the Self Accelerating Decomposition Temperature (SADT) Test published by the Organic Peroxide Producers' Safety Division (OPPSD).

(2) Refrigeration may be used as a means of stabilization only when approved by the Associate Director for Operations and Enforcement, MTB. (For status of approvals issued by the Bureau of Explosives, see § 171.19 of this subchapter.)

(c) Packages which evolve a dangerous quantity of flammable gas or vapor realeased from a material which would not otherwise be subject to this subchapter, i.e., the release of flammable vapor or gas in such quantities that a flammable mixture with air would be created within a transport vehicle.

(d) Packages containing materials (other than those classed as explosives) which will detonate in a fire. For the purposes of this paragraph, a detonation is a type of explosion in which a shock wave travels through the material at a speed greater than the speed of sound in the undecomposed material. When tests are required to evaluate a package under the provisions of this paragraph, the testing must be done or approved by one of the agencies specified in § 173.86.

(e) Any package containing a cigarette lighter or other similar device with fuel and equipped with an ignition element, unless the design of the device and its packaging insofar as they affect safety in transportation have been examined by the Bureau of Explosives (B of E) and approved by the Associate Director for Operations and Enforcement, MTB. (An approval which was issued by the B of E remains valid to the same extent as if it had been issued by MTB.) For lighters containing gases, also see § 173.308.

38. In § 173.28 the section heading, the introductory text of paragraph (h), and paragraph (n) are revised; paragraph (h)(1) is deleted, paragraphs (i) and (j) are deleted and reserved; paragraph (p) is added to read as follows:

§ 173.28 Reuse of packagings (containers).

* * * * *

(h) Except as provided in paragraphs (m), (n), and (p) of this section, single-trip containers (marked STC) and nonreusable containers (marked NRC) subject to the specification requirement of Part 178 of this subchapter from which contents have been removed following use for transportation of any material, may not be used thereafter for the transportation of hazardous materials.

(i) [Reserved]

(j) [Reserved]

* * * * *

(n) A packaging marked as STC or NRC according to the specification requirements of Part 178 of this subchapter may be reused for the shipment of any corrosive solid, ORM–A, ORM–B, ORM–C, ORM–E or any material not required by this subchapter to be shipped in a DOT specification packaging. Paragraph (m) of this section does not apply to these materials.

* * * * *

(p) A packaging marked NRC or STC according to the specification requirements of Part 178 of this subchapter may be reused for the shipment of hazardous waste to designated facilities subject to the following conditions:

(1) Except as authorized by this paragraph, the waste must be packaged in accordance with this Part and offered for transportation in accordance with the requirements of this subchapter.

(2) Transportation is performed by highway only.

(3) A package is not offered for transportation less than 24 hours after it is finally closed for transportation, and each package is inspected for leakage immediately prior to being offered for transportation.

(4) Each package is loaded by the shipper and unloaded by the consignee, unless the motor carrier is a private or contract carrier.

(5) The packaging may be used only once under this paragraph and may not be used again for shipment of hazardous materials except in accordance with paragraph (m) or (n) of this section.

39. In § 173.29 paragraph (a) is revised; paragraphs (b), (c), and (e) are

deleted; paragraph (d) is redesignated paragraph (b); paragraph (f) is redesignated paragraph (c) to read as follows:

§ 173.29 Empty packagings, portable tanks, cargo tanks, and tank cars.

(a) Except as otherwise provided in this section, a packaging having a capacity of 110 gallons or less that previously contained a hazardous material may not be offered for transportation unless offered in the same manner as required when it previously contained a greater quantity of hazardous material.

(1) This paragraph does not apply to a packaging that has been cleaned and purged of all residue or to a packaging filled with a material that is not subject to this subchapter.

(2) The word "waste" does not have to be displayed as part of the marking required by § 172.300 of this subchapter on a packaging having a capacity of 110 gallons or less that contains only the residue of a hazardous material.

(3) Any packaging having a capacity of 110 gallons or less that contains only the residue of a hazardous material covered by Table 2 of § 172.504 of this subchapter—

(i) Does not have to be included in determining the applicability of the placarding requirements of that section, and

(ii) Is not subject to the shipping paper requirements of this subchapter when collected and transported by a private motor carrier for reconditioning or reuse.

(4) Notwithstanding the stowage requirements in Columns 7(a) and (b) of the Table in § 172.101 or of the Optional Table in § 172.102 of this subchapter, for transportation by water, empty drums or empty cylinders not meeting the exception in paragraph (a)(1) of this section may be stowed on deck or under deck. Also, these packagings are not subject to Subparts D through O of Part 176 of this subchapter.

* * * * *

40. Section 173.51 is revised to read as follows:

§ 173.51 Forbidden explosives.

Unless otherwise provided in this subchapter, the transportation of the following explosives is forbidden:

(a) Explosive compounds, mixtures or devices which ignite spontaneously or undergo marked decomposition when subjected to a temperature of 167° F. (75° C.) for 48 consecutive hours.

(b) New explosive compounds, mixtures or devices except as provided for in § 173.86.

(c) Explosive mixtures or devices containing an ammonium salt and a chlorate.

(d) Explosive mixtures or devices containing an acidic metal salt and a chlorate.

(e) Leaking or damaged packages of explosives.

(f) Nitroglycerin, diethylene glycol dinitrate or other liquid explosives not authorized by §173.53(e) or (h). (For shipment by motor vehicle other than by common carrier, see § 177.822(b) of this subchapter.)

(g) Loaded firearms.

(h) Fireworks that combine an explosive and a detonator or blasting cap.

(i) Fireworks containing yellow or white phosphorous.

(j) Toy torpedoes, the maximum outside dimension of which exceeds ⅞-inch, or toy torpedoes containing a mixture of potassium chlorate, black antimony, and sulfur with an average weight of explosive composition in each torpedo exceeding four grains.

41. In § 173.118a paragraphs (a) and (b)(1), (2), (3) and (5) are revised to read as follows:

§ 173.118a Exceptions for combustible liquids.

(a) Unless otherwise stated for a specific material, the regulations in this subchapter do not apply to a material classed as a combustible liquid in a packaging having a rated capacity of 110 gallons or less, unless the combustible liquid is a hazardous substance, or a hazardous waste.

(b) * * *

(1) Shipping papers, waybills, switching orders, and hazardous waste manifests;

(2) Marking of portable tanks and identification number marking of portable tanks, cargo tanks, tank cars and mult-unit tank car tanks;

(3) Placarding of portable tanks, cargo tanks and tank cars.

* * * * *

(5) Reporting incidents as prescribed by §§ 171.15, 171.16, and 171.17 of this subchapter.

42. In § 173.151a, paragraph (a)(3) is revised to read as follows:

§ 173.151a Organic peroxide; definition.

(a) * * *

(3) It is determined that the predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide, or

* * * * *

42A. In § 173.154, the second sentence of paragraph (a)(20) is revised to delete the comma and all the text after the word "dry" and by adding a period after the word "dry".

43. A new § 173.179 is added to read as follows:

§ 173.179 N-methyl-N'-nitro-N-nitrosoguanidine.

N-methyl-N'nitro-N-nitrosoguanidine must be packaged as follows: The quantity in one outside packaging may not exceed 25 grams and must be placed in a polyethylene bottle which is tightly closed and the closure secured in place with pressure sensitive tape. The bottle must be sealed in a polyethylene bag constructed of polyethylene at least 4 mils thick. The bag containing the bottle must be cushioned in a hermetically sealed can with noncombustible cushioning material. There must be at least one inch of cushioning material between the outer surface of the bag and the inner surface of the can. The metal can must be cushioned in a DOT 12B fiberboard box constructed of at least 350 pound test fiberboard. There must be at least one inch of cushioning material between the outer surface of the can and the inner surface of the fiberboard box.

§ 173.182 [Amended]

44. In § 173.182(a) and § 173.182(b) the following materials are added in the text by being entered in their proper alphabetical sequence: "beryllium nitrate, cupric nitrate, ferric nitrate, mercuric nitrate, nickel nitrate, and zirconium nitrate."

45. In § 173.217 the heading and introductory text to paragraph (a) are amended by inserting the entry "Calcium hypochlorite, hydrated" in proper alphabetical order; present paragraph (b) is redesignated paragraph (c) and a new paragraph (b) is added to read as follows:

§ 173.217 Calcium hypochlorite mixture, dry; lithium hypochlorite mixture, dry; mono-(trichloro) tetra-(monopotassium dichloro)-penta-s-triazinetrione, dry; potassium dichloro-s-triazinetrione, dry; sodium dichloro-s-triazinetrione, dry; trichloro-s-triazinetrione, dry.

* * * * *

(b) As prescribed in § 173.163(a)(7). Authorized only for calcium hypochlorite, hydrated.

* * * * *

46. In § 173.352, the section heading and the introductory text of paragraph (a) are revised to read as follows:

§ 173.352 Sodium and potassium cyanide solutions, and cyanide solution, n.o.s.

(a) Sodium and potassium cyanide solutions, and cyanide solutions, n.o.s.

must be packed in specification packagings as follows:

* * * * *

47. In § 173.364, the introductory text of paragraph (a) is revised to read as follows:

§ 173.364 Limited quantities of poison B solids.

(a) Unless otherwise excluded by paragraph (a)(3) of this section, Limited Quantities of Poison B solids for which exceptions are permitted, as noted by reference to this section in § 172.101 of this subchapter, are excepted from specification packaging requirements of this Part if in tightly closed inside packaging securely cushioned when necessary to prevent breakage according to the following subparagraphs. (In addition, these shipments are not subject to Subpart F of Part 172 of this subchapter except § 174.24 and § 174.680, nor Part 177 of this subchapter except § 177.817 and § 177.841(e).)

* * * * *

48. In § 173.389 paragraph (e) is revised to read as follows:

§ 173.389 Radioactive materials; definitions.

* * * * *

(e) "Radioactive material" means any material or combination of materials which spontaneously emit ionizing radiation. Material in which the estimated specific activity is not greater than 0.002 microcuries per gram of material, and in which the radioactivity is essentially uniformly distributed, is not classed as a Radioactive material under this subchapter.

* * * * *

49. In § 173.500, paragraph (a) and the Note to paragraph (a) are revised; former paragraphs (a)(1) through (a)(4) are redesignated paragraphs (b)(1), (b)(2), (b)(3) and (b)(4) respectively and the introductory text of paragraph (b) and a new paragraph (b)(5) are added to read as follows:

§ 173.500 Definitions.

(a) An Other Regulated Material (ORM) is a material that—

(1) May pose an unreasonable risk to health and safety or property when transported in commerce; and

(2) Does not meet any of the definitions of the other hazard classes specified in this subchapter, or

(3) Has been reclassed an ORM (specifically or permissively) according to this subchapter.

Note.—A material with a flashpoint of 100° F. to 200° F. may not be classed as an ORM if it is a hazardous waste or is offered in a packaging having a rated capacity of more than 110 gallons.

(b) ORM's are divided into classes as follows:

* * * * *

(5) An ORM–E is a material that is not included in any other hazard class, but is subject to the requirements of this subchapter. Materials in this class include—

(i) Hazardous waste.

(ii) Hazardous substances as defined in § 171.8 of this subchapter.

50. In § 173.505 the introductory text to paragraph (a) is revised to read as follows:

§ 173.505 Exceptions for other regulated material (ORM).

(a) The following ORM's, unless otherwise provided by § 172.101 of this subchapter, are not subject to the requirements of this subchapter, except §§ 173.6, 173.21 and 173.24, and Subparts C and D of Part 172 of this subchapter when packaged as follows:

* * * * *

51. In § 173.510 paragraph (a)(1) is revised and paragraph (a)(5) is added to read as follows:

§ 173.510 General packaging requirements.

(a) * * *

(1) Each material must be offered for transportation and transported in compliance with Subparts B, C, and D of Part 172 of this subchapter and Subparts A and B of Part 173. [Note: Packaging for certain PCB's for disposal, and for storage for disposal is prescribed by EPA in 40 CFR 761.10 and 761.42.]

* * * * *

(5) Portable tanks, tank cars, cargo tanks, hopper and dump type transport vehicles must be free from leaks and all discharge openings must be securely closed during transportation.

52. A heading to Subpart O, to precede sections numbered 173.1300 through 173.1399, is added to read as follows:

Subpart O—Other Regulated Material; ORM–E.

53. Section 173.1300 is added to read as follows:

§ 173.1300 Hazardous waste, liquid or solid, n.o.s.; hazardous substance, liquid or solid, n.o.s.

Hazardous waste, liquid or solid, n.o.s., or Hazardous substance, liquid or solid, n.o.s., may not be offered for transportation unless packaged in accordance with § 173.510.

PART 174—CARRIAGE BY RAIL

54. In § 174.24 paragraph (b) is revised to read as follows:

§ 174.24 Shipping papers.

* * * * *

(b) This subpart does not apply to a material classed as an ORM–A, B, C, or D unless it is a—

(1) Hazardous substance, or

(2) Hazardous waste.

55. In § 174.25 paragraph (b)(6) is added and at the end of paragraph (c) a new sentence is added to read as follows:

§ 174.25 Additional information on waybills, switching orders and other billings.

* * * * *

(b) * * *

(6) For any entry for a material that is a hazardous substance, the letters "RQ" shall be entered on the shipping paper either before or after the basic description, and

* * * * *

(c) * * * For an empty tank car that last contained a hazardous substance and still contains a reportable quantity, "RQ" shall be entered on the shipping paper either before or after the basic description.

* * * * *

56. Section 174.45 is revised to read as follows:

§ 174.45 Reporting hazardous materials incidents.

When an incident occurs during transportation in which a hazardous material is involved, a report may be required (see §§ 171.15, 171.16 and 171.17 of this subchapter).

PART 176—CARRIAGE BY VESSEL

57. In § 176.11 paragraph (e) is revised and paragraph (f) is added to read as follows:

§ 176.11 Exceptions.

* * * * *

(e) Hazardous materials classed and shipped as ORM–D are not subject to the requirements of this Part unless they are offered for transporation as hazardous wastes.

(f) The stowage requirements of § 172.101 of this subchapter notwithstanding, a hazardous material which is classed, labeled and described in accordance with § 172.102 may be stowed as provided in that section.

58. In § 176.48 paragraph (b) is revised to read as follows:

§ 176.48 Situation requiring report.

* * * * *

(b) When an incident occurs during transportation in which a hazardous material is involved, a report may be required (see §§ 171.15, 171.16 and 171.17 of this subchapter).

* * * * *

PART 177—CARRIAGE BY PUBLIC HIGHWAY

59. Section 177.807 is revised to read as follows:

§ 177.807 Reporting hazardous materials incidents.

When an incident occurs during transporation in which a hazardous material is involved, a report may be required (see §§ 171.15, 171.16, and 171.17 of this subchapter).

(49 U.S.C. 1803, 1804, 1808; 49 CFR 1.53, Appendix A to Part 1).

Note.—The Materials Transportation Bureau has determined that this document will not result in a major economic impact under the terms of Executive Order 12044 and DOT implementing procedures (44 FR 11034) nor require an environmental impact statement under the National Environmental Policy Act (49 U.S.C. 4321 et seq.) A regulatory evaluation and environmental assessment are available for review in the docket.

Issued in Washington, D.C. on May 7, 1980.

L. D. Santman,

Director, Materials Transportation Bureau.

Note.—Incorporation by reference provisions approved by the Director of the Federal Register on May 15, 1980.

[FR Doc. 80-15510 Filed 5-21-80; 8:45 am]

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Thursday
May 22, 1980

Part III

U.S. Regulatory Council

Guidelines for Entries in the Calendar of Federal Regulations; Request for Public Comments

U.S. REGULATORY COUNCIL

Guidelines for Entries in the Calendar of Federal Regulations; Request for Public Comments

AGENCY: United States Regulatory Council.

ACTION: Request for public comment.

SUMMARY: We are asking members of the public to suggest any revisions they feel are necessary to the Guidelines for the **Calendar of Federal Regulations.** The Regulatory Council issued these Guidelines to help Federal agencies prepare entries for the May 1980 edition of the **Calendar** that would be as complete and consistent as possible given the different activities and goals of the 36 Council agencies and the different stages of development of the regulations the agencies describe. We want the **Calendar** to be as useful as possible to its readers, and we welcome comments that will help us revise the Guidelines we will issue for the November 1980 edition of the **Calendar.**

The **Calendar,** which we publish twice a year in May and November, is a catalog of the most important regulations which Council agencies are developing at the time of publication. We hope to increase public involvement in the regulatory development process by asking for comments to the Guidelines now, and by indicating in the **Calendar** how interested parties may contact the appropriate agencies on specific regulations.

COMMENTS: We are asking for your comments by June 30, 1980.

Please address your comments to: Mark G. Schoenberg, Associate Director, U.S. Regulatory Council, Washington, D.C. 20503, (202) 426–1962 or (202) 653–7240.

FOR FURTHER INFORMATION CONTACT: Peter J. Petkas, Director, U.S. Regulatory Council, Washington, D.C. 20503, (202) 395–6110.

SUPPLEMENTARY INFORMATION: The President directed the creation of the U.S. Regulatory Council on October 31, 1978. Its principal duties are to help coordinate Federal regulatory activities and to help manage the regulatory process more effectively. The Council is comprised of 36 Federal departments and agencies that have significant regulatory responsibilities.

The President directed the Council to develop and publish a semiannual calendar of important upcoming Federal regulations. The Council published the first edition of the **Calendar of Federal Regulations** in February 1979 (44 FR 11388 *et seq.*, February 28, 1979), and the second edition in November 1979 (44 FR 68202 *et seq.*, November 28, 1979). The Council will publish subsequent editions every May and November.

The **Calendar** serves the President, the Congress, the regulators and the public as a tool for understanding and helping to shape the way we implement national regulatory policy goals. It also serves the public by describing opportunities for them to participate in the development of specific regulations.

The Council designed the **Calendar** to be a comprehensive catalog of the most important Federal regulations that agencies are developing. It presents the following information for each proposed regulation:

—Why the proposed regulation is important;

—Problems the agency intends to address in the proposed regulation;

—Major alternatives the agency is considering;

—Sectors of the economy that could be affected by the proposal;

—Expected costs and benefits of the proposal;

—Related regulations and actions;

—Collaboration between the issuing agency and other Federal and State agencies;

—Timetable for action;

—List of available documents; and

—Agency contact.

We realize that the amount of information an agency can supply varies according to a regulation's state of development, and the different activities and operations for the agency itself. Because experts sometimes disagree on the method that should be used to estimate costs, benefits, and other economic impacts, we tried to structure the Guidelines so that the 36 Council agencies could express their analytic data in as consistent a way as possible. These Guidelines do not assume a particular methodology for economic analysis or any particular means for expressing the results of such analysis.

The **Calendar** is an evolving document that has benefited from the comments submitted by readers of previous editions, and the experience and ideas of the Council agencies. We want to continue this evolution and refinement, and are therefore seeking your comments on these latest Guidelines. Specifically, should we revise the Guidelines to:

—Request additional information? If so, on what subjects?

—Delete information we now request? If so, what?

—Organize the material differently? If so, how?

We would also appreciate any other comments you may have. The Guidelines for the May 1980 **Calendar** entries are reprinted below for your information. We have made a few minor changes in them to correct such things as typographical errors.

Dated May 6, 1980.

Douglas M. Costle,

Chairman.

Guidelines for the May 1980 Edition of the Calendar of Federal Regulations—Table of Contents

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INTRODUCTION

The United States Regulatory Council publishes the **Calendar of Federal Regulations** to provide a comprehensive overview of important regulations that the 36 Council agencies are proposing. Because we want the **Calendar** to be as useful as possible to readers—interested citizens, public and private interest groups, the business community, and government officials—we are offering these Guidelines to help agencies prepare material for the third edition of the **Calendar** which we will publish in May. With the help of staff members in your agency and suggestions from many private and public interest groups, we have refined the basic format we used for the second edition.

The principal changes in this new edition that we made to improve both the content and appearance of the **Calendar** are:

1. Asking for agency head or designated Council Representative clearance on the entries.

2. Asking for a Code of Federal Regulations citation listed immediately after the title of the proposed regulation.

3. Adding a new section entitled "Reason for Including This Entry" to briefly describe the reason the agency finds the entry important enough to include it in the **Calendar.**

4. Deleting the separate "Sectors Affected" section and rearranging the relevant information to appear as a subheading within both the costs and the benefits sections.

We are also:

1. Trying to elicit more substantial cost and benefit data by changing the way we ask for this information. The information we request is the same.

2. Giving more examples of legal citations. The information we request remains the same.

3. Describing in more detail examples of innovative regulatory techniques you may wish to discuss in your alternatives section.

4. Clarifying some small format points.

These Guidelines provide a comprehensive framework that attempts to accommodate the different reporting approaches of 36 agencies. We realize that what you include in your entries will depend on: (1) the types of information your agency analyzes; (2) the stage of development of the regulation at the time you write your entries; (3) the appropriateness of certain information for certain rules; and (4) whether your agency has performed or will perform a regulatory analysis. However, we have structured the Guidelines so that you can provide as much information as you have available, thus making the **Calendar** as useful as possible to its wide variety of readers.

GENERAL INSTRUCTIONS FOR PREPARING ENTRIES

1. Agency Clearance

Calendar Representatives are responsible for ensuring that the Agency Head or Council Representative clears agency submissions prior to the time we publish the Calendar in the **Federal Register.** We must have a transmittal letter from your Agency Head or Council Representative accompanying the entries from your agency.

We have found that the best entries in the last **Calendar** were those which were reviewed by economists as well as lawyers and plain English editors within the agency. We suggest that if you have not established internal legal, economic, and plain English reviews of your entries, you may wish to do so. This will expedite our joint editorial process.

2. Criteria for Including a Proposed Regulation

We would like to have a minimum of five entries from each participating executive agency and three from each participating independent agency, unless, of course, you do not have a sufficient number of actions under development which meet the criteria described below.

Each entry should meet one or more of the following criteria, which are also those you use to determine whether you should prepare a regulatory analysis under Executive Order 12044:

- Regulations that have an annual effect on the economy of $100 million or more;
- Regulations that will impose a major increase in costs or prices for individual industries, levels of government, or geographic regions; and
- Regulations otherwise determined by the agency head.

In addition, you should prepare an entry for the following types of regulations which also require regulatory analysis:

- Grants and income transfer program regulations which may impose annual compliance costs of $100 million or more; and
- Any regulation you have reviewed under the provisions of EO 12044 if you are reproposing it and if the changes you propose to make in the regulation would themselves be considered "major" under the Executive Order.

You should also include an entry for any other proposed regulation as follows:

- Any proposed regulation for which an agency is not likely to prepare a regulatory analysis, but which the agency might want to include because:
  —It is precedent setting;
  —It concerns an issue of great public interest; or
  —It would cause an increase in productivity and/or profits without causing any adverse effects.

The importance of such rules might make public information and/or participation in developing the proposed rule desirable.

- Any entry that appeared in the second edition, unless it has been promulgated or withdrawn, in which case we will note this fact in the Calendar's Appendix II: Status of Regulations from the November 1979 Edition.

3. Timing

You should submit an entry for any regulation that meets one or more of the above criteria and for which an agency is *reasonably likely* to have a regulatory action [e.g. Advance Notice of Proposed Rulemaking (ANPRM), Notice of Proposed Rulemaking (NPRM), Commission Decision, Final Rule, etc.] *within the next twelve months.* If you have a proposed rule that meets the above criteria and that may become final around the date we publish the **Calendar,** please prepare an entry for that regulation—we can always withdraw it at the last minute. Our experience shows that final actions often "slip" and we don't want you or ourselves to be embarrassed by a glaring omission from the **Calendar.**

4. Writing Style

Because the **Calendar** has such a varied readership, you, of course, should prepare all **Calendar** entries in clear and concise language. You can accomplish this goal by making sure that:

- You write all sentences in the *active rather than passive voice* whenever possible. If you use the active voice you will make your sentences clearer and more forceful. Also, when you use the passive voice you tend to obscure "who does what to whom," leaving the reader unsure who is responsible.

Example: Active: "We will seek public comment." Passive: "Public comment will be sought."

- You precisely define *"jargon"* or *"state of the art"* terms that are not generally understood by a nonspecialized readership.
- You *spell out acronyms and other abbreviations* the first time they appear in the text of each entry. In addition please spell out all acronyms the first time they appear in the "Active Government Collaboration" section. We will accept three acronyms without your spelling them out—ANPRM (Advanced Notice of Proposed Rulemaking), NPRM (Notice of Proposed Rulemaking) and EO (Executive Order). We will define these terms in the Users' Guide to the **Calendar.**

If any entries appear confusing because of multiple, complicated acronyms, you should spell out as many acronyms as possible so that you make the entry more understandable.

- *You do not use footnotes.* Explain your point in parentheses or by some other means in the text itself.
- If possible, you ask *an editor in your agency* to review entries to make sure they are written in plain English before the material reaches us; if you do this you will facilitate our mutual editorial process.

5. Format

We suggest that, if possible, you type draft entries on a memory typewriter to facilitate any rewriting you need to make your entries final.

You should make sure:

• You make your entries consistent with the basic outline indicated in these Guidelines;

• You type your entries *double-spaced* with at least one-inch margins on *all* sides of the page;

• You indent paragraphs five spaces; and

• You type section headings in upper and lower case, and place them flush with the left margin. Do NOT underline them because the the printer italicizes underlined words.

In addition:

• Please submit a clean final copy because we will send it directly to the printer.

• If possible, please submit original manuscript; we must photostat your material several times.

BASIC OUTLINE FOR ENTRIES

Agency Designation/Title of Regulation

Type the agency name and issuing division in abbreviated form, *entirely in upper case*, e.g., DOE–ERA. Type the word "Title" on a separate line, two lines below the agency designation and two lines above the actual title. Give the title of the regulation or action, *capitalizing the first letter of all the important words.*

In parentheses immediately after the title, give the **Code of Federal Regulations** (CFR) citation, if one is available. If the regulation you are proposing is a revision to an existing CFR citation, place an asterisk (*) after the citation. If the proposed regulation will occupy a new CFR section, you do not need the asterisk. We are doing this to distinguish between rules which you are revising or reproposing, and new rules.

Example: DOE–ERA

Title
Gasohol Market Regulations (10 CFR Parts 202, 205, 210–212, 218, 500, 660, 661)

Legal Authority

We are trying to maintain a consistent format for legal citations. The information we need is the same as that in the last **Calendar**, but we are giving you more detailed examples to help you prepare this section. If possible, please review your citations with an attorney in your agency to ensure accuracy, and to save editing time.

1. Laws

A. Whenever you give a citation to a U.S. Law you should cite to the United States Code (U.S.C.), the document which contains the consolidated and codified Public Laws, *except* in the cases outlined under B below.

Example

When you wish to cite to:	Write:
Title 10, Section 501 of the U.S.C.	10 U.S.C. 501

B. In some instances, if you cite to the U.S. Code you will not communicate where the reader can find the particular provision. Examples of this are provisions in appropriations acts and provisions that are amendments to an existing law but have not been codified separately in the U.S. Code. For these exceptional cases you should use Pub. L. (Public Law) and Stat. (U.S. Statutes at Large) citations.

Example

When you wish to cite to:	Write:
Public Law 96–187, titled Federal Election Campaign Act Amendments of 1979, found in the 93rd edition of the U.S. Statutes at Large on page 1339.	Federal Election Campaign Act Amendments of 1979, Pub. L. 96–187, 93 Stat. 1339

2. Regulations

A. When you give a citation to a regulation you should cite the Code of Federal Regulations, except as provided under B below.

Example

When you wish to cite to:	Write:
Title 1, Chapter 1 of the CFR	1 CFR Chapter 1
Title 1, Chapter 1, Part 18	1 CFR Part 18
Title 1, Chapter 1, Parts 18 and 19	1 CFR Parts 18, 19
Title 1, Chapter 1, Part 18, § 18.12	1 CFR 18.12
Title 1, Chapter 1, Part 18, § 18.12 Paragraph (c)(3)	1 CFR 18.12 (c)(3)

B. In four instances, your citations should include references to both **Federal Register** (FR), and the Code of Federal Regulations (CFR). These cases are:

• Proposed regulations and ANPRMs.

• Where the regulation, although published in the FR, and assigned a CFR number, has not yet been included in the annual revision of the CFR.

• Where the document, although published in the FR, is not a regulation but is related to one. Even though the document itself does not appear in the CFR, if it references material in the CFR, you should cite to these references.

• Where the regulation in question, formerly included in the CFR, is no longer effective and does not appear in the most recent annual revision of the CFR. You should give that original citation.

Example

When you wish to cite to:	Write:
A proposed rule in the 44th Edition of the **Federal Register**, Page 33804, published on June 12, 1979, which would appear at Title 24 of the Code of Federal Regulations, Part 880	24 CFR Part 880 (44 FR 33804, June 12, 1979)

3. Executive Orders

The President issues Executive Orders (EOs) which are always published in the **Federal Register** and compiled in CFR Title 3. You should have a CFR citation for EOs, if possible. Since there are no Chapters or Parts in the CFR Title 3, you should give a page number when you have a citation in 3 CFR.

Example

When you wish to cite to:	Write:
EO 11382, published in Title 3 of the CFR, compilation of 1966–67, at page 691	EO 11382, 3 CFR, 1966–67 Comp., p. 691.

If the EO has not yet been published in the CFR, give an FR citation as you do with regulations.

You may wish to cite only to the **Federal Register** in some cases, e.g., documents which appeared in the FR but that are not laws or regulations.

When you wish to cite to:	Write:
The 44th Edition of the **Federal Register**, page 33804, published on June 12, 1979	44 FR 33804, June 12, 1979

Reason for Including This Entry

Many readers who have used the first two editions of the **Calendar** have commented that it is unclear why agencies have included certain rules. We therefore have added a new section to each entry to address this concern. Please state briefly why you are including the proposed regulation in the **Calendar**—in other words, why you consider the regulation important.

Example

The Department of Agriculture thinks this rule is important because it will set a precedent that will allow public participation at an earlier stage in our rulemaking process. The proposed rule will also allow groups to participate that have been financially unable to do so in the past.

Example

The Department of Housing and Urban Development thinks that this rule is important because we expect it will have an annual effect of $100 million or more on the economy.

One or two sentences should suffice for this section; you will give more detailed descriptions of the importance

and effects of the proposed regulation later in the entry. You can refer to Criteria for Including a Proposed Regulation earlier in these Guidelines, to help you prepare this new section.

Statement of Problem

In this section describe the magnitude of the problem and why you need to take regulatory action to help solve it.

1. Start by giving a brief amount of background information so the reader understands why the problem arose.

Example

DOE's Economic Regulatory Administration is proposing to amend its regulations on Puerto Rican naptha entitlements. The agency began its narrative by briefly describing why the Federal government promulgated its original regulations, the content of those regulations, and the circumstances of the last ten years which made the agency wish to revise them.

2. Discuss the magnitude of the problem as best you can:

A. In quantitative terms, if possible.

Example

OSHA is proposing a regulation to reduce safety and health hazards in abrasive blasting operations. In describing the problem which led the agency to propose the regulations, OSHA stated that approximately 80,000 persons work as abrasive blasters across the country, and they as well as others in the blasting area face health and safety hazards in their work. OSHA described these hazards, which include a lung disease called silicosis, and stated that investigators had documented over 100 cases of silicosis, resulting in 25 deaths among sandblasters since 1958, in the U.S. Gulf Coast states alone.

B. If you do not have precise figures available, use a range or percentage to describe the problem.

Example

In describing why it is proposing fuel economy standards for model years 1982–85 light duty trucks, DOT stated that in 1978 roughly half of the total petroleum consumed in the United States was used for transportation. The light truck fleet, which includes vehicles such as conventional pickups and vans, consumed approximately 20 percent of that amount.

C. If you cannot make a quantitative statement, you should try to provide a qualitative description of the problem.

Example

The difficulty minority groups find in gaining access to public broadcasting may mean that these groups cannot adequately voice their concerns through the broadcast media.

3. Describe why the agency decided to act on this problem at this time. Possible explanations include new legislation, identification of a problem, a court decision, or prodding by consumers or industry.

Example

The Federal Highway Administration (FHWA) is considering revising the regulations that limit the driving hours and prescribed rest periods for drivers of vehicles engaged in interstate or foreign commerce. FHWA is taking this action in response to: (1) Numerous requests from public interest groups, labor organizations, motor carriers, and individual drivers; (2) Research studies showing that driver fatigue causes many commercial motor vehicle accidents; and (3) A 1974 decision of a Federal District Court involving a suit brought by PROD, Inc., an interest group representing some commercial truck drivers. PROD sought judicial review of FHWA's failure to initiate rulemaking proceedings on the hours of service regulations. The court dismissed the suit to allow FHWA to begin rulemaking, but allowed PROD to reinstate the suit if FHWA failed to initiate rulemaking within 18 months.

4. You should describe the consequences of not responding to the problem. "Doing nothing" is the base case against which all benefits and costs are measured. You should describe this base case, so later you can show the need for your proposed regulation by discussing how you will improve on the "do nothing" situation.

Example

If the agency does not take any action, a certain percentage of land across the country might irretrievably erode, or an estimated number of people a year might lose their lives, or the amount of a particular pollutant in the air might increase, causing illness in older people or those with respiratory problems.

Alternatives Under Consideration

The Carter Administration has emphasized the value of making an explicit and deliberate choice from among a selection of regulatory options. For example, the Administration's regulatory analysis program places importance on identifying and evaluating each major option in draft and final regulatory analyses. The Administration also has placed strong emphasis, through a November 16, 1979 Presidential directive, on developing regulations that take the size and nature of affected businesses and organizations into consideration (Weekly Compilation of Presidential Documents, Week of November 26, 1979 Vol. 15, No. 47; *Regulatory Programs and Small Businesses and Organizations).*

This section should include a succinct description of the major alternatives you are considering to solve the problem that you outlined in the preceding section and that improve on the "no action" base case. Please include the major pros and cons of each alternative when you describe it, so the reader will know why you are considering each one.

If you have decided to propose or have proposed one alternative, you should indicate that choice and describe it in detail.

In most cases, the two to four alternatives you list here will be identical to those that you are evaluating in your regulatory analysis, if you are preparing one.

Example

An outline of the paragraphs describing your alternatives section would look like this:

We are considering Option "A"

- "A" would solve the problem in the following way
- "A" has the following advantages
- "A" has the following disadvantages

We are also considering Option "B"

- "B" would solve the problem in the following way
- "B" has the following advantages
- "B" has the following disadvantages

We are also considering Option "C"

- Etc.

We prefer Option "A" over "B" and "C" because of the following reasons:

1. "A" will cause minimum additional expense to the regulated sector, and still meet the agency's regulatory objective of . . . by . . . .

2. "A" will be easier for us to enforce because . . . .

Example

The FAA stated that possible alternatives to establishing flammability standards for uniforms of crewmembers are:

(A) No regulation; do not require uniforms worn by crewmembers to meet any flammability standard. Current materials used to make uniforms provide maximum comfort, a range of styling, and are easily cleaned. However, they are constructed of conventional fabric that is flammable and may provide inadequate protection from radiant heat in cabin fires which people could survive if they wore adequate protective clothing. Also, without protective clothing, crewmembers may be incapable of performing necessary functions in certain emergencies.

(B) Require crewmembers to put on special garments such as firemen wear in case of a fire. This option was fully explored and reported in FAA Report No. FAA–RD–77–18. Although the garment provides maximum protection from flame and radiant heat, it is very expensive and difficult to put on.

(C) Require that crewmember uniforms meet a standard similar to the current children's sleepwear standard. This is a performance standard that requires that materials used for children's sleepwear resist ignition when exposed to flame, and self-extinguish rapidly. Materials which satisfy the children's sleepwear standard must be flame-resistant, but need not protect the wearer from radiant heat transferred through clothing.

(D) Require crewmember uniforms to meet a test measuring resistance to ignition and

ability to self-extinguish as well as a standard designed to protect the wearer from injury from the transfer of radiant heat through clothing.

We currently regard alternative D as the most desirable alternative, since crewmembers must be adequately protected from both flame and radiant heat injury if they are to perform their duties adequately in an emergency.

Kinds of alternatives you are considering or have considered of course will vary according to the regulation. While the authorizing statute itself may specify that you must issue the regulation or take some other action, there are usually options you will have to or can consider to implement the law through regulation. You should try to describe the following kinds of alternatives, where appropriate:

1. The *different kinds of actions* you might take to achieve your statutory objective.

Example

If the statute requires that you reduce mining accidents, you might regulate the kind of protective clothing miners wear at work, the safety equipment available to them, or the structural safety supports mine operators must use when they construct a mine.

2. The *level of control* you will require for the action you are recommending.

Example

You might limit chemical discharges to 50 parts per million (ppm), 75 ppm, or 100 ppm.

3. The *flexibility* you build into your regulation to take into account the size and nature of the affected businesses or sectors, and to alleviate unnecessary burdens on them.

Example

EPA Guidelines and Standards on the Discharge of Effluents into Navigable Waters tailor regulatory limitations to the size of the industry and the effluent it produces. For instance, in the regulations covering receiving stations for bulk milk, the more stringent set of limitations applies to stations receiving and processing large amounts of milk each day. Stations processing smaller amounts of milk have to meet less stringent standards.

4. The *timing* of compliance.

Example

You might require that libraries install ramps for the handicapped within two years or within five years of the time the regulation becomes effective.

5. The *degree of reporting* you will require from businesses in order to comply with the proposed regulation. You might consider a range of reporting requirements. Reporting is a tool that can help you to reach your regulatory objectives and minimize unnecessary burdens on your agency or the regulated sector.

Example

OSHA reduced its reporting requirements for small firms which had little equipment and low accident rates; 131,000 businesses with fewer than 11 employees no longer have to fill out OSHA's annual survey. OSHA also cut 75 percent of its questions from the forms that larger businesses must complete. OSHA said that these actions have reduced the required man-hours by 80 percent, from 320,000 to 70,000 hours, and saved business an estimated $100,000,000 a year.

If there are no realistic alternatives to the action that you propose, please explain why.

Innovative Regulatory Techniques

In your description of alternatives you should highlight any innovative techniques you are considering. We define innovative techniques as departures from the traditional "command and control" form of regulation, which involves strictly specified rules and formal government sanctions for failure to comply. Innovative techniques typically involve approaches that use the economic forces of the marketplace to achieve regulatory goals. Regulatory reform is an important goal of the Administration, and this section can document your innovations publicly and reflect the information you have given to us already for the Council's reform initiatives report.

We have defined seven categories of innovative techniques.

1. Enhance Competition (including deregulation)

These actions remove artificial barriers to competition. Deregulation may be appropriate because the need for regulation no longer exists.

Example

On May 1, 1975, the SEC abolished fixed commission rates on stock market transactions. This action resulted in greater competition among brokerage houses, allowing investors to negotiate brokerage fees and rates that more accurately reflect the services received.

Example

In the 1930s and 1940s, when the FCC first began to regulate radio broadcasting, the radio marketplace was very different from what it is today. There were many fewer stations, for example, and television was not the dominant medium. The FCC is exploring whether the regulatory assumptions it made in the 1930s and 1940s are still valid. In particular, the Commission has proposed to modify or eliminate some of its present controls on news and public affairs programming and on commercial time.

2. Marketable Rights

In some cases you can meet your regulatory objectives by granting rights to engage in certain activities and allowing these rights to be sold or traded among private parties. This mechanism can provide an overall limit on regulated activities while allowing voluntary transactions to arrange the detailed allocation of rights. Market forces thereby can replace centralized government decisionmaking.

Example

DOI administers aspects of the Outer Continental Shelf (OCS) drilling program by suing marketable rights techniques. The agency designates certain areas of the OCS as suitable locations for oil driling. DOI then solicits bids from oil companies that wish to lease those designated plots. The OCS is still public property which the Federal government owns and oversees, but the right to drill for and sell oil and resell the leases is bought by the oil companies.

3. Economic Incentives

These include structuring fees or providing subsidies such as energy tax credits or government procurement subsidies to encourage the private sector to achieve regulatory goals, instead of using direct regulation to achieve these goals.

Example

EPA and GSA decided jointly to pay a premium to manufacturers to make lawnmowers that operate at a lower noise level. This encouraged manufacturers to produce mowers with lower noise levels without forcing them to do so.

4. Performance Standards

These approaches permit sectors that an agency regulates to meet a desired overall performance standard rather than a specific design standard. This leaves regulated firms free to find the most cost effective means of compliance while maintaining the desired level of overall quality.

Example

The Motor Vehicle Information and Cost Savings Act requires that automobiles attain a fuel economy standard of 27.5 miles per gallon (mpg) by 1985. DOT in enforcing this statute has chosen to allow manufacturers to meet the 27.5 mpg limit through performance standards, i.e., manufacturers can meet this limit in any way they consider best. They can, for example, reduce vehicle size, construct vehicles from different materials, design more efficient engines, etc., rather than have DOT mandate a particular method of reaching the 27.5 mpg limit.

5. Information Disclosure

In this approach, agencies take steps to ensure that users of products or services are adequately informed about them. With this information, users can decide whether or not to purchase or use these products or services. By providing information or requiring that suppliers disclose specific information, rather than by regulating them directly, the agency increases the suppliers'

operating freedom and the users' freedom of choice.

Example

Giving information about a product on its label, for instance, provides the consumer informed freedom of choice in the products he/she purchases. Disclosure, as required in truth-in-lending documents for various types of loans, describes the rights, obligations, and implications of a transaction.

6. Voluntary Standard Setting

In these approaches, sectors that agencies regulate can develop a voluntary standard rather than conform to one set by the agency. This brings private sector expertise into the regulation development process.

Example

CPSC aims to reduce deaths and injuries from fires caused by smoldering cigarettes dropped on upholstered furniture. The agency was considering taking regulatory action, but agreed to defer this action for a year to allow industry to operate its own voluntary program. The agency will carefully assess the results of the voluntary program before proposing further action.

7. Compliance Reform

These approaches use market-oriented techniques as a part of Federal compliance programs. Such techniques include government-licensed private auditors, consumer deputies, third party inspections, verifiable self-reporting, whistle blower programs, and economically based noncompliance penalties.

Example

The Food Safety and Quality Service of USDA is proposing to allow meat and poultry plants to conduct their own quality control program as a substitute for certain Federal inspection programs. Meat and poultry plants would still meet government standards without the need for continual on-site government inspection.

Your agency may have developed nontraditional regulatory approaches that we have not mentioned above. We encourage you to include such approaches in this section.

Summary of Benefits

This section and the next one on costs contain some of the most important information in the **Calendar**. However, many entries in the previous edition showed that entry writers had difficulty in providing the data we requested. We are attempting to improve these two sections by restructuring the Guidelines in this area in order to make the information easier to present.

Sectors Affected

There will no longer be a separate "Sectors Affected" section. Instead, the information you previously provided in that section will now be divided between the "Summary of Benefits" and "Summary of Costs" sections and will appear as a "Sectors Affected" subheading at the beginning of each of these sections. Please identify the sectors that will be most strongly affected, either directly or indirectly, by your proposed regulation.

Example

(For FHLBB "Branching" proposal)

Summary of Benefits

Sectors Affected: Federally chartered savings and loan associations in Washington, DC, Maryland, and Virginia; customers who use the services of these associations.

The information you highlight in the "Sectors Affected" subheading should match the information your agency supplies in the "Sectors Affected" Index. We have given the index form to the **Calendar** Representative.

The information under the "Special Impacts" category of the Index should be described in the subheading of the narrative in the following ways:

1. Special populations—by age, income, health status, ethnicity, etc.

2. Geographic areas—by region, State, county, local, inner city, metropolitan area, rural, etc. If you have prepared an Urban Impact Statement, please say so and try to incorporate information from that document into this section.

3. Levels of government—by Federal, State, and local.

After you have highlighted the sectors affected, you can proceed with the narrative, describing just how your proposal benefits these sectors.

Direct Benefits

First discuss the sectors that the proposal would benefit directly, and describe these benefits. Relate your discussion to the "no action" situation that caused the problem you described earlier. Your benefits would be those positive effects resulting from the action you propose to take.

If you are still considering a range of alternatives, you should discuss the direct benefits, in both qualitative and quantitative terms, for each major alternative you are considering, where such benefits differ. Your discussion will be most useful if you compare and contrast the benefits of each alternative where appropriate. You should also indicate how the benefits will be distributed over time.

1. Measurable (quantitative) terms.

A. Where possible, give *specific figures* for benefits that specified sectors would enjoy. If you give dollar values for benefits, please *state what year's dollars you are using.*

Example

Amounts of dollars saved by a specified sector over a specified time period, reduction in number of lost work days or injuries, amount of pollution or paperwork.

B. Where specific figures cannot be given, please give a range or "guesstimate."

Example

This proposal may result in an estimated savings of 3,000–5,000 acres of farmland in the next 15 to 20 years; or

We expect that "x" industry will add 10 to 20 percent to its yearly profits; or

We estimate that a particular sector may be able to save a total of $10 to $20 million over the next ten years (in 1980 dollars). Fifty percent of these savings would occur in the first three years.

2. Unmeasurable (qualitative) terms.

Equally important in a discussion of benefits is a *qualitative* discussion of the expected results from the proposal. Presenting qualitative information has often been a problem in cost and benefit discussions simply because the information is not precisely measurable. Aesthetics, quality of life, worker morale, and a general healthy environment are all very important, but hard to measure. However, you should try to include a discussion of such factors.

Example

The FTC stated that an important qualitative benefit of any final trade regulation rule concerning credit practices would be that creditors would treat people suffering from financial difficulties more fairly. At present, some creditors may harass the friends and relatives of those in debt, or threaten debtors with the loss of their jobs.

Indirect Benefits

Indirect, or "secondary," benefits are less obvious results of the proposal, and are harder to define precisely because they are indirect. They are results of the direct impact on other sectors, and are felt by the clientele or constituencies of the directly affected sector.

Over the long term, indirect effects can be as important as the direct effects. There are almost an infinite variety of such indirect effects, but, of course, you should identify only the most important ones.

If you are still considering a range of alternatives, you should discuss, compare, and contrast the indirect benefits for each alternative.

1. Measurable (quantitative) terms.

Discuss the indirect benefits of the regulation in quantitative terms if possible.

Example

For instance, a rule which you might propose to require child-proof tops on

medicines could indirectly benefit parents by reducing the hospital bills that might occur if a child accidentally ingested the medicine. You might be able to identify the amount or percentage the proposed rule would reduce these bills if you knew the statistics on medical treatment for such accidents.

2. Unmeasurable (qualitative) terms. Discuss the indirect benefits of the regulation in qualitative terms as well.

Example

The CAB stated that its proposal for guidelines on subsidies to preserve essential air service to small communities should lead to many benefits. One of the intangible benefits may be an improved way of life for residents of small communities. This would result from continued or better access to the Nation's air transportation system.

Summary of Costs

Sectors Affected

As with the preceding section, "Summary of Benefits," this section should now start with a subheading identifying the sectors directly and indirectly affected by your proposed regulation.

Example

(For an EPA regulation for noise emission standards for newly manufactured motorcycles)

Summary of Costs

Sectors Affected: motorcycle manufacturers; manufacturers and distributors of motorcycle mufflers; and purchasers of motorcycles and motorcycle mufflers.

You should then proceed with a narrative discussing what costs you expect sectors which you have identified to bear as a result of the proposal or the alternatives you are considering. It is important to note that the word "costs" does NOT *only* apply to monetary figures. The "cost" of the proposed regulation is any negative impact which the proposal might cause either initially or over the long term, not only including dollars paid by an affected sector, but also including intangibles such as changes in established ways of conducting business, or in the habits and expectations of the general public.

Direct Costs

You should structure your discussion as you did for that in the Summary of Benefits section. Relate your discussion to the "no action" base case that caused the problem you described earlier. If you are still considering a range of alternatives, you should discuss the direct costs, in both quantitative and qualitative terms, for each major alternative which you are considering, where such costs differ. Your discussion will be most useful if you compare and contrast the cost of each alternative where appropriate. You should also indicate how the compliance costs will be distributed over time.

1. Measurable (quantitative) terms. Please include a discussion of the total compliance cost of the proposal. Differentiate between the kinds of costs you are discussing.

- Capital costs. These include the investment in physical plants and equipment necessary to comply with the regulation.
- Annual costs. These include operation and maintenance costs as well as interest and depreciation costs. Please differentiate among these costs in your discussion.
- Administrative costs. These include additional reporting burdens, such as periodic reports imposed upon the regulated sector. They may also include increased personnel and budget expenditures for those levels of government which must oversee compliance. Please differentiate between costs on regulating and regulated groups.
- You may want to note other types of costs, such as research and development costs. If you do, please distinguish between the capital and annual components of such costs.

In all of your cost discussions you should:

- Use specific figures where possible and state what year's dollars you are using.
- Use ranges, percentages, or "guesstimates" where specific figures are not possible, but clearly identify them as such.
- Briefly identify the rate and method which you use if you discount costs.

Example

(For OSHA's abrasive blasting regulations) We list the preliminary estimates of the incremental costs of the first alternative below. The size of the range reflects variations in the stringency and timing of selected provisions of this alternative.

Type of cost	Amount in millions of dollars (1978)
Installed capital	13–185
Annual capital charge	3–44
Annual energy	.01–8
Annual operating and maintenance	51–78
Total annualized	54–130

OSHA estimates that the alternative of banning sand would cost an additional $90 million in annual operating and maintenance costs due to the extra cost of substitutes for silica sand. Since sand sold for blasting is less than 3 percent of the sales of sand suppliers, the incremental effect on sand suppliers would be minor.

The implications of the upper bound cost estimates listed above for price, output, and employment in the affected industries are displayed below. The final two ratios in the table estimate the effect on the market structure.

	Percent change in price	Percent change in output	Net employment change (percent)	Total annualized cost to profit ratio	Installed capital cost to normal investment ratio
Alternative 1	0.0750	−0.0989	−0.0929	0.0167	0.0266
Ban Sand	0.1782	−0.2201	−0.5388	0.0396	0.0266

2. Unmeasurable (qualitative) terms. As with the benefits discussion, give information here on the potential effects on aesthetics, quality of life, and other intangibles which are important but cannot be specifically measured.

Example

(In a CPSC discussion of insulation for omnidirectional citizens band [CB] base station antennas)

Certain producers may leave the CB antenna market if they cannot provide insulation at a reasonable cost.

Indirect Costs

If you are still considering a range of alternatives, you should discuss, compare, and contrast the indirect costs for each alternative.

1. Measurable (quantitative) terms. Discussion of indirect costs/impacts could include such items as plant closings, job losses, increases in energy use, as well as price increases that may occur as a result of implementing the proposed regulation.

Example

CPSC estimated that customers would pay $114 to $174 a year in increased prices for furniture as a result of the agency's proposed furniture flammability standard.

2. Unmeasurable (qualitative) terms.

Example

FTC's proposed rulemaking on children's advertising could indirectly affect the television audience by causing changes in the quantity and quality of programing by television stations. If the proposed rule to restrict advertising would cause advertisers to cut down on the amount as well as the kind of advertising time purchased, the stations may lose some advertising revenues and this may force them to change some of their existing programs.

Related Regulations and Actions

Internal

Mention by title any existing programs and/or regulations and any regulations under development in your

own agency that are related to the proposed regulation.

External

Summarize the regulations or actions of other Federal agencies or major State agencies which are related to the proposed regulation.

If the information for both subheadings is "none", you can omit the subheadings and put "none" directly under the category. However, if there is information for at least one subheading, please use both. Please underline "*Internal*" and "*External*" so the **Federal Register** will put the words in italics.

Example

(For a FERC entry on sales of power and exemptions of certain facilities from regulation)

Related Regulations and Actions

Internal: On June 27, 1979, FERC issued proposed regulations providing for qualification of small power production and cogeneration facilities under § 201 of PURPA, in Docket No. RM79–54. These rules establish criteria by which FERC may certify small power production and cogeneration facilities as qualifying facilities which are then eligible for the rate and exemption provisions of § 201 of PURPA.

External: Each State regulatory authority must set specific rates for these sales of power. States may do so by issuing regulations or on a case-by-case basis, but in all events must provide notice and opportunity for a hearing. States may also establish operating standards for interfacilities.

Because you may mention other agencies in this section, it is important that you remember to spell out any acronyms you are using for the first time in your entry.

Active Government Collaboration

Briefly describe the steps your agency is taking to coordinate the proposed regulation with any other Federal, State, or local agencies and any agreements between agencies specifying which agency has the lead for the coordination. Mention actions related to an issuing division within your own agency (e.g., The Occupational Safety and Health Administration of the Department of Labor) under "Related Regulations and Actions" and not here. Provide proper citations (see "Legal Authority") when appropriate.

In this section, you *must* spell out the names of agencies, other than your own, on first reference, even if you have spelled them out elsewhere in the entry.

Example

(For an HEW entry) HEW has worked with the National Bureau of Standards in the Department of Commerce, which developed the system for rating equivalent means of achieving Life Safety Code standards. HEW is also collaborating with the Veterans Administration, which has adopted the National Bureau of Standards system for veterans' hospitals.

Timetable

In this section, please state the *future* actions you plan to take on the proposed rule.

Please note that we will emphasize in the Users' Guide that dates in the **Calendar** are tentative and subject to change. We will make it clear that these dates are your present best estimates, but that the reader should contact the person listed for the most current information. For this reason it is not necessary to use the word "estimate" in your entry.

Where applicable, you should give dates for all of the following if they are actions which you are planning for the *future:*

- ANPRM—Insert date.
- NPRM—Insert date.
- Regulatory Analyses; other analyses—If your agency performs separate analyses in addition to a regulatory analysis, please also list them here. Examples would be Environmental Impact Statements, Urban Impact Statements, etc. Please also indicate the current status of your regulatory analysis—under preparation, draft or final.
- Public Hearing—Please indicate the date and place.
- Public Comment Period—Please indicate the opening and closing dates for the comment period, and where the public can send or take their comments. Make sure this information is reflected accurately in the new Index III: Dates For Public Participation Opportunities.
- Final Rule—Insert date.
- Final Rule Effective—Insert date.
- Commission Decision or other action peculiar to your agency—Insert date.

If you do not have exact dates for an action, such as a public comment period, but know when and/or where it will occur in relation to future regulatory actions, you should state this.

Example

Public Comment Period—60 days following publication of NPRM.

Available Documents

List the major available documents related to the proposed regulation. These documents may include information that you drew upon to propose the regulation. Most of the items listed under "Timetable" will appear as references in the "Available Documents" section as the action on the proposal progresses. These include:

- ANPRM or NPRM
- Regulatory analyses or other impact statements,
- Transcripts from open agency meetings and public hearings, and
- Summary reports of legislative activity.

State where documents are available for review or how readers can obtain copies if this information is not evident. Include a *docket number* if applicable. This information is especially important if the document originated outside your agency. If you refer to the **Federal Register** here, please give complete citations (see Legal Authority above).

Example

NPRM—41 FR 51622, November 23, 1976
Federal Maritime Commission Docket 76–63
All documents available for review in the Office of the Secretary, Federal Maritime Commission, 1100 L Street, Room 11101, Washington, DC 26513.

Agency Contact

Please use a single name under this category, followed by the person's formal title, complete address, and telephone number, written in block form.

If you need to list more than one contact, please indicate who is responsible for what information regarding the regulation.

Example

Agency Contact:
Ms. Elizabeth A. Delf, Special Assistant to Commissioner Dupont,
Postal Rate Commission,
Suite 500, 2000 L Street NW.,
Washington, DC 20268,
(202) 254–3816.

CHECKLIST/OUTLINE OF GUIDELINES

GENERAL INSTRUCTIONS

To help you prepare your entries, we offer this checklist. By using it as you write each entry, you can ensure that you have included all the necessary information.

1. Agency Clearance

—Include letter from Agency Head or Council Representative accompanying entries

—Include an economist, lawyer, and plain English editor in your agency review of drafts

2. Criteria for Inclusion

—Submit for the **Calendar** at least five entries from executive agencies, three from independent agencies, meeting one or more of the following requirements:

EO 12044 Requirements for Regulatory Analysis; Regulations which:

—Have an annual effect of $100 million or more on economy

—Impose major increase in costs or prices for specific sectors
—Are included as determined by agency head
Other Regulations which Require Regulatory Analysis:
—Grants and income transfer programs with annual compliance costs of $100 million or more
—Regulations you are reproposing with major changes
Other Criteria:
—Regulations which are precedent setting, concern an issue of great public interest, or would increase productivity or profits without causing adverse effects
—Entries which appeared in the last edition of the **Calendar** and which are still active within the agency

3. **Timing**—Include entries if you anticipate regulatory action on them within the next twelve months, or if the Final Rule is close to the **Calendar** publication date

4. **Writing Style**—Write in active voice; define jargon; spell out acronyms on first use, with the exception of ANPRM, NPRM, and EO; do not use footnotes

5. **Format**
—Use a memory typewriter, if possible
—Be consistent with the Guidelines
—Type double-spaced, with one-inch margins on all sides of the page
—Indent paragraphs *five* spaces
—Type section headings in upper and lower case, flush with the left margins of the page; do not underline
—Submit clean final copy
—Submit original manuscript

BASIC OUTLINE FOR ENTRIES

AGENCY DESIGNATION/TITLE OF REGULATION

—Include acronym for agency and issuing division
—Include word "Title"
—Include title, with all important words capitalized
—Include CFR citation, in parentheses after title, with an asterisk if the proposed regulation is a revision to an existing CFR citation.

LEGAL AUTHORITY

REASON FOR INCLUDING THIS ENTRY

—Briefly state importance of the proposed regulation

STATEMENT OF PROBLEM

—Discuss background of problem
—Discuss magnitude of problem
—Discuss reason the agency is acting at this time
—Discuss consequences of not responding to the problem

ALTERNATIVES UNDER CONSIDERATION

Option A

—How it would solve the problem
—The advantages it offers
—The disadvantages it offers

Option B

—How it would solve the problem
—The advantages it offers
—The disadvantages it offers

Option C

—How it would solve the problem
—The advantages it offers
—The disadvantages it offers
—Discuss the option the agency prefers (if any at this point)
—Discuss the reasons for that preference
—Please include the following considerations if appropriate, when you discuss alternatives:
—Different kinds of actions you might take to achieve the statutory objective
—Level of control
—Flexibility to take into account size and nature of affected businesses or other sectors
—Timing of compliance
—Degree of reporting required
—An explanation, if you have no alternatives
—Innovative techniques (enhance competition, marketable rights, economic incentives, performance standards, information disclosure, voluntary standard setting, compliance reform)

SUMMARY OF BENEFITS

—List *Sectors Affected* in a subheading
—Relate your discussion to the "no action" base case
—If the agency is not yet recommending one alternative, discuss benefits for each major option which the agency is considering and compare and contrast the effects
—Indicate how the benefits will be distributed over time
—Discuss direct effects in measurable (quantitative) terms
—Discuss direct effects in unmeasurable (qualitative) terms
—Discuss indirect effects in measurable terms
—Discuss indirect effect in unmeasurable terms

SUMMARY OF COSTS

—List *Sectors Affected* in a subheading
—Relate your discussion to the "no action" base case
—If the agency is not yet recommending one alternative, discuss costs for each major option which the agency is considering and compare and contrast the effects
—Indicate how compliance costs will be distributed over time
—Discuss direct effects in measurable (quantitative) terms
—Discuss direct effects in unmeasurable (qualitative) terms
—Discuss indirect effects in measurable terms
—Discuss indirect effects in unmeasurable terms
In discussing quantifiable costs:
—Differentiate between kinds of costs
—Capital costs
—Annual costs
—Administrative costs
—Other types of costs such as research and development
—Use specific figures and state what year's dollars you are using
—If there are no specific figures, use ranges, percentages or "guesstimates," but clearly identify them as such
—If you discount costs, briefly identify the rate and method you use

RELATED REGULATIONS AND ACTIONS

—*Internal:* within your own agency
—*External:* within other Federal and/or State agencies

ACTIVE GOVERNMENT COLLABORATION

—Identify steps to coordinate the proposal with other Federal, State, or local agencies

TIMETABLE

—State all *future* actions, including where appropriate
—ANRM
—NPRM
—Regulatory or other analyses, such as environmental impact statements
—Public Hearing
—Public Comment Period (indicate where comments may be sent)
—Final Rule
—Final Rule Effective
—Commission Decision or other action peculiar to your agency

AVAILABLE DOCUMENTS

—List major documents such as ANPRMs, regulatory or other analysis, transcripts from public meetings, etc.
—State where available
—Include docket number if applicable

AGENCY CONTACT

—Use a single name, or if more than one, indicate why the reader should contact one rather than the other

[FR Doc. 80-14416 Filed 5-21-80; 8:45 am]
BILLING CODE 6560-24-M

federal register

Thursday
May 22, 1980

Part IV

Environmental Protection Agency

1981 and 1982 Model Year Light-Duty Diesel Vehicles: Revised Motor Vehicle Exhaust Emission Standards for Oxides of Nitrogen; 1981–1985 Model Year Light-Duty Diesel Motor Vehicles: Applications for Waiver of Oxides of Nitrogen Emission Standard

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 86

[FRL 1496-3]

Revised Motor Vehicle Exhaust Emission Standards for Oxides of Nitrogen (NO_x) for 1981 and 1982 Model Year Light-Duty Diesel Vehicles

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: This regulation establishes oxides of nitrogen (NO_x) emission standards for 1981 and 1982 model year light-duty vehicles belonging to certain diesel engine families for which I have granted waivers from the standard otherwise applicable under section 202(b)(6)(B) of the Clean Air Act, 42 U.S.C. 7521(b)(6)(B).

EFFECTIVE DATE: June 23, 1980.

ADDRESS: Information relevant to this rule is contained in Public Docket EN-80-3 at the Central Docket Section of the Environmental Protection Agency (EPA), Room 2903B, 401 M Street, S.W., Washington, D.C. 20460 and is available for review between the hours of 8:00 a.m. and 4:00 p.m. As provided in 40 CFR Part 2, EPA may charge a reasonable fee for copying services.

FOR FURTHER INFORMATION CONTACT: Jerry Schwartz, Manufacturers Operations Division (EN-340), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460, (202) 472-9421.

SUPPLEMENTARY INFORMATION: Section 202(b)(1)(B) of the Clean Air Act ("the Act"), 42 U.S.C. 7521(b)(1)(B), requires that regulations applicable to NO_x emissions from light-duty vehicles or engines manufactured during or after the 1981 model year shall contain standards which provide that such emissions from vehicles or engines shall not exceed 1.0 gram per vehicle mile. Regulations implementing this requirement have established this NO_x standard.

Section 202(b)(6)(B) of the Act authorizes the Administrator, upon application by any manufacturer, to waive the statutory NO_x standard for the 1981 through 1984 model years for any light-duty diesel engine family for which the Administrator can make the required statutory findings. I must promulgate interim NO_x standards applicable to the subject light-duty diesel engine families for those model years for which I have granted waivers.

Volkswagen AG, and Automobiles Peugeot have submitted new applications for those waivers. The statutory criteria, my determinations with respect to the vehicle models covered by the waiver applications, and my decision to grant or deny the waiver applications appear in the consolidated decision published along with this notice. In that decision, I granted waivers covering the following engine families for 1981 and 1982 model years only:

Manufacturer and engine family	Model year
Peugeot: 2.3 Liter (L)-Turbocharged (TC)-XD2S..	1981, 1982
Volkswagen AG:	
1.6L. naturally aspirated (NA), 2375 pounds inertia weight (I.W.)	1981, 1982
1.6L-NA-2500 I.W.	1981
2.0L-NA-3250 I.W.	1981, 1982
1.6L-TC-2375 I.W.	1982
1.6L-TC-2625 I.W.	1982
2.0L-TC-3250 I.W.	1982

Having decided to grant waiver applications for these diesel engine families, I am simultaneously promulgating regulations adopting emission standards not permitting NO_x emissions from 1981 and 1982 model year vehicles of these engine families to exceed the prescribed levels. The public has received an opportunity to comment on the waiver applications at issue, and I have considered those comments in making the consolidated decision which requires the promulgation of this rule. Also, the 1981 model year certification process is underway. For these reasons, I find that providing notice and an opportunity to comment on this rulemaking before final promulgation is impracticable and unnecessary.

Note.—The Environmental Protection Agency has determined that this action does not constitute a major proposal requiring preparation of a Regulatory Analysis under Executive Order 12044.

In addition, because the decision accompanying this rulemaking is based on a detailed analysis indicating that this rulemaking will have a negligible effect on air quality, the Environmental Protection Agency has not prepared an Environmental Impact Statement to accompany this rulemaking.

Dated: May 13, 1980.

Douglas M. Costle,

Administrator.

40 CFR Part 86 is amended as follows:

Subpart A—General Provisions for Emission Regulations for 1977 and Later Model Year New Light-Duty Vehicles, 1977 and Later Model Year New Light-Duty Trucks and 1977 and Later Model Year New Heavy-Duty Engines

40 CFR 86.081-8(a)(1)(iii) published at 45 FR 5480 (January 23, 1980), is revised to read as follows:

§ 86.081-8 Emissions standards for 1981 and later model year light-duty vehicles.

(a) * * *

(1) * * *

(iii) Oxides of nitrogen—1.0 grams per vehicle mile, except that: (A) Oxides of nitrogen emissions from 1981 and 1982 model year light-duty vehicles manufactured by American Motors Corporation shall not exceed 2.0 grams per vehicle mile; (B) oxides of nitrogen emissions from light-duty diesel vehicles of the following 1981 and 1982 model year engine families shall not exceed the prescribed levels:

Manufacturer and engine family	Model year	NO_x (gpm)
General Motors Corp.: 5.7 liter (L)....	1981, 1982	1.5
Daimler-Benz AG:		
2.4L	1981, 1982	1.5
		1.25
3.0L naturally aspirated (NA).....	1981, 1982	1.5
3.0L turbocharged (TC)	1981, 1982	1.5
AB Volvo: 2.4L naturally aspirated....	1981, 1982	1.5

Manufacturer and engine family	Model year	Interim standard (gpm)
Peugeot: 2.3L-TC-XD2S.....	1981, 1982	1.5
Volkswagen AG:		
1.6L-NA-2375 pounds inertia weight (I.W.)	1981, 1982	1.3
1.6L-NA-2500 I.W	1981	1.4
2.0L-NA-3250 I.W	1981, 1982	1.5
1.6L-TC-2375 I.W.....	1982	1.3
1.6L-TC-2625 I.W.....	1982	1.4
2.0L-TC-3250 I.W.....	1982	1.5

(Secs. 202 and 301(a) of the Clean Air Act, as amended, 42 U.S.C. 7521, 7601(a)(Supp. I 1977))

[FR Doc. 80-15522 Filed 5-21-80; 8:45 am]

BILLING CODE 6560-01-M

ENVIRONMENTAL PROTECTION AGENCY

[FRL 1496-4]

Applications for Waiver of the 1981-85 Model Year Oxides of Nitrogen Emission Standard for Light-Duty Diesel Motor Vehicles—Second Consolidated Decision of the Administrator

I. Introduction

This is the second consolidated decision I have issued under section 202(b)(6)(B) of the Clean Air Act, as amended (Act)[1] regarding applications from automobile manufacturers for waiver of the 1.0 gram per mile (gpm) oxides of nitrogen (NO_x) emission standard scheduled to apply to 1981 and subsequent model year light-duty diesel vehicles and engines.[2]

As the introduction to the first diesel NO_x waiver decision explains, section 202(b)(1)(B) of the Act establishes the standards applicable to emissions of oxides of nitrogen (NO_x) from light-duty vehicles and engines manufactured during and after model year 1977.[3] This section requires the Administrator of the Environmental Protection Agency (EPA) to promulgate regulations containing standards which provide that NO_x emissions may not exceed 2.0 grams per vehicle mile (gpm) for model years 1977 through 1980, and may not exceed 1.0 gpm for 1981 and later model years.

Section 202(b)(6)(B) of the Act authorizes the Administrator to delay implementation of the 1.0 gpm NO_x standard by waiving it under certain conditions to permit the use of diesel engine technology. Section 202(b)(6)(B) of the Act provides that, upon the petition of a manufacturer, the Administrator may waive the 1.0 gpm NO_x standard to a level not to exceed 1.5 gpm, for any class or category of diesel-powered light-duty vehicles and engines manufactured during the four model year period beginning with model year 1981. In order to obtain a waiver, the manufacturer must show that the waiver is necessary to permit the use of diesel engine technology in the class or category of vehicles or engines for which it has requested a waiver. Moreover, the Administrator must determine:

(i) That such waiver will not endanger public health,

(ii) That such waiver will result in significant fuel savings at least equal to the fuel economy standard applicable in each year under the Energy Policy and Conservation Act ("EPCA"), and

(iii) That the technology has a potential for long-term air quality benefit and has the potential to meet or exceed the average fuel economy standard applicable under EPCA at the expiration of the waiver.[4]

On July 14, 1978, guidelines for the submission of applications under this waiver provision were published in the Federal Register.[5] The guidelines follow the language of the Act in placing an affirmative burden on the manufacturer to supply information sufficient to satisfy independently each of the waiver criteria set forth above for each engine family for which a waiver was requested. The guidelines also stress that although the waiver might be requested for the four model year period beginning with the 1981 model year up to a NO_x level of 1.5 gpm, the waiver could be granted for a shorter period of time and to an intermediate NO_x level between 1.0 and 1.5 gpm.

EPA held public hearings in response to an initial group of waiver applications, and on January 23, 1980, I published my consolidated decision on those applications. I granted the waiver applications covering certain engine familes which met all of the prescribed statutory criteria, and I denied the remaining applications on the basis that the applicants had submitted insufficient information to show the need for NO_x waivers to permit use of diesel engine technology in those engine families. Specifically, I denied Automobiles Peugeot's (Peugeot) request for waivers for two of its engine families and Volkswagen AG's (VW) request for three of its engine families because these manufacturers had failed to supply sufficient data by which I could assess adequately the respective NO_x emission control capabilities of their engine families. As a result, Peugeot and VW failed to show that waivers are necessary for any of these engine families, as the statute requires.[6]

Subsequent to my decision, I received reapplications from Peugeot and VW on February 6, 1980, and February 11, 1980, respectively. Specifically, Peugeot submitted a reapplication for four-year waivers for its diesel engine families while VW submitted a reapplication for two year waivers for its diesel engine families. Each of these reapplications included new emission data on each of the subject engine families. EPA held public hearings on these reapplications on February 27, 1980. The transcripts of these hearings, the materials submitted by the applicants in their original and follow-up waiver requests, and all other information upon which I have based my decision on this set of waiver requests are included in EPA Public Docket EN-80-3.

II. Summary of Decision

A. Waiver Applications Granted

The waiver applications which I have decided to grant cover the following engine families for the model years specified:

Waiver Applications Granted

Manufacturer	Model year	Engine family
Peugeot	1981, 1982	2.3 liter (L), turbocharged (TC)-XD2S.
VW	1981, 1982	1.6L naturally aspirated (NA), 2375 pounds inertia weight (I.W.).
	1981	1.6L-NA-2500 I.W.
	1981, 1982	2.0L-NA-3250 I.W.
	1982	1.6L-TC-2375 I.W.
	1982	1.6L-TC02625 I.W.
	1982	2.0L-TC-3250 I.W.

As discussed more fully below, I have concluded that applications covering these engine families meet each of the statutory criteria for receiving a waiver for the years noted. I am prescribing an interim NO_x standard of 1.5 gpm for Peugeot for these model years. For VW, I am prescribing the interim standards it proposed in its application, which are reproduced in the following chart:[7]

Engine family	Model year	Interim Standard (gpm)
1.6L-NA-2375 I.W	1981, 1982	1.3
1.6L-NA-2500 I.W	1981	1.4
2.0L-NA-3250 I.W	1981, 1982	1.5
1.6L-TC-2375 I.W	1982	1.3
1.6L-TC-2625 I.W	1982	1.4
2.0L-TC-3250 I.W	1982	1.5

B. Waiver Applications Denied

I am denying waiver requests covering the following engine families for the model years specified:

[1] 42 U.S.C. 7521(b)(6)(B) (Supp. I 1977).

[2] The first decision was published at 44 FR 5480 (January 23, 1980) (hereinafter "Orig. decision").

[3] 42 U.S.C. 7521(b)(1)(B) (Supp. I 1977). See the first diesel NO_x waiver decision for a discussion of the statutory history leading up to this provision. Orig. decision at 5480, n.1.

[4] For a discussion of the Congressional purpose behind this provision, see the discussion accompanying notes 2 and 3 of my original decision at 5480.

[5] 43 FR 30341 (July 14, 1978) (hereinafter "Guidelines").

[6] Orig. decision at 5487.

[7] Application for Waiver of Oxides of Nitrogen Emissions Standards for Light-Duty Engines submitted by Volkswagen AG, dated May, 1979 (hereinafter "Orig. VW App.") 2.-4.

Waiver Applications Denied

Manufacturer	Model year	Engine family
Peugeot	1983, 1984	2.3L-TC-XD2S, SC3S

As I will discuss more fully below, I have concluded that the ever-accelerating development of NO_x control technology and a California production phase-in should provide sufficient experience for Peugeot to develop the technology necessary to enable the XD2S engine family to meet the 1.0 gpm NO_x standard by the 1983 model year. I have denied a waiver for the XD3S engine family because Peugeot submitted insufficient data by which I could adequately assess the NO_x emission control capabilities of this engine family.

III. Discussion

A. Assessing Need for Waivers

Section 202(b)(6)(B) of the Act expressly assigns to an applicant the burden of showing that the waiver is necessary to permit the use of diesel engine technology in a particular class or category of vehicles or engines. The major issue I must address under this criterion is whether the applicant has shown that unless I grant the waiver, the engine family which the waiver request covers will not be able to meet applicable emission standards, even with the addition of any device, equipment or aspect of diesel engine technology presently available or expected to become available during the period covered by the waiver request.[8]

1. *Decision Methodology*

The methodology this decision employs to assess an engine family's need for a waiver is the same as the methodology I used in my original diesel NO_x waiver decision.[9] Appendix A to this consolidated decision contains an assessment of technology available to meet the 1.0 gpm NO_x standard for each diesel engine family in question. The assessment is derived from a review of the diesel engine family as described in the waiver application and of each family after hypothetically factoring in one or more purposely conservative "Projected Technological Improvements" ("factors"). The methodology applies these factors for currently-known improvements and hardware that an applicant may implement during the waiver period (such as advanced EGR systems, compression ratio changes, or injection timing modifications.[10] Appendix A contains this evaluation for each engine family for which sufficient emission test data were available by using a "Monte Carlo" statistical simulation technique used in previous suspension and waiver decisions to project the likelihood that a given engine family will be able to pass EPA's certification test requirements under a 1.0 gpm NO_x standard.[11]

Appendix A also evaluates the effect of NO_x emission controls on emissions of particulate matter. This evaluation relies on information supplied by applicants in this proceeding and in the diesel particulate rulemaking proceedings,[12] as well as on other information contained in the record for this consolidated decision.

2. *Individual Applicants*

Each manufacturer has reached a state in its development of NO_x emission controls at which it has narrowed the range of strategies it contemplates employing to meet the 1.0 gpm NO_x standard and the particulate standard[13] to, at most, a few alternative systems. To support their contentions that waivers are necessary to permit the use of diesel technology for the engine families in question, both Peugeot and VW have provided descriptions of the systems each has been considering in efforts to meet 1981 and later model year emission standards.

(a) *Peugeot.* Peugeot reapplied for a waiver of the 1981–1984 NO_x standard applicable to its light-duty diesel vehicles. For the 1981 and 1982 model years, the waiver request applies to its XD2S engine family. For the 1983 and 1984 model years, the waiver request applies to the XD2S or the XD3S engine family.[14] I denied a waiver for these engine families in my first NO_x consolidated decision on the ground that Peugeot provided insufficient emission test data for evaluating the engine families' emission control capabilities.[15]

The reapplication provides additional emissions data and requests that I grant a waiver on the basis of Peugeot's assertions that it is unable to meet both the 1.0 gpm NO_x standard and the 0.6 gpm particulate standard that EPA had proposed at the time of Peugeot's application. Peugeot is relying totally on Exhaust Gas Recirculation (EGR) to lower its NO_x emissions.[16] EPA's analysis projects this engine family to be unable in the 1981 model year to meet the 1.0 gpm NO_x standard.[17]

EPA's analysis projects that vehicles in this engine family could certify at a 1.2 gpm NO_x standard without incorporating any available technological improvements, such as increased EGR rate.[18] Peugeot, however, asserted that this engine family needs a waiver of the NO_x standard to 1.5 gpm in order for Peugeot to have adequate confidence that production vehicles of this engine family wold meet applicable NO_x emission requirements.[19]

The data which Peugeot has submitted to support its position do not necessarily show that without a waiver up to 1.5 gpm this engine family will not be able to meet applicable NO_x emission requirements in production.[20] Nevertheless, because of Peugeot's

[8] Guidelines, at 30342. Beginning in the 1981 model year, applicable statutory standards will be 0.41 gpm hydrocarbons (HC), 3.4 gpm carbon monoxide (CO), and 1.0 gpm NO_x. Beginning in the 1982 model year, the light-duty diesel vehicle particulate standard of 0.6 gpm takes effect. That standard becomes 0.2 gpm as of the 1985 model year. 45 FR 14496 (March 5, 1980).

[9] For a more complete discussion of the methodology employed see Orig. decision at 5484-5485.

[10] Appendix A, § IV.

[11] See Orig. decision at 5484 and discussion of Monte Carlo technique in the previous suspension decision published at 38 FR 10317, 10323 (April 26, 1973). EPA's certification test requirements are located at 40 CFR Part 86.

[12] EPA Public Docket No. OMSAPC-78-3.

[13] At the time of the applications, the proposed particulate standard for light-duty diesel vehicles was 0.6 gpm for the 1981 model year and 0.2 gpm for the 1983 and later model years. 44 FR 6650 (February 1, 1979). On February 21, 1980, I promulgated a final standard of 0.6 gpm for the model years 1982–1984 and 0.2 gpm for the 1985 model year and beyond. See 45 FR 14496 (March 5, 1980). The impact of this change on my evaluation of the manufacturers' data will be noted.

[14] Automobiles Peugeot Application for Waiver of the 1981–1984 NO_x Emission Standard, dated February 6, 1980 (hereinafter "P. App.") 1.–6. Peugeot indicated that its marketing plan for the 1983 and 1984 model years was uncertain and that it would actually market either the XD2S or the XD3S engine, or both. See Transcript of February 27, 1980 Public Hearing on the Waiver of the 1981–1984 Model Year Light-Duty Diesel NO_x Emissions Standard (hereinafter "Tr.") 55–56.

[15] Orig. decision at 5487.

[16] Until June, 1979 Peugeot's "first choice" system was its "advanced" hydraulic EGR system with a "mixed control unit". Peugeot stated that technical and mass production problems have necessitated a delay in applying that system, and it is uncertain whether this system will be available for 1982 model year California vehicles, although it is making a concerted effort to have the system ready at that time. Thus, an electropneumatic EGR system is the sole system available for 1981. The electropneumatic system is incapable of reaching the lower NO_x and particulate emission levels achieved by the "advanced" system. See P. App. 1–2, 2–1 and 2–3; and Tr. 11.

[17] Appendix A, Table II–1. This engine family did pass when the "factor" for the use of a fuel available in France but not in the United States was applied. See Appendix A, § IV.

[18] Appendix A, § V.

[19] See Letter from Richard H. Lucki, Government and Engineering Liaison (Peugeot) to Charles Freed, Director Manufacturers Operations Division (EPA), March 6, 1980 (Appendix 2) (hereinafter "Lucki Letter").

[20] For example, it is at least questionable that Peugeot will need to manufacture as much as 97.5% of its production vehicles to meet standards in order to satisfy Federal emission requirements pertaining to production vehicles. See Lucki Letter, p. 1.

expressed position, a significant risk does exist that, where I to set an interim standard less than 1.5 gpm, Peugeot would conclude that it needs to incorporate additional available technological improvements to reduce further this engine family's NO_x emission levels, and thereby provide what it deems to be adequate assurance that its certification and production vehicles will comply with any interim NO_x standard applicable in the 1981 model year.

The technological improvement which Peugeot would likely incorporate to accomplish this end would be use of an increased EGR rate.[21] While increasing the EGR rate tends to decrease NO_x emissions it also tends to place an upward pressure on particulate emissions.[22] As the public health discussion in Section III(B)(2) of this decision points out, I have concluded that increased particulate emissions pose potentially greater health risks than increased NO_x emissions. As a result, I am setting an interim NO_x standard of 1.5 gpm because available information shows that a significant risk exists that Peugeot needs the waiver to minimize the likelihood that it will increase its "base" EGR rates to meet any lower NO_x standard.[23]

With regard to the 1982 model year, Peugeot has also indicated its intent to use California as a proving ground for compliance with a 1.0 gpm NO_x standard.[24] Peugeot would then extend the technology of its 1982 California light-duty diesel vehicles to its 49-state models in the 1983 model year. I find that this phase-in period is necessary for Peugeot to identify and correct quality control problems that may arise with the application of the new control technology.[25]

b. *VW.* VW reapplied for a waiver of the 1981 and 1982 model year NO_x standards applicable to three classes of its light-duty diesel vehicles: Rabbit, Dasher and Audi 5000.[26] VW sought interim NO_x standards that decrease over time and vary for each vehicle class. The standards chosen reflect VW's assessment of the lowest NO_x levels it can achieve in each year in which it plans to produce a given class.[27] In its reapplication, VW split the vehicle classes for which it requested waivers in its original application into smaller classes according to method of aspiration, engine displacement, and vehicle model. VW's purpose in distinguishing among vehicle models was to show the best emissions control capability for the different inertia weight classes associated with each model, and to make it clear that VW believes that for these vehicles the higher inertia weight classes require a higher NO_x standard.[28] Therefore, in response to VW's request, and because it will result in increased emissions control, I have distinguished between VW's diesel classes on the basis of inertia weight for purposes of this consolidated decision. I denied waivers for these vehicles in my first consolidated NO_x waiver decision on the grounds that VW provided insufficient emission test data for evaluating the engine families' emission control capabilities.[29]

This reapplication provides new emission data and requests that I grant waivers on the basis of VW's assertions that 1) its diesel engine families planned for 1981 and/or 1982 cannot meet 1.0 gpm NO_x, 0.41 gpm HC, or both the statutory NO_x and HC standards and 2) the public health benefit resulting from decreasing particulates emissions if the waiver is granted for the remaining engine families, outweighs the possible danger resulting from the "additional" NO_x that would be emitted if the waiver is denied.[30]

My technical analysis of data submitted by VW showed the 1.6L–NA–2500 I.W. engine family to be incapable of meeting the 1981 NO_x standard.[31] It also showed the 1.6L–NA–2375 I.W. and 2.0L–NA—3250 I.W. engine families to be incapable of meeting both the NO_x standard and the HC standard of 0.41 gpm simultaneously in 1981.[32]

For the engine families VW plans to introduce in the 1982 model year, my analysis shows the 2.0L–TC–3250 I.W. engine family to be incapable of meeting the statutory 1.0 gpm NO_x standard in that year.[33] My analysis also shows that the 1.6L–TC–2625 I.W. engine family fails both the NO_x and the HC standard, as do the 1.6L–NA–2375 I.W. and 2.0L–NA–3250 I.W. engine families.[34] Finally, my analysis showed that the 1.6L–TC–2375 I.W. engine family was capable of passing the NO_x standard, but not capable of simultaneously passing the HC standard.[35]

In its waiver reapplication, VW indicated that in some instances these engine families were capable of meeting interim NO_x standards less than 1.5 gpm, and in fact requested waivers to those interim levels for the engine families in question.[36] EPA's analysis projects that these VW engine families will not be able to meet interim NO_x standards below these levels (and that VW's other diesel engine families will not be able to meet interim NO_x standards below 1.5 gpm).[37]

Because VW indicated that it did not need waivers of the NO_x standard to levels beyond those interim levels listed in its waiver reapplication, VW has not adequately shown that a significant risk exists that it will decide it needs to incorporate technological improvements (such as EGR) which may pose a health risk insofar as they affect emissions or unregulated pollutants to ensure that its

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[21] Appendix A, § IV. When the factor for increased EGR was applied for the 2.3L–TC–XD2S engine family, a significant reduction in NO_x emissions was noted. This technological improvement is available for the 1981 model year.

[22] Appendix A, § IV. See also 45 FR 14496, 14498 (March 5, 1980). The technology-based particulate standard for light-duty diesel vehicles does not take effect until the 1982 model year.

[23] In *International Harvester Co.* v. *Ruckelshaus*, the Court instructed EPA in deciding on requests for delays in implementing scheduled emission standards to take into account the possibility of environmental harm that could result from failure to grant the requested delay. 478 F. 2d 615, 641 (D.C. Cir. 1974).

[24] P. App. 1–2.

[25] The California phase-in is necessary for Peugeot to mitigate the risks of national production, such as a recall of the national fleet, should it turn out that diesel vehicles with previously untried technology experience problems in complying with applicable emission standards in use. See discussion of the need for California phase-in in my original decision at 5485–5486. Peugeot has not shown here that the California phase-in opportunity will not give it adequate lead time to permit it to develop the technology needed to market this engine family nationally in the 1983 model year and the model years thereafter.

[26] Volkswagen Application for NO_x Waiver (hereinafter "VW App.") 1. VW indicated it would reasssess the need for a waiver for 1983 and 1984 and reapply for those years in the future if necessary.

[27] See table in section II.A. of this decision for the designated standards and model years of planned production.

[28] Tr. 65–66.

[29] In its original application, VW requested waivers for its 1.6 liter naturally-aspirated, 1.6 liter turbocharged, and 2.0 liter naturally-aspirated engine families. VW did not request a waiver for its 1.5 liter engine, although it did submit data for this engine family sufficient for EPA to make a technological assessment. The emission results of the 1.5 liter engine, however, could not be used as a substitute for 1.6 liter engine emission data as VW requested, because of the different technologies associated with each engine. Since VW submitted no durability data for the 1.6 liter turbocharged engine and submitted only low-mileage development vehicle data for the naturally-aspirated 1.6 liter engine, I classified both as "no-data" engine families. VW submitted no durability data for its 2.0 liter engines. See Appendix A—Summary of Technological Capability, Orig. decision at 5504.

[30] VW App. 4.

[31] Appendix A, Table II–2. Several engine families were projected to be capable of meeting the 1.0 NO_x standard with the catalyzed trap oxidizer factor applied. This technology, however, will not be available until after the 1982 model year. See Appendix A, § IV.

[32] Appendix A, Table II–2.

[33] Appendix A, Table II–2.

[34] Appendix A, Table II–2.

[35] Appendix A, Table II–2.

[36] VW App., Table I, p. 2. VW stated that it does not plan on using EGR on its 49-State vehicles to achieve its requested interim NO_x standards in 1981 and 1982. See Tr. 69.

[37] Appendix A, § V.

engine families will comply with its suggested interim NO_x levels.[38] As a result, I have determined that VW needs waivers of the statutory NO_x standard only to its requested interim levels for those engine families for which VW has suggested those levels, and to 1.5 gpm for its other diesel families.

VW indicated it would probably be able to market light-duty diesel vehicles in California in the 1982 model year, but only because of the benefit of the California HC evaporative emissions credit, a credit unavailable in the 49-state market.[39] VW also has the opportunity to use California as a "pilot market" in 1982 for Federal systems it will market in 1983.[40] This will enable VW to evaluate the data it receives from the California market, especially with respect to potential durability problems. Therefore, I have determined that effective emissions control technology is not available for these engine families for 1981 and 1982 to meet NO_x standards below the standards which VW suggested.

B. Endangerment to Public Health

In order to grant a waiver request, section 202(b)(6)(B)(i) requires me to determine that a waiver of the statutory standard of 1.0 gpm NO_x would not endanger the public health. Congress intended my assessment of this criterion to include consideration of the potential health effects of unregulated pollutants from diesel engines as well as the health effects associated with increased NO_x emissions.[41]

1. Oxides of Nitrogen (No_x)

a. *Air Quality Impact.* In my original decision, I concluded that the potential impact on ambient NO_x levels resulting from a NO_x waiver covering the engine families for which I granted a waiver would not be significant.[42] Granting waivers today for the engine families listed in section IIA will not alter this conclusion; that is, the potential impact on NO_x levels resulting from granting these additional waivers, even when combined with the impact from the waivers I granted earlier, will not be significant.[43]

b. *Public Health Impact.* In my original decision, I concluded that granting the waiver would have little impact on the projected annual decrease in ambient NO_x levels, and therefore granting those waivers would not endanger the public health.[44] Granting a waiver today for those engine families listed in section IIA will not alter that conclusion. Thus, I also conclude that today's waivers will not endanger the public health.

2. Particulates

My main health concern in these proceedings relating to emissions from diesel engines is over potential increased emissions of diesel particulates and focuses on the potential for an increase in the incidence of respiratory ailments, and the potential that organic components of the diesel particulates are carcinogenic.[45] These concerns warrant action, where appropriate, that would minimize particulate emissions from light-duty diesels.

a. *Air Quality Impact.* It is undisputed that the projected increase in diesel light-duty vehicle production will increase human exposure to respirable particulates.[46] This fact underscores my concern for action minimizing particulate emissions from light-duty diesels.

b. *Health Impact—i. Assessment of Risks—Granting or Denying Waivers.* In my original decision, I noted that to the extent that waivers are granted, the applicants will be able to market diesel vehicles that emit more particulates than would gasoline-powered vehicles. However, my assessment of the risk posed by these emissions must be made in light of the greater risk posed by the particulate emission levels that might result from waiver denial.[47]

If I deny a waiver, an applicant may choose not to manufacture the diesel engine family at all, or it may attempt to manufacture the diesels and successfully certify them in compliance with the 1.0 gpm NO_x standard. This is indeed a real possibility, not withstanding EPA's evaluation of the manufacturers' technological capabilities. EPA's Monte Carlo evaluation serves to quantify the risk that a given engine family will fail to comply with the standard in certification, and is purposely conservative in order to assure that an engine family classified in Appendix A as a "pass" would almost certainly pass certification requirements.[48] Thus, failing the Monte Carlo analysis does not indicate for certain that the engine family using currently-developed technology would not actually meet certification requirements under a 1.0 gpm NO_x standard, nor does it preclude the possibility of the manufacturer's making an all-out effort up until the start of the 1981 model year to develop calibrations which would permit successful certification of its diesel engine families.[49]

Peugeot stated that in 1979, 74% of Peugeot Motors of America's total sales

[38] Despite EPA's projection on the basis of available emission data, that these VW non-EGR engine families will not pass al certification requirements at the requested interim standards (Appendix A, § V), VW has nonetheless decided to attempt to successfully certify these engine families. This points out the conservative nature of the Monte Carlo analysis, and that a manufacturer might decide to go ahead with production despite EPA's projection that the manufacturer's vehicles will not pass all certification requirements.

[39] Tr. 71. California provides manufacturers with an evaporative emissions "credit" which results in a lower tailpipe HC standard for vehicles with low HC evaporative emissions (such as diesels). See California Exhaust Emission Standards and Test Procedures for 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, as amended May 22, 1979, p.8.

[40] Tr. 71. As is the case for Peugeot, VW needs the California phase-in to mitigate the risks of national production, such as recall of the national fleet.

[41] See, e.g., H.R. Rep. No. 294, 95th Cong., 1st Sess. 19, 237, 250–51 (1977); S. Rep. No. 127, 95th Cong., 1st Sess. 70 (1977).

[42] Orig. decision at 5488–89.

[43] Appendix A, § VI.

[44] Orig. decision at 5489.

[45] Orig. decision at 5489. Although there is no current definitive epidemiologic evidence establishing cancer risk from exposure to diesel particulates, the uncertainty surrounding the potential health risk posed by diesel particulates warrants a cautious approach in regulating the vehicles which produce them. See discussion in Orig. decision at 5490.

[46] Diesel-powered vehicles emit particulates at a far greater rate than catalyst-equipped gasoline-powered vehicles. Orig. decision at 5489–5490.

[47] Orig. decision at 5490.

[48] The methodology provides a margin of error to provide manufacturers with a cushion for the risks of failing to comply with the emission requirements during actual certification testing and in production. This is necessary because the consequences of discovering at a later date that a manufacturer cannot comply after it makes development and production commitments could have serious economic consequences. See *International Harvester Co.* v. *Ruckelshaus*, 478 F. 2d 615, 630 (D.C. Cir. 1973).

[49] For a fuller discussion of the possibility that a manufacturer failing the Monte Carlo analysis would still produce diesel engine families under a 1.0 gpm NO_x standard see pages 5490–5492 of my original decision. Manufacturers have previously asserted that they were unable to produce the technology (Viz., catalytic converters) necessary to meet the 1975 model year statutory CO standard, and that a suspension was necessary to permit production. See Decision of the Administrator on Remand from the United States Court of Appeals for the District of Columbia Circuit, 38 FR 10317 (April 26, 1973). Even though EPA granted the requested suspensions, many manufacturers did produce 1975 model year vehicles employing catalysts.

Although waiver denial does not necessarily preclude the manufacturers from producing light-duty diesels, section 202(a)(4) of the Act does make specific provision for the assessment of health risks from emissions of unregulated pollutants associated with competing technologies. This section provides me with authority to deny certification to vehicles with technologies which "will cause or contribute to an unreasonable risk to public health, welfare or safety in its operation or function". (42 U.S.C. 7521(a)(4) (Supp. I 1977)). When the manufacturers apply for certification for the engine families at issue in this decision, I expect to be in a position to determine whether the vehicles presented for certification will pose an unreasonable risk to public health, welfare or safety.

in the U.S. were diesels.[50] Peugeot, therefore, has a strong incentive to attempt to certify and market its diesels even without a waiver. Peugeot might attempt to accomplish this by hastening the development of its "advanced" EGR system.[51] or by taking other actions that may require increased use of EGR. EPA's analysis of Peugeot's data for its XD2S engine family shows that increasing the use of EGR to reduce NO_x toward the statutory level of 1.0 gpm would place upward pressure on particulate emissions.[52]

By establishing a NO_x standard that Peugeot will be able to meet without using increased EGR for its diesel engine families, I can avoid giving rise to the risk that Peugeot will produce its diesel engine families under a 1.0 gpm NO_x standard with higher particulate emissions. Because increased particulates pose potentially greater health risks than increased NO_x, I conclude that granting waivers for Peugeot's diesel engine families, thereby precluding any need for the use of increased EGR systems that put upward pressure on particulates, is more protective of the public health than waiver denial.

The same reasoning is applicable to VW. VW indicated that without a waiver it would not be able to market diesel models in 1981.[53] It did admit, however, that simply because the data obtained from prototype vehicles of these models were above the engineering goals it would establish for a 1.0 gpm NO_x standard, did not necessarily mean it would not decide to mass produce these models. VW explained that the decision whether to produce or not is a management decision.[54] Depending on marketing and other factors, VW indicated its management might decide to accept the risk it perceived of committing its resources, without a waiver, to efforts to produce complying vehicles, even if the efforts might fail.

VW's management has significant incentives to make the decision to produce its diesel vehicles without a waiver. VW projects demand for diesels to be over 50% in some product lines.[55] VW indicated it seriously doubts whether it can maintain its sales volume without diesel models.[56] VW also stated that the continued viability of its Westmoreland, Pennsylvania plant would be threatened if it could not market diesels, because the plant cannot produce all gasoline-powered models.[57] Finally, VW would have to cancel its preliminary agreement with the state of Michigan for the construction of a new plant.[58] These facts suggests a strong possibility that VW may ultimately decide to produce diesel models without a waiver.

The engine families contained in VW's waiver request include some "concepts" that employ EGR and some that do not.[59] The most promising concepts in terms of NO_x emission reductions for model years 1981 and 1982, however, appear to be those employing EGR systems.[60] Use of this EGR technology will generally put upward pressure on particulate emissions.[61] Therefore, I conclude that granting VW's NO_x waiver requests also is more protective of the public health than waiver denial.

C. Fuel Economy

Fuel economy considerations are contained in the second and third criteria of section 202(b)(6)(B).[62] The second criterion provide that I may grant a waiver if I determine that it will result in significant fuel savings at least equal to the fuel economy standard applicable in each year under the EPCA.[63] To meet this criterion, the applicant must show that the "base level" for a class or category for which the applicant has requested a waiver will meet the applicable EPCA fuel economy standards.[64] The fuel economy standard for the 1981 model year is 22 miles per gallon (mpg) and the standard for the 1982 model year is 24 mpg.[65] All of the base levels of the engine families granted waivers in this decision will meet or better the fuel economy standards for 1981 and 1982 (the waiver years).[66]

The third criterion provides that I may grant a waiver if I determine, among other things, that the diesel engine technology has the potential to meet or exceed the average fuel economy standard applicable under EPCA at the expiration of the waiver. To meet this criterion, the applicant must show that there is a substantial likelihood that the average fuel economy of the applicant's diesel fleet will meet or exceed the EPCA standard.[67] The EPCA standard for 1983, the expiration year of the waivers, is 26 mpg.[68] I find that there is a substantial likelihood that the average fuel economy of the diesel fleets of the applicants will meet or exceed 26 mpg.[69]

D. Long-Term Air Quality Benefit

In order for me to grant a waiver, I must find that diesel engine technology has the potential for long-term air quality benefit.[70] The applicant will meet this criterion if there is a substantial likelihood that the engine families covered by its waiver request will be able to comply with the applicable emissions standards at the expiration of the waiver period.[71] The standards applicable at the expiration of the waiver period, model year 1983, are, in addition to the 1.0 NO_x standard, standards of 3.4 gpm for emissions of carbon monoxide (CO), 0.41 gpm for

[50] Tr. 9.

[51] See P. App. 2–1 and 2–3 for discussion on Peugeot's differing EGR systems.

[52] Appendix A, § IV. As a result of my delaying the effective date of the light-duty diesel vehicle particulate standard until the 1982 model year, Peugeot could arguably increase the EGR rate in its 1981 model year diesel vehicles, thereby lowering the NO_x emissions from those vehicles below the 1.0 gpm standard, without concerning itself with violating any particulate standard. Moreover, the particulate standard I promulgated for the 1982 model year is a technology-based standard that reflects the greatest degree of particulate emission reduction achieveable through the application of technology which I have determined will be available for a given model year, considering lead time and other constraints. 42 U.S.C. 7521(a)(3)(A)(iii). An upward pressure on particulate emissions from increasing the EGR rate still could present a threat to the public health, even though the increase in particulate emissions would not cause Peugeot to be in violation of a particulate standard.

[53] Tr. 93.

[54] Tr. 80.

[55] Tr. 64.

[56] Tr. 94–95.

[57] Tr. 95.

[58] Tr. 92.

[59] VW App., 7–11.

[60] VW App., Table II, p. 5.

[61] In EPA's action promulgating light-duty diesel particulate standards, EPA noted that recognized deleterious effect of EGR on particulate emissions. 45 FR 14496, 14498 (March 5, 1980.)

[62] Clean Air Act, as amended, § 202(b)(6)(B) (ii) and (iii). 42 U.S.C. 7521(b)(6)(B) (ii) and (iii) (Supp. I 1977). a major consideration for Congress in providing for a waiver of the NO_x satandard for diesel-powered vehicles was the potential fuel economy benefits of diesel technology. See discussion accompanying footnote 3 of my original decision at 5480.

[63] Section 302(A)(i) of EPCA establishes fuel economy standards for 1978–80 and 1985 and thereafter and provides the Secretary of Transportation with the authority to promulgate standards for 1981–84. 15 U.S.C. 2002(a)(1)(1975).

[64] Guidelines, at 30343. Base level means "a unique combination of basic engine, inertia weight, and transmission class". 40 CFR 600.002–77(23) (1977).

[65] 49 CFR 531.5 (1978).

[66] Appendix A, § VI; P. App. 4–1, 4–1(a)(b); and Tr. 12–13. See discussion in my original decision at 5493.

[67] Average fuel economy means "the production-weighted combined fuel economy value of all passenger automobiles produced by a manufacturer in a single model year as computed in 40 CFR 600.510." 40 CFR 600.002–77 (14) (1977).

[68] 49 CFR 531.5 (1978).

[69] Appendix A, § VI. See also, Letter from W. Groth, Administrator, Emissions Regulations & Testing (VW) to Central Docket Section, Docket EN–80–3 (EPA) (March 4, 1980) (Attachment 3).

[70] 42 U.S.C. 7521(b)(6)(B)(iii) (Supp. I 1977).

[71] See 123 Cong. Rec. 13703 (Aug. 4, 1977) (remarks of Senator Muskie). See also 43 Fed. Reg. 30343, 30347 (July 14, 1978).

emissions of hydrocarbons (HC), and 0.6 gpm for emissions of particulates.[72]

1. *Peugeot*

I have already found that a small-scale phase-in of the technology necessary to meet a 1.0 gpm NO_x standard in California in model year 1982 will be necessary to permit Peugeot to avoid undue risks in nationwide production of the 49-state diesel fleet.[73] Peugeot has indicated that it could use the California market in 1982 in this manner.[74] The one-year California phase-in will provide Peugeot with an opportunity to develop reliable diesel emission control technologies necessary to meet a 1.0 gpm NO_x standard at lower particulate levels. Specifically, EPA's technical analysis indicates that Peugeot's hydraulic EGR system, coupled with some technology changes has the potential to achieve lower NO_x and particulate emission levels when fully developed.[75] Therefore, I find there is a substantial likelihood that Peugeot's engine family for which I am granting waivers today will be capable of meeting the Federal statutory standards in model year 1983.

2. *VW*

VW also has the opportunity to take advantage of California as a "pilot market" in 1982, for Federal production in 1983.[76] VW, however, is experiencing difficulties meeting a 0.41 gpm HC standard with some of its diesel engine families.[77] VW has stated that it intends to apply a catalytic converter to its California vehicles in 1982 to decrease HC emissions, and indicated it might meet all Federal standards in 1983 with its use, without an evaporative emissions credit.[78] Thus, I find there is a substantial likelihood that VW's engine families for which I am granting a waiver today will meet the Federal statutory standards in 1983.[79]

E. Final Decision and Amended Rule

Section 202(b)(6)(B) of the Act grants me the authority to waive the statutory standard of 1.0 gpm NO_x and to prescribe interim standards which provide that NO_x emissions may not exceed 1.5 gpm for any class or category of diesel light-duty vehicles or engines manufactured during model years 1981, 1982, 1983, and/or 1984 which meet the statutory waiver criteria. Based upon the foregoing discussion of the classes or categories for which waiver applications were made, I am granting waivers and simultaneously promulgating interim standards for engine families for model years 1981 and 1982 as follows:

Manufacturer and engine family	Model year	Interim standard (gpm)
Peugeot: 2.3L-TC-XD2S	1981, 1982	1.5
VW:		
1.6L-NA-2375 I.W	1981, 1982	1.5
1.6L-NA-2500 I.W	1981	1.4
2.0L-NA-3250 I.W	1981, 1982	1.5
1.6L-TC-2375 I.W	1982	1.3
1.6L-TC-2625 I.W	1982	1.4
2.0L-TC-3250 I.W	1982	1.5

Dated: May 13, 1980.

Douglas M. Costle,

Administrator.

Appendix A—Summary of Technological Capability

Contents

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I. Introduction

The existing 1981 model year exhaust emission standards for light duty vehicles are 0.41 grams per mile HC, 3.4 grams per mile CO, and 1.0 grams per mile NO_x. Section 202(b)(6)(B) of the Clean Air Act, as amended, [42 U.S.C. 7521(b)(6)(B)] provides a waiver procedure by which a manufacturer may apply for relaxation of the 1.0 gram per mile NO_x standard up to 1.5 grams per mile for some period during model years 1981 through 1984 for Diesel-powered vehicles. Since the initial decision by the Administrator [1 at 5480]*, two vehicles manufacturers, Volkswagen and Peugeot, have resubmitted data for waiver consideration.

This appendix reviews the technological capability of the applicant manufacturers to meet the 1981 and subsequent model year NO_x standard of 1.0 grams per mile. The analysis contained in this appendix relies on analyses contained in previous technical appendices. These appendices are incorporated by reference [1 at 5494].

As required by Section 202(b)(6)(B), the technological feasibility evaluation performed by the technical staff is made to evaluate the technological capability of each applicant to achieve the 1.0 grams per mile NO_x emission standard, in order to determine whether or not a waiver is necessary to permit the use of Diesel engine technology.

II. Summary of Technological Capabilities

Tables II–1 and II–2 are the summaries of the two applicants' capabilities for achieving 0.41 HC, 3.4 CO, and 1.0 NO_x with the Diesel-powered vehicles for which data were submitted in the NO_x waiver re-applications.

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[72] 42 U.S.C. 7521(b)(1)(A), (B) (Supp. I 1977); and 45 FR 14496 (March 5, 1980).

[73] Orig. Decision at 5485.

[74] P. App. 1–2.

[75] Appendix A, § IV.

[76] See footnote 32.

[77] See, for example, VW APP., Table II, p. 4.

[78] Tr. 71–72.

[79] VW plans to introduce a "catalyzed" trap oxidizer that it expects will be ready for production sometime after model year 1982. This technology is designed to reduce particulates and HC simultaneously, thereby allowing greater EGR rates. See VW App. 14. Additionally, VW has only applied for waivers for a two-year period, and it has stated its intent to reapply for waivers for additional model years if it finds it is unable to meet the 1983 Federal standards.

* The brackets contain the description x at y. This means the referenced material is located in reference number x (listed at the end of this document) at page number y.

Table II-1

Applicant: Peugeot

[0.41 HC, 3.4 CO, 1.0 NOx]

Engine Family	No. of Vehicles (last 3 nos. of VIN)	W/O Factors: Vehicles P/F		W/O Factors: Reason for Failures			W/O Factors: Probability			Vehicle	Factor	W/Factors: Vehicles P/F		W/Factors: Reason for Failures			W/Factors: Probability		
		P	F	HC	CO	NOx	HC	CO	NOx			P	F	HC	CO	NOx	HC	CO	NOx
2.3L-TC (XD2S)	3 (516)		X	X		X	78	100	28	1	A		X	X			58	100	91
											B		X	X			30	96	83
											C		X	X	X		16	6	85
											D		X	X			58	100	91
											E		X	X		X	72	100	65
											F	X					96	100	83
	(909)*		X			X	87	100	63	2	A		X	X			72	100	94
											B		X	X			39	100	83
											C		X	X			18	100	85
											D		X	X			72	100	95
											E		X			X	80	100	77
											F	X					96	100	83
											Z		X			X	89	100	15
	(041)		X	X		X	69	100	32	3	A		X			X	96	100	0
											B		X	X		X	79	100	46
											C		X	X		X	76	100	76
											D		X			X	89	100	79
2.3L-TC (XD3S)	No data																		

*Official 1981 Certification vehicle

Table II-2

Applicant: Volkswagen*

[0.41 HC, 3.4 CO, 1.0 NOx]

Engine Family	No. of Vehicles (last 3 nos. of VIN)	W/O Factors: Vehicles P/F		W/O Factors: Reason for Failures			W/O Factors: Probability			Vehicle	Factor	W/Factors: Vehicles P/F		W/Factors: Reason for Failures			W/Factors: Probability		
		P	F	HC	CO	NOx	HC	CO	NOx			P	F	HC	CO	NOx	HC	CO	NOx
1.6L-NA-Rabbit	2 (522)		X	X		X	65	100	76	1	A		X	X			75	100	98
											B	X					95	100	100
	(845)		X	X		X	79	100	0	2	A		X			X	87	100	79
											B	X					98	100	100
1.6L-TC-Rabbit	2 (697)		X	X			45	100	86	1	A		X	X			61	100	98
											B	X					89	100	100
	(022)		X	X		X	47	100	0	2	A		X	X		X	58	100	75
											B	X					92	100	98
1.6L-NA-Dasher	1 (108)		X			X	91	100	0	1	A		X			X	93	100	0
											B		X			X	99	100	67
1.6L-TC-Dasher	1 (102)		X	X		X	47	100	0	1	A		X	X		X	64	100	30
											B	X					89	100	94
2.0L-NA-Audi	2 (869)		X	X		X	67	100	0	1	A		X	X		X	78	100	0
											B		X			X	92	100	0
											C		X	X			55	100	96
	(525)		X	X		X	58	100	0	2	A	X					93	100	97
											B			X		X	73	100	0
2.0L-TC-Audi	1 (610)		X			X	83	100	0	1	A		X			X	97	100	72
											B		X			X	85	100	0
											C		X	X	X		18	0	98

*Engine Family as Designated in Appendix

1.6L-NA-Rabbit
1.6L-TC-Rabbit
1.6L-NA-Dasher
1.6L-TC-Dasher
2.0L-NA-Audi
2.0L-TC-Audi

Engine Family as Designated in Decision

1.6L-NA-2375 IW
1.6L-TC-2375 IW
1.6L-NA-2500 IW
1.6L-TC-2625 IW
2.0L-NA-3250 IW
2.0L-TC-3250 IW

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The key to the summary tables is as follows. The first five column headings refer to analysis of the vehicles in an as-received condition; i.e., without any technological improvements applied to these vehicles. The first column heading lists the engine families. The second column heading is the number of vehicles in each engine family that were evaluated through the Monte Carlo analysis. [A detailed description of these vehicles is presented in Section V.] The third column heading is he number of vehicles that passed or failed the Monte Carlo analysis. The fourth column heading is the reason(s) for these failures, that is, which of the exhaust emissions were determined to have less than an 80 percent chance of certifying when it was evaluated by the Monte Carlo analysis. The fifth column heading is the probability of passing the particular standards as generated by the Monte Carlo analysis.

Column headings six through ten reflect the "technological improvements" applied to the as-received vehicles. Column heading six refers to the vehicles that were used for the Monte Carlo analysis. Column heading seven is a shorthand notation of the factors that were applied to the vehicles. This notation is further developed and explained in Section IV. Column heading eight refers to the number of vehicles again that passed or failed, this time with the improvements applied. Column heading nine is the reason for the failure, if the vehicle indeed failed, and whether it was a HC, CO, or NO_x failure. Column heading ten refers to the probabilites for compliance with the HC, CO, or NO_x standards that go along with the indication of a failure.

The "no data" category is an abbreviated notation for the lack of acceptable data to perform EPA's technological analysis. Applicants have, for several years, known the types of data necessary for EPA to make a determination whether or not a given vehicle would be projected to pass or fail a set of standards. Unfortunately, in many cases there were a lack of acceptable data for specific engine families. This effectively precluded EPA from making a pass/fail determination for those families. In these cases, the families are called no data and no pass/fail determination was made.

In the technological analysis, data from prior year's certification programs were not used. These data were not used because the technology and calibrations employed on these vehicles were not for may not be representative of the technology and calibrations that will be used for model year 1981. Vehicles designed and calibrated or much different, more lenient, emissions than those at issue here have little relevance to a forecast of technological availability.

III. Statistical Treatment of the Data

Again, no changes have been made in the basic Monte Carlo methodology since its last use in a technical appendix. This methodology has been discussed and used previously [1 at 5496]. There were no changes made to the variability inputs of the basic Monte Carlo methodology as a result of these re-applications [1 at 5496].

IV. Projected Technological Improvements (Factors)

The rationale for technological improvements (factors) is well discussed in previous technical appendices and will not be elaborated upon further [1 at 5496].

Unfortunately, the new data submitted did not allow the development of numerous technological improvements factors. For example, Peugeot provided limited development data, from which technological improvements are generated, for emission control systems other than their prime system. Volkswagen failed to provide development data for one engine family for which they are seeking a waiver.

Factor for EGR Settings (Rates) on the Peugeot Electropneumatic EGR System

Peugeot is planning to introduce an electropneumatic EGR system on their 2.3L turbocharged engine in model year 1981 [4 at 2–1]. Peugeot maintains that this system is sufficiently advanced to attain the model year 1981 calibrations necessary to complete the certification process by the start of production.

While the calibrations for model year 1981 may be fixed, according to Peugeot, Peugeot did present data which would allow the EPA technical staff to evaluate the effect of varying EGR rates on the electropneumatic EGR system. These data are presented in Table IV–1 [4 at 2.23–75/76]. In all cases the "setting" numbers in the table correspond to higher EGR rates.

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Table IV-1

Effects of EGR Settings (Rates) on the Peugeot Electropneumatic EGR System

VIN 2663022, 3500 IW, XD2S Engine, M4 [4 at 2.23-76]

HC	CO	NOx	Part	MPG	Remarks*
0.15	1.58	1.02	0.443	27.73	'81 setting
0.18	1.84	0.86	0.591	28.31	setting "No. 6"
(1.20)	(1.16)	(0.84)	(1.33)	(1.02)	(Factors)
0.15	1.58	1.02	0.443	27.73	'81 setting
0.25	3.12	0.78	0.95	27.67	setting "No. 2"
(1.67)	(1.97)	(0.76)	(2.14)	(1.00)	(Factors)

VIN 2769007, 3500 IW, XD2S Engine [4 at 2.23-75]

0.15	1.38	0.92	0.4151	31.73	'81 setting
0.23	2.23	0.84	0.5249	30.89	setting "No. 2"
(1.53)	(1.77)	(0.91)	(1.26)	(0.97)	(Factors)
0.15	1.38	0.92	0.4151	31.73	'81 setting
0.26	2.97	0.83	0.5785	30.79	setting "No. 3"
(1.73)	(2.15)	(0.90)	(1.39)	(0.97)	(Factors)

*From graphs at 2.23-75/76 1, 2, and 3, EGR settings "No. 6", "No. 2", and "No. 3" correspond to higher EGR rates than the base calibration.

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The effects of these higher EGR rates were to lower NO_x levels, raise HC and CO levels, and put upward pressure on particulates.

The factors for EGR setting corresponding to numbers 6, 2, and 3 were simulated in the Monte Carlo analysis of vehicles numbered 2867516 and 909. This factor was selected for simulation because: (1) this technology has a short lead time and could be implemented by 1981 model year introduction, (2) low cost, and (3) nominal impact on fuel economy.

Factors for Injection Timing Changes with the Peugeot Electropneumatic EGR Systems

Peugeot also supplied data which showed the effects of injection timing changes on the EGR system proposed for model year 1981. These data are shown in Table IV–2.

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Table IV-2

Effects of Injection Timing Changes on the Peugeot Electropneumatic EGR System

Timing 7° BTDC vs. '81 Calibration at 5° BTDC

	HC	CO	NOx	Part	MPG	Vehicle No.
	0.15	1.06	1.04	0.3125	26.35	3076549
	0.29	1.70	0.83	-	27.68	53ATA75
	0.32	2.27	0.90	0.4614	28.06	1001670
	0.14	1.30	1.06	0.3019	25.32	2867516
Avg. 7°	0.22	1.58	0.96	0.3586	26.85	
[4 at 2.23-79, 80, 81, and 84]						
	0.23	1.31	0.97	0.4929	28.23	2867516
	0.11	1.43	1.01	-	27.83	1002721
	0.39	2.52	0.75	0.4355	28.02	1001670
Avg. 5°	0.24	1.75	0.91	0.4642	28.02	
Factors	(1.08)	(1.11)	(0.95)	(1.29)	(1.04)	
Same Vehicle Comparison						
[4 at 2.23-81]						
	0.32	2.27	0.90	0.4614	28.06	7°
	0.39	2.52	0.75	0.4355	28.02	5°
Factor	(1.22)	(1.11)	(0.83)	(0.94)	(1.00)	
[4 at 2.23-84]						
	0.14	1.30	1.06	0.3019	25.32	7°
	0.23	1.31	0.97	0.4929	28.23	5°
Factor	(1.64)	(1.01)	(0.91)	(1.63)	(1.11)	

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It can be noted that while retarded injection timing has a positive effect on reduction of NO_x and fuel consumption, deleterious effects on HC, CO and in most cases particulate matter were observed. Since Peugeot is having difficulty in achieving NO_x and HC standards simultaneously, [4 at 2-12] the use of factors based on retarded injection timing may not help Peugeot achieve the emission levels necessary for 1.0 gram per mile NO_x.

These factors were also applied to vehicles 2867516 and 909 in the Monte Carlo simulation. Two factors were selected, one to represent an average reduction achievable with different vehicles, and one set of factors representative of what is achievable on one vehicle.

Peugeot presented data from vehicles equipped with their electropneumatic EGR system which could have provided factors for such things as the effect of transmission shift schedule, injector pump changes, time before initiation of EGR, EGR versus engine speed, and injector type. Generally, these technical changes produced little benefits towards reducing NO_x or particulate levels. Factors based on these changes were not pursued further since it is possible that these technical changes were incorporated into the model year 1981 calibration and little or no data were available to assess their effects on NO_x or particulate levels.

Effect of French Specification Fuel on the Peugeot Electropneumatic EGR System

Peugeot has long maintained that the quality of U.S. Diesel fuel has been detrimental to the ability of their engines to achieve HC and NO_x standards [4 at 2-12]. In Peugeot's additional data submission, they presented additional data which allowed the EPA technical staff to derive factors [8 at 2-23—31-1, 2]. These data are reproduced in Table IV-3. The factors generated indicate an improvement for all pollutants and a benefit on fuel economy. These factors were applied to all of the Peugeot vehicles analyzed in the Monte Carlo simulation.

Table IV-3

Effect of Fuel on the Peugeot Electropneumatic EGR System

	HC	CO	NOx	Part	MPG
U.S. Fuel					
	0.13	1.16	1.16	0.4283	26.62
	0.11	1.26	1.22	0.4763	26.13
Avg.	0.12	1.21	1.19	0.4523	26.38
[8 at 2-23 - 31-2]					
French fuel					
	0.09	0.69	1.06	0.3585	28.52
	0.09	0.96	1.09	0.3515	28.65
Avg.	0.09	0.84	1.08	0.3550	28.60
[8 at 2-23 - 31-1]					
Factors	(0.75)	(0.69)	(0.91)	(0.78)	(1.08)

While this technological improvement indicates a benefit in achieving emissions standards, the availability of higher quality fuel in the United States could be severely limited. Therefore, while the EPA technical staff concludes that French specification (improved quality) fuel could potentially allow Peugeot to achieve 1.0 gram per mile NO_x levels, the lack of this type of fuel on the U.S. market makes this approach unrealistic for the 1981 and 1982 model years. Peugeot supplied no information that would lead EPA to conclude that such fuel will be available throughout the U.S.

Factors for the Changes of EGR Rates on the Peugeot Hydraulic EGR System

Peugeot has been experimenting with an EGR system developed by the Robert Bosch Company that Peugeot has labeled the "hydraulic" as opposed to the "electropneumatic" system [4 at 2–8]. This system, even though Peugeot has started a durability vehicle with this system installed, will not be available before model year 1983 [4 at 2–1 and section 2.2.1.4]. Consequently, factors were developed to ascertain the viability of this technology for the post-1983 model year achievement of 1.0 gram per mile NO_x standards.

Table IV–4 shows the data which were used to develop the factors for judging the effects of EGR rates on the hydraulic EGR system. It is assumed that the 25% idle EGR rate would be Peugeot's preferred EGR setting. This is consistent with Peugeot's experience on the electropneumatic EGR system; i.e., as low an EGGR rate as possible to minimize particulate and HC problems. Note that the factors developed from vehicle 8000056 have a modest effect in reducing NO_x levels, but put upward pressure on particulates. However, the converse effect on particulates is true for the data from vehicle 8000004. Both of these factors were simulated on vehicle 041 in the Monte Carlo analysis.

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Table IV-4

Effects of EGR Settings (Rates) on the Peugeot Hydraulic EGR System

[4 at 2.23-77/78]

For Engine No. 8000056

	HC	CO	NOx	Part	MPG	Setting of Idle EGR
	0.28	2.98	0.72	1.042	26.12	35%
	0.19	2.96	0.81	1.433	26.34	30%
	0.21	2.58	0.83	1.009	25.71	30%
Avg.	0.20	2.77	0.82	1.221	26.03	
	0.23	2.46	0.86	0.8932	27.53	25%
	0.18	2.18	0.91	0.8617	25.96	25%
Avg.	0.21	2.32	0.89	0.8774	26.75	
Factors						
	(0.95)	(1.19)	(0.92)	(1.39)	(0.97)	30%/25%
	(1.33)	(1.28)	(0.81)	(1.19)	(0.98)	35%/25%

For Engine No. 8000004

	0.30	1.78	0.74	0.4081	29.69	35%
	0.21	1.69	0.79	0.3731	30.17	35%
Avg.	0.25	1.73	0.77	0.3906	29.93	
	0.19	1.83	0.84	0.3772	28.63	30%
	0.18	1.72	0.81	0.4112	29.30	25%
	0.24	1.68	0.90	.3836	29.29	25%
Avg.	0.21	1.70	0.86	0.3974	29.29	
Factors						
	(0.90)	(1.08)	(0.98)	(0.95)	(0.98)	30%/25%
	(1.19)	(1.01)	(0.90)	(0.98)	(1.02)	35%/25%

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Factor for Compression Ratio Changes on the Peugeot Hydraulic EGR System

The effects of compression ratio changes are observed in the data displayed in Table IV–5. These data indicate that compression ratio changes can have a beneficial effect on reducing either engine hydrocarbon or reducing NO_x emissions. Both sets of data indicate upward pressure on particulates. Again, factors for full time EGR were simulated in the Monte Carlo analysis of vehicle 041. This factor was selected because of its benefit for reduction of hydrocarbons and it would have less of an adverse impact on particulate levels. The EPA technical staff believes that the use of higher compression ratio coupled with EGR could have the potential to achieve both NO_x levels below 1.0 gram per mile and particulate levels below 0.6 gram per mile. However, lead time precludes the use of this system before model year 1983.

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Table IV-5

Effect of Compression Ratio on the Peugeot Hydraulic EGR System

[4 at 2.23-90] VIN 042, M4, XD2S-TC Engine

	HC	CO	NOx	Part	MPG	Remarks
	0.22	1.56	1.12	0.4344	28.98	12° Timing, 30% EGR,
	0.17	1.46	1.03	0.3034	29.25	No EGR before 120 sec.
	0.20	1.51	1.10	0.3689	29.12	CR 21.59
	0.34	1.75	0.94	0.5900	29.26	Same as above except
	0.14	1.74	0.99	0.5710	30.27	CR 22.56
	0.24	1.75	0.97	0.5835	29.77	
Factor CR 22.56 / CR 21.59	(1.20)	(1.16)	(0.88)	(1.58)	(1.02)	
[4 at 2.23-91]						
	0.49	1.93	0.63	0.4294	27.02	10° Timing, 30% EGR,
	0.36	1.90	0.65	0.3480	28.07	CR 21.54
	0.43	1.92	0.64	0.3887	27.55	
	0.20	1.72	0.79	0.5580	28.04	Same as above except
	0.24	1.99	0.80	0.5373	27.84	CR 22.56
	0.22	1.86	0.80	0.5476	27.94	
Factors CR 22.56 / CR 21.54	(0.51)	(0.97)	(1.25)	(1.41)	(1.01)	

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Factors for the Effect of Injection Timing Change and Injection Timing Changes Without EGR for the First 160 Seconds of Vehicle Operation on the Peugeot Hydraulic EGR System

Tables IV–6 and 7 illustrate the effects of injection timing retardation on the hydraulic EGR system. These factors were developed but *not* used in the Monte Carlo simulation. They are included here as illustrations of the potential for achieving both a NO_x *and* particulate reduction simultaneously by use of the hydraulic EGR system and injection timing retarded. There is a penalty for hydrocarbons and fuel economy, however. These timing changes, possibly coupled with the aforementioned technologies, indicate that there is a potential for the hydraulic EGR system to achieve lower NO_x and particulate levels when fully developed.

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Table IV-6

Influence of Injecton Timing on the Peugeot Hydraulic EGR System

[4 at 2.23-86] Vehicle 042 "Permanent" EGR - 30% EGR

	HC	CO	NOx	Part	MPG_u	Timing
	0.19	1.83	0.84	0.3772	28.63	12°
	0.34	1.61	0.81	0.3260	27.02	10°
	0.49	1.93	0.63	0.4294	27.02	10°
	0.36	1.90	0.64	0.3480	28.07	10°
	0.40	1.81	0.69	0.3678	27.77	
	0.91	2.19	0.72	0.3975	29.13	8°
	0.65	1.95	0.62	0.3573	27.79	8°
	0.78	2.07	0.67	0.3774	28.46	
Factors						
10°/12°	(2.11)	(0.99)	(0.82)	(0.98)	(0.97)	
8°/12°	(4.11)	(1.13)	(0.80)	(1.00)	(0.99)	

[4 at 2.23-88] Vehicle 012 "Permanent" EGR - 30% EGR

	0.20	1.64	0.81	0.8595	24.45	10°
	0.22	2.18	0.88	0.8580	23.55	10°
	0.21	1.91	0.85	0.8588	24.00	
	0.32	1.63	0.87	0.5613	22.89	8°
	0.37	2.06	0.79	0.4145	23.69	6°
	0.51	2.00	0.76	0.4312	23.09	6°
	0.44	2.03	0.78	0.4228	23.39	
Factors						
8°/10°	(1.52)	(0.85)	(1.02)	(0.66)	(0.95)	
6°/10°	(2.10)	(1.06)	(0.92)	(0.49)	(0.97)	
6°/ 8°	(1.38)	(1.25)	(0.90)	(0.75)	(1.02)	

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Table IV-7

Effect of Injection Timing on the Peugeot Hydraulic EGR System Calibration for No EGR in the First 160 Seconds of Vehicle Operation

	HC	CO	NOx	Part	MPG	Timing
	0.22	1.85	1.00	0.6935	22.38	10°
	0.21	1.83	0.92	0.7686	23.09	10°
	0.21	1.84	0.96	0.7310	22.73	
	0.23	1.52	0.87	0.5621	23.33	8°
	0.44	2.07	0.80	0.4736	22.68	6°
Factors						
8°/10°	(1.10)	(0.83)	(0.91)	(0.77)	(1.03)	
6°/10°	(2.10)	(1.13)	(0.83)	(0.65)	(1.00)	

[4 at 2.23-89]

Technology Improvements (Factors) for Volkswagen Engines

Volkswagen has applied for NO_x waivers for six engine families in the latest submission for a NO_x waiver [5 at 2]. Unfortunately, Volkswagen did not provide detailed technical development data for their 1.6L naturally aspirated or turbocharged engines from which the EPA technical staff could develop technological improvement factors. Of the data supplied [References 2, 3 and 5], the EPA technical staff was able to extract a set of factors for a combustion chamber ratio change, a long lead time item, and to extrapolate the results from the 2.0L engine equipped with a catalytic converter or trap oxidizer. Again, these data would indicate the potential for this technology, but Volkswagen maintains this is a long lead time item not ready before 1982 [5 at 7] or 1985 [5 at 11]. Also, the EPA technical staff would prefer not to translate technology between engine families which are family specific, but the paucity of 1.6L engine family data necessitates this transfer.

Volkswagen did submit data which indicated the effects of injection timing, injector nozzle modifications, and EGR in their initial application [3 at Table 1]. However, the injection timing modifications and nozzle modifications are now incorporated into 1981 model year vehicles and these two factors are no longer applicable. The EPA technical staff did evaluate the effects of EGR on the 2.0L engines. Additionally, Volkswagen evaluated concepts employing EGR for all of their available engine families for 1981 and 1982. Table IV-9 will detail the factors applicable to a non-modified 1979 engine. Volkswagen provided, for simulation only, one durability vehicle which did not incorporate the injection timing changes and injector nozzle modifications [5 at 59].

Volkswagen affirmed there were no additional 1.6L development vehicle data available for analysis [6 at 88].

Volkswagen Combustion Chamber Ratio Change Factor

A technology evaluated by VW was to change the prechamber volume to main combustion chamber volume in an attempt to reduce NO_x emissions. A comparison was made to ascertain the effect of this change, the data being presented in Table IV-8 [2 at 2.b.1-51].

While this type of change may be a long lead time item if retooling heads, patterns, and casting changes are needed, these factors were simulated in the Monte Carlo analysis to see if they affected VW's ability to pass. These factors were applied to all 1.6L engines, either NA or TC.

Table IV-8

Volkswagen Combustion Chamber Ratio Change Factor

Engine Family/Vehicle	HC	CO	NOx	Part	Remarks
4 cyl., 1.6L,	0.35	1.32	1.21	0.32	No. 14
2250 IW, M4	0.31	1.33	0.98	-	No. 17 (low cc ratio)
Factors	(0.88)	(1.01)	(0.81)	-	

Volkswagen EGR and Increased EGR Factors for the 2.0L–NA Engine

The data analyzed for these factors are detailed in Table IV–9. The factors of interest are those for low rate EGR (Cond. 3 versus Cond. 2), and for high rate EGR (Cond. 4 versus Cond. 2). It should be noted there is a dramatic reduction in NO_x for these factors, but a severe penalty for HC, particulates, and fuel economy with greater amounts of EGR.

For those engines not equipped with concept 1, injection timing and injector nozzle modifications (VIN 148–809), the factor of interest in Table IV–9 is condition 3 versus condition 1. These factors were applied to the Volkswagen 2.0L durability vehicles.

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Table IV-9

Audi 5000 EGR Evaluation, 2.0L-NA M4, 3250 IW

Vehicle No. 847-521 [5 at 41]

Cond.	Test	HC	CO	NOx	Part	FE	Comments
1	1	0.291	1.125	1.467	0.53	26.6	1979 Prod.
	2	0.447	1.372	1.502	0.49	24.6	vehicle as
	3	0.351	1.400	1.534	0.58	26.2	received
	Avg.	0.363	1.299	1.501	0.53	25.8	
2	1	0.254	1.231	1.371	0.32	29.6	With modified
	2	0.232	1.164	1.282	0.39	29.0	injection curve
	3	0.219	1.307	1.328	0.38	28.7	+ reduced nozzle
	Avg.	0.235	1.234	1.327	0.36	29.1	tolerance
3	1	0.439	1.871	1.057	0.50	26.7	With modified
	2	0.478	1.936	0.909	0.48	26.7	injection curve
	3	0.372	1.812	0.953	0.40	25.8	+ reduced nozzle
	4	0.408	1.899	0.912	0.46	26.7	tolerance and
	Avg.	0.424	1.879	0.957	0.46	26.5	EGR (low rate)
4	1	0.602	2.486	0.726	0.56	27.1	With modified
	2	0.762	2.530	0.638	0.62	27.2	injection curve
	Avg.	0.682	2.508	0.682	0.59	27.1	+ reduced nozzle tolerance and EGR (high rate)

Factors

Cond. 2/Cond. 1	(0.65)	(0.95)	(0.88)	(0.68)	(1.13)
Cond. 3/Cond. 1	(1.17)	(1.45)	(0.64)	(0.86)	(1.03)
Cond. 4/Cond. 1	(1.88)	(1.93)	(0.46)	(1.11)	(1.05)
Cond. 3/Cond. 2	(1.80)	(1.52)	(0.72)	(1.27)	(0.91)
Cond. 4/Cond. 2	(2.90)	(2.03)	(0.51)	(1.63)	(0.93)

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Volkswagen Trap Oxidizer Factor

Volkswagen provided the data displayed in the upper portion of Table IV-10 as representative of the results to date with a trap oxidizer applied to a vehicle equipped with EGR. Volkswagen maintains that this concept is no longer viable because of its adverse effects on NO_x levels (5 at 14). This technology was simulated on all 2.0L engines to ascertain the HC/NO_x reduction potential of this technology as the technology does provide a particulate reduction benefit.

Table IV-10

Volkswagen

Trap Oxidizer and Catalyzed Trap Oxidizer Factors

Trap Oxidizer VIN 503-611, 2.0L-NA, 3250 IW, M4 [5 at 44]

	HC	CO	NOx	Part	MPG	Remarks
	0.413	1.985	1.300	0.54	28.6	Baseline
	0.377	2.033	1.390	0.42	27.5	w/Trap Oxidizer
Factors	(0.91)	(1.02)	(1.07)	(0.78)	(0.96)	

Catalyzed Trap Oxidizer VIN 490-667, 2.0L-NA, 3250 IW, M5 [5 at 46]

	0.461	1.914	1.832	0.69	27.3	Baseline
	0.231	0.216	1.130	0.42	27.8	w/Catalyst Trap Oxidizer
Factors	(0.50)	(0.11)	(0.62)	(0.61)	(1.02)	

Volkswagen Catalyzed Trap Oxidizer Factor

The lower portion of Table IV-10 contains the data for the factors attributable to the technology Volkswagen feels will solve their emissions problems when fully developed [5 at 14]. As the data show, this technology has the ability to simultaneously reduce HC, CO, NO_x and particulate levels without adversely affecting fuel economy. The reduction in NO_x levels may be attributable to the fact this technology allows the use of more EGR than would be allowed without it. Volkswagen commented there were driveability problems with the use of the technology which will have to be overcome [5 at 14].

Volkswagen maintains trap oxidizer technology is a long lead time technology not available until the 1985 period [5 at 17, 18]. The EPA technical staff does not necessarily agree with Volkswagen's time schedule of 1985 because of the background experience that could allow transfer of similar technology developed for gasoline powered vehicle catalyst systems, but they agree it would take at least through model year 1982 to complete development of the Volkswagen concepts.

These factors were simulated on all 1.6L and 2.0L engines in the Monte Carlo analysis. While the use of these factors may not be appropriate for the 1.6L engines because they were developed on a 2.0L engine, the EPA technical staff used them to assess the potential for this technology in the post 1982 time frame [6 at 76].

Volkswagen 2.0L-TC No EGR to EGR Factor

One of the durability vehicles submitted was equipped with injection timing and injector nozzle modifications, but no EGR. To assess the effects of the addition of EGR to this vehicle, the factors in Table IV-11 were developed. These factors were only applied to vehicle VIN 503-610. This factor also has an adverse effect on HC, CO and particulates.

Table IV-11

Volkswagen 2.0L-TC No EGR to EGR Factor

VIN 490-674, 2.0L-TC, 3250 IW, M5 [5 at 42]

	HC	CO	NOx	Part	MPG	Remarks
	0.313	1.407	1.496	-	-	Baseline, 2.0L-TC engine, 4K miles [5 at 39]
	0.291	1.125	1.467	0.42	26.6	Timing and nozzle mods
	0.212	0.891	1.563	0.39	27.3	
Avg.	0.251	1.008	1.515	0.41	26.9	
	0.443	4.522	0.755	0.61	26.7	Same as above + EGR
Factors $\left(\frac{\text{No EGR}}{\text{EGR}}\right)$	(1.76)	(4.49)	(0.50)	(1.49)	(0.99)	

Summary of Factors Applied in Monte Carlo Simulation

The factors applied to the vehicles simulated in the Monte Carlo analysis are all listed in Table IV-12.

Table IV-12

Factors Used in the Monte Carlo Simulation

Mfg.	VIN-Monte Carlo	Letter Code	Factors HC	CO	NOx	Remarks
Peugeot	2867516	A	1.20	1.16	0.84	EGR Setting #6
2.3L-TC		B	1.53	1.72	0.91	" " #2
		C	1.73	2.15	0.90	" " #3
		D	1.22	1.11	0.83	2° Timing Change (Diff. Vehs.)
		E	1.08	1.11	0.95	" " " (Same Vehs.)
		F	0.75	0.69	0.91	French fuel vs. U.S. fuel
	909	A	1.20	1.16	0.84	EGR Setting #6
		B	1.53	1.72	0.91	" " #2
		C	1.73	2.15	0.90	" " #3
		D	1.22	1.11	0.83	2° Timing Change (Diff. Vehs.)
		E	1.08	1.11	0.95	" " " (Same Vehs.)
		F	0.75	0.69	0.91	French fuel vs. U.S. fuel
		Z	1.00	1.00	1.00	w/o particulate tunnel
	041	A	0.51	0.97	1.25	CR Change
		B	0.90	1.08	0.98	30% EGR vs 25% EGR
		C	0.95	1.19	0.92	" " " " " (Diff. Eng.)
		D	0.75	0.69	0.91	French fuel vs. U.S. fuel
Volkswagen						
Rabbit	449-522	A	0.88	1.01	0.81	Comb Chamber Change
1.6L-NA		B	0.50	0.11	0.62	Catalyzed Trap Oxid.
	449-845	A	0.88	1.01	0.81	Comb Chamber Change
		B	0.50	0.11	0.62	Catalyzed Trap Oxid.
Rabbit	449-697	A	0.88	1.01	0.81	Comb Chamber Change
1.6L-TC		B	0.50	0.11	0.62	Catalyzed Trap Oxid.
	463-022	A	0.88	1.01	0.81	Comb Chamber Change
		B	0.50	0.11	0.62	Catalyzed Trap Oxid.
Dasher	476-108	A	0.88	1.01	0.81	Comb Chamber Change
1.6L-NA		B	0.50	0.11	0.62	Catalyzed Trap Oxid.
Dasher	455-102	A	0.88	1.01	0.81	Comb Chamber Change
1.6L-TC		B	0.50	0.11	0.62	Catalyzed Trap Oxid.
Audi	148-809	A	0.50	0.11	0.62	Catalyst Trap Oxid.
2.0L-NA		B	0.91	1.02	1.07	Trap Oxidizer
		C	1.17	1.45	0.64	No EGR — EGR
	847-525	A	0.50	0.11	0.62	Catalyst Trap Oxid.
		B	0.91	1.02	1.07	Trap Oxidizer
Audi	503-610	A	0.50	0.11	0.62	Catalyst Trap Oxid.
2.0L-TC		B	0.91	1.02	1.07	Trap Oxidizer
		C	1.76	4.49	0.50	No EGR — EGR

V. Discussion of Individual Manufacturer's Technical Capability

Once more, as in the previous analysis, this section discusses all the vehicles which, (1) were submitted by both of the applicants, and (2) were also acceptable for input into the Monte Carlo simulation. Additionally, acceptability for input means, (1) that the vehicle is a durability vehicle which has accumulated a minimum of 20,000 miles with the same major emission control components, and (2) that a minimum of four valid 1975 FTP tests have been conducted on the vehicle.

A discussion of the pass/fail determinations noted in Section II are also presented in this section. To pass the 1981 emission standards of 0.41 HC, 3.4 CO, 1.0 NO_x, the probabilities of passing each individual pollutant must be greater than or equal to 80%. If the probability of passing HC, for example, is less than or equal to 79%, the vehicle fails—even if the probabilities for CO and NO_x greatly exceed the 80% cutpoint.

Pass/fail analysis is provided only for emission standards for 0.41 HC, 3.4 CO, and 1.5 NO_x. The complete data needed for a similar analysis in emission standards of 0.41 HC, 3.4 CO, and 1.0 NO_x are presented in the Monte Carlo outputs. An analysis of a NO_x standard between 1.0 gpm and 1.5 gpm are included in the discussion of the vehicles entered into the Monte Carlo simulation where appropriate.

Peugeot

The durability vehicles contained in the Peugeot NO_x waiver applications [4 at 23.1–7/8, 23.1–9/10] which met the minimum criteria for entry into the Monte Carlo simulation are shown in Table V–1. It will be noted that a model year 1981 Certification durability vehicle has also been simulated in the Monte Carlo analysis. The reasons for the use of this vehicle in the simulation were; 1) sufficient time has passed since the first waiver application that model year 1981 certification durability vehicles, equipped with technologies targeted to achieve 1.0 gram per mile NO_x levels, are now actively being tested, and 2) the results of the certification vehicle analysis were used only for comparison with the results obtained from the technical analysis conducted for the noncertification vehicles.

Table V-1

Vehicles in Peugeot Motors Waiver Application
Meeting the Minimum Criteria for Entry into Monte Carlo

Engine Family	VIN	Control System	Entered into M.C.	If not-Why not
2.3L-TC (XD2S)	286516	Electropneumatic EGR	Yes	
	041	Hydraulic EGR	Yes	
	909*	Electropneumatic EGR	Yes	
XD3S		- No data supplied -		

*Official Model Year 1981 Certification vehicle.

Pass/Fail Analysis for 2.3L–TC Engines

Both non-certification prototype vehicles which were powered by the 2.3L–TC engine, *failed* the Monte Carlo analysis at 1.0 gram per mile NO_x levels with and without factors. Refer to Table II–1 for the probabilities of passing at 1.0 gram per mile NO_x levels.

A discussion of the vehicles follow. Vehicle 2867516, equipped with a turbocharger and an electropneumatic EGR system, was unable to achieve the 1.0 gram per mile NO_x levels either without factors or when simulated with the factors discussed previously. Vehicle VIN 041, equipped with a turbocharger and hydraulic EGR system (a post-1982 system) also failed with and without factors.

The Monte Carlo analyses at interim NO_x levels were reviewed, and they revealed that vehicle VIN 2867516 could certify to a 1.2 gram per mile NO_x level *without* application of factors. However, supplemental durability data submitted by Peugeot has caused the Monte Carlo analysis now to project that this vehicle will *fail* the HC standard of 0.41 grams per mile [8 at 22.3–8]. Previously, the original data submitted by Peugeot displayed a probability of 87% passing at 0.41 HC for this vehicle. These data are shown in Table V–2.

Table V–2.—*Monte Carlo Simulation Probability of Passing Interim NO_x Levels for Vehicle VIN 2867516—Without Factors*

	Probabilities (percent)		
NO_x level	HC	CO	NO_x
1.0	78	100	28
1.1	78	100	75
1.2	78	100	92
1.3	78	100	97
1.4	78	100	100
1.5	78	100	100

As a check on the prototype vehicle, the Monte Carlo simulation of the 1981 model year Certification vehicle, VIN 909, indicated that vehicle could certify to 1.1 grams per mile NO_x with an 87% probability of achieving the 0.41 HC standard at all NO_x levels. This simulation is shown in Table V–3.

Table V–3.—*Monte Carlo Simulation Probability of Passing Interim NO_x Levels for Vehicle VIN 909—Without Factors*

	Probabilities (percent)		
NO_x level	HC	CO	NO_x
1.0	87	100	63
1.1	87	100	84
1.2	87	100	99
1.3	87	100	98
1.4	87	100	100
1.5	87	100	100

In the post-hearing data submission by Peugeot, it was revealed that vehicle VIN 909 had been durability emission tested both under the 1981 test procedures and with the 1982 test procedures which call for the use of the particulate tunnel [8 at 2–23—6–2]. The above data were generated with the particulate tunnel in operation. The EPA technical staff analyzed the data without the tunnel and the results are to be found in Table V–4. The vehicle data used for these simulations are found in Table V–5.

Table V–4—*Monte Carlo Simulation Probability of Passing Interim NO_x Levels for Vehicle VIN 909—Without Factors—Without Particulate Tunnel*

	Probabilities (percent)		
NO_x level	HC	CO	NO_x
1.0	89	100	15
1.1	89	100	65
1.2	89	100	91
1.3	89	100	98
1.4	89	100	100
1.5	89	100	100

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Table V-5

Effects of a Particulate Tunnel on Gaseous Emission from a XD2S Powered Peugeot Vehicle

Vehicle VIN 909, 505 Sedan, 3500 #IW, A3, Electropneumatic EGR, MY81 Calibrations, Official EPA Durability Vehicle

Mileage		HC		CO		NOx		Particulate		MPG	
/Part. unnel	WO/Part. Tunnel	W/Part. Tunnel	WO/Part. Tunnel	W/Part. Tunnel	WO/Part. Tunnel	W/Part. Tunnel	WO/Part. Tunnel	W/Part. Tunnel	WO/Part. Tunnel	W/Part. Tunnel	WO/Part. Tunnel
4982	4962	0.245	0.242	0.99	1.56	1.02	0.94	0.439	-	24.50	24.87
0002	9991	0.267	0.240	1.10	1.10	0.99	0.97	0.407	-	24.51	24.35
5017	14998	0.291	0.242	1.31	1.62	0.95	1.04	0.510	-	24.91	24.60
5035	15056	0.324	0.194	1.31	1.34	0.97	0.96	0.449	-	24.80	24.80
0021	20041	0.157	0.205	1.03	1.08	1.07	1.03	0.446	-	24.20	24.03
5041	25064	0.148	0.185	0.96	1.07	1.07	1.03	0.428	-	23.93	24.63
9935	29953	0.151	0.142	0.85	0.92	1.08	1.06	0.334	-	24.16	24.69
9973	29991	0.244	0.202	0.99	0.95	1.01	1.08	0.441	-	24.31	24.02
5085	25104	0.140	0.192	0.97	1.04	0.96	0.97	0.397	-	24.94	24.82
9954	39973	0.146	0.201	0.86	1.07	0.94	1.03	0.311	-	24.54	25.22
4000		0.28	0.22	1.19	1.46	1.01	0.96				
50000		0.09	0.16	0.80	0.76	0.99	1.07				
DF		0.32	0.71	0.67	0.52	0.98	1.11				

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What these simulations in the preceding tables project is that the 2.3L–TC engine family could certify to 1.2 grams per mile NO_x without additional technological improvements.

A check was made on particulate levels for both of these engines, and Peugeot reports both of the vehicles are exhibiting particulate levels below 0.6 grams per mile. The particulate levels range from .28 to .44 grams per mile for vehicle 2867516 and .33 to .51 grams per mile for vehicle 909.

Pass/Fail Analysis XD3S Engine Family

Peugeot provided no durability data for this engine family. It is considered a no data family.

Analysis of Volkswagen Engine Families

All of the durability vehicles submitted by Volkswagen were acceptable for Monte Carlo simulation and were so simulated. Table IV–12 identifies these vehicles.

It should be further noted that Volkswagen has asked for different interim NO_x levels for an engine family (1.6L–NA and TC), depending on the vehicle model. Table V–6 outlines these requested NO_x levels [5 at 2]. While this is a deviation from present EPA certification practices i.e., the largest sales, inertia weight model, is usually selected to simulate the emission levels from an engine family marketed in different models (body styles), this split does not pose a problem for Monte Carlo simulation. Consequently, the pass/fail analysis will be discussed as per the Volkswagen waiver request.

Table V–6

Volkswagen Interim NOx Levels

Disp. (Liter)	Method of aspiration	Models	1980 Eng. Fam. Designation	Volkswagen Proposed NOx Std. (g/mile) 1981	1982
1.6	N.A.	Rabbit Jetta	D	1.3	1.3
1.6	N.A.	Dasher Audi 4000	D	1.4	-
2.0	N.A.	Audi 5000	D–A	1.5	1.5
1.6	T.C.	Rabbit Jetta	(new)	-	1.3
1.6	T.C.	Dasher Audi 4000	(new)	-	1.4
2.0	T.C.	Audi 5000	(new)	-	1.5

[5 at 2]

Pass/Fail Analysis 1.6L–NA Rabbit Engine Family

Two vehicles were submitted for Monte Carlo simulation of this engine family. Both of these vehicles failed the Monte Carlo analysis at the 1.0 gram per mile NO_x level. Both of the vehilces passed the 1.0 gram per mile NO_x level with factors applied. The factors applied are the long lead time factors of combustion chamber change and catalyzed trap oxidizer. No data was submitted for this engine family to allow the EPA technical staff to analyze the effects of factors for EGR or increased EGR on particulate emissions. Therefore, the EPA technical staff considers this engine family to have *failed* at 1.0 gram per mile NO_x levels for model years 1981 and 1982 both with and without factors. There are however, interim NO_x levels that these vehicles pass. The discussion of these vehicles follows.

Vehicle VIN 449–522 fails the Monte Carlo analysis at all NO_x levels above 1.0 gram per mile because of a *hydrocarbon* pass rate of only 65 percent.

As mentioned previously, the use of a catalyzed trap oxidizer would improve the hydrocarbon pass rate while allowing a simultaneous NO_x pass probability. This technological improvement was simulated for this vehicle and resulted in a pass at 1.0 gram per mile NO_x. However, the trap oxidizer technology will not be available before 1983. Therefore, the EPA technical staff concludes that this vehicle could pass at an interim NO_x level 1.1 gram per mile *provided* Volkswagen could control the hydrocarbon emissions. When questioned about control of hydrocarbon emissions, Volkswagen stated they would indeed achieve the statutory hydrocarbon levels if they were granted the interim NO_x levels they requested [6 at 83]. The EPA technical staff does not contest Volkswagen's affirmation that they can achieve the statutory HC and CO standards. The EPA technical staff concludes that the statutory HC and CO standards will be met at the interim NO_x level of 1.3 grams per mile based on the conservative Monte Carlo analysis and Volkswagen apparent willingness to proceed with certification.

The possibility that Volkswagen can meet the statutory HC and CO standard at 1.3 gram per mile NO_x is at least corroborated by the second vehicle, VIN 449–845 which gives the following probabilities for HC, CO and NO_x at the 1.3 gram per mile NO_x level, 79, 100, 90. These levels are achieved without application of factors. The *hydrocarbon* pass rate is below the necessary 80% probability, as projected by the Monte Carlo analysis, but because of the conservative nature of the analysis, Volkswagen's contention that it will achieve all statutory emissions levels if granted a NO_x waiver of 1.3 grams per mile is not contradicted.

Therefore, on the basis of Volkswagen's request, an interim NO_x standard of 1.3 grams per mile for the 1.6L–NA Rabbit engine family for model years 1981 and 1982 is appropriate. This timeframe will allow the applicant to benefit from the California experience [1 at 5485] and to complete the development of the catalyzed trap oxidizer.

Pass/Fail Analysis of the 2.6L–TC Rabbit Engine Family

Volkswagen has requested the same interim NO_x standard, 1.3 grams per mile, for this engine as for the 1.6L–NA version. The only difference is they want that standard for model year 1982 only. As shown in Table II–2, the simulated vehicles failed at the 1.0 gram per mile NO_x levels without factors, but passes at 1.0 gram per mile NO_x levels with the catalyzed trap oxidizer factor. The results of the 1.6L–TC Rabbit engine family Monte Carlo simulation are analogous to the 1.6L–NA Rabbit engine family results. The individual vehicle results are discussed.

Vehicle VIN 449–697 was found to have the following HC, CO and NO_x probabilities of passing at 1.3 gram per mile NO_x levels: 45, 100, 99. Again, there appears to be a problem with *hydrocarbons* at this NO_x level.

The second vehicle, VIN 463–022, has NO_x passing probabilities of 47, 100, 81 at 1.3 grams per mile. Here, also, a situation similar to the 1.6L–NA Rabbit engine family exists. Again, because of the conservative nature of the Monte Carlo analysis, the manufacturer's contention that they will achieve the statutory emission levels for HC and CO at the 1.3 gram per mile NO_x level, is not contradicted, and an interim standard of 1.3 grams per mile is appropriate in 1982.

Pass/Fail Analysis 1.6L–NA Dasher Engine Family

Volkswagen has requested an interim 1.4 gram per mile NO_x level for this engine family for one model year only (1981). The one vehicle, VIN 476–108, simulated in the Monte Carlo analysis indicates that this engine family will fail at the 1.0 gram per mile NO_x level with or without factors. The Monte Carlo simulation indicates that this vehicle will achieve an interim NO_x level of 1.4 grams per mile NO_x with the factor for change in combustion chamber ratio, and 1.1 gram per mile NO_x with the catalyzed trap oxidizer factor. As both of these factors represent long lead items, the conservative Monte Carlo analysis would *not* predict that the 1.4 gram per mile interim NO_x levels proposed by Volkswagen could be achieved by 2981. However, the EPA technical staff concludes nevertheless that the 1.4 gram per mile interim NO_x level would be appropriate for this engine family.

Pass/Fail Analysis 1.6L–TC Dasher Engine Family

The situation analagous to the Rabbit engine family also exists for this engine family. The Monte Carlo simulation predicts that his engine family would fail at 1.0 gram per mile NO_x without factors and pass 1.0 gram per mile NO_x with the catalyzed trap factor. The Monte Carlo simulation also indicates the probability of passing 1.4 gram per mile NO_x levels are 45, 100, 100 without factors. Again, *hydrocarbons* are the problem and consequently, the EPA technical staff recommends an interim 1.4 gram per NO_x standard for this engine family.

Pass/Fail Analysis for 2.0L–NA Audi Engine Family

As the data in Table II–2 shows, the two vehicles simulated without factors fail at the 1.0 gram per mile NO_x standard. One vehicle passed at 1.0 gram per mile NO_x with the factor for the catalyzed trap oxidizer. One vehicle, 148–809, achieves, without factors, the 1.5 gram per mile NO_x level but fails *hydrocarbons*. The other vehicle, 847–525, achieves without factors, the 1.4 gram per mile NO_x level but also is predicted to fail *hydrocarbon* levels.

Therefore, the EPA technical staff concludes that of all the vehicles simulated, these two require the use of a catalyzed trap oxidizer and EGR to achieve NO_x levels below 1.5 gram per mile NO_x. As trap oxidizer technology is not available until post model year 1982, the technical staff concludes that 1.5 gram per mile NO_x is the only achievable NO_x level before 1983 for this engine family. The simulation of the technological factors of No EGR to EGR and increased EGR on EGR equipped vehicles also placed upward pressure on particulates for this engine family.

Pass/Fail Analysis for 2.0L–TC Audi Engine Family

Table II–2 indicates that the vehicle simulated in the Monte Carlo analysis failed both with and without factors at the 1.0 gram per mile NO_x standard. With the factor for EGR applied, a reduction in NO_x emissions was noted but with a penalty for particulate emissions. The technical staff concludes that this engine family will not be able to achieve NO_x emissions levels below 1.5 gram per mile NO_x in model year 1982.

The EPA technical staff concludes that 1.5 gram per mile will be the lowest NO_x levels achievable in 1982 for this engine family.

VI. Other Technological Considerations

Fuel Economy

Fuel economy is a criterion which the Administrator must consider in his decision to grant or deny the applicants, NO_x waiver request. The two issues of importance are individual engine family fuel economy results or projections and fleet sales weighted average fuel economy effects.

Individual Engine Family Fuel Economy Results

Only those engine families for which an emission control capability analysis was conducted are considered in this section. Data displayed in Section IV show that those engine families which were analyzed comply with the required fuel economy standards of 22 MPG and 24 MPG in 1981 and 1982 respectively. The data given in Section IV are Urban fuel economy values; and the "composite" fuel economy levels will be higher than the Urban fuel economy levels shown. Therefore, the engine families considered should have no difficulty achieving the fuel economy standards.

Fleet Sales Weighted Average Fuel Economy Effects

The applicants provided no new data upon which to make projections for the time period of interest, 1981–82. Therefore, the analysis prescribed in the first remains unchanged [1 at 5505].

Post-Waiver Period Issues

Two post-waiver period issues, long-term air quality benefits and fuel economy potential, were discussed in detail in the last NO_x waiver decision [1 at 5506]. The present applications provided no new data to modify the previously articulated conclusions.

Air Quality Summary

The two applicants provided no new information other than their previously supplied air quality analyses for the first NO_x waiver applications. Therefore, the conclusions reached in the first NO_x waiver decision remain unchanged [1 at 5507 thru 5511].

VII. References

1. Federal Register, Vol. 45, No. 16, Wednesday, January 23, 1980, Notices.

2. Application for Waiver of the 1981–1984 NO_x Emission Standards for light duty engines submitted to the Environmental Protection Agency by Volkswagen AG, May, 1979.

3. Volkswagen of America, Inc.—additional information for NO_x Waiver Hearings official records—dated July 13, 1979 from Mr. W. Groth (VW) to Mr. B. Jackson (MSED).

4. *Automobiles Peugeot,* Application for Waiver of the 1981–1984 NO_x Emission Standard, dated February 6, 1980.

5. Volkswagen Application for NO_x Waiver, dated February 20, 1980.

6. Transcript of Proceedings, United States Environmental Protection Agency, In the Matter of: Public Hearing on the Waiver of the 1981–1984 Model Year Light-Duty Diesel NO_x Emissions Standard, Washington, D.C., February 27, 1980, Acme Reporting Company.

7. Volkswagen of America Inc.—additional information for NO_x Waiver Hearings official records—dated March 4, 1980, from W. Groth (VWA) to EPA, Central Docket Section.

8. U.S. Technical Research Co., Automobiles Peugeot—additional information for NO_x Waiver Hearings official records—dated March 6, 1980—from R. H. Lucki (Peugeot) to C. Freed (EPA).

9. Volkswagen of America Inc.—additional information for NO_x Waiver Hearings official records—dated March, 1980—from W. Groth (VWA) to EPA, Central Docket Section.

[FR Doc. 80-15611 Filed 5-21-80; 8:45 am]

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federal register

Thursday
May 22, 1980

Part V

Pennsylvania Avenue Development Corporation

General Guidelines and Uniform Standards for Urban Planning and Design of Development Within the Pennsylvania Avenue Development Area

PENNSYLVANIA AVENUE DEVELOPMENT CORPORATION

36 CFR Part 920

General Guidelines and Uniform Standards for Urban Planning and Design of Development Within the Pennsylvania Avenue Development Area

AGENCY: Pennsylvania Avenue Development Corporation.

ACTION: Interim Rule; request for comment.

SUMMARY: The Pennsylvania Avenue Development Corporation (Corporation) is adopting this document as an interim rule governing implementation of urban planning and design features of the Pennsylvania Avenue Plan—1974, as amended. Subparts A and B describe the purpose and policy of the Corporation as well as the general framework against which development proposals will be evaluated by the Corporation. Subpart C contains those Standards that are applicable throughout the Corporation's development area. These Standards will be applicable in addition to the Controls and Standards for the coordinated planning area within which a particular proposed development is located. Subpart D is a Glossary of Terms which will apply to this Part 920 and each set of Controls and Standards comprising Subchapter B of 36 CFR Chapter IX.

Public comment is invited on the substance of this interim rule as well as the readability and clarity of presentation.

DATES: Effective Date: April 1, 1980. Comments must be received on or before June 15, 1980.

ADDRESS: Send comments to Mary M. Schneider, Attorney, Pennsylvania Avenue Development Corporation, 425 13th Street, N.W., Suite 1148, Washington, D.C. 20004.

FOR FURTHER INFORMATION CONTACT: Mary M. Schneider (202) 566–1078, or Yong-Duk Chyun, Architect, (202) 566–1218, Pennsylvania Avenue Development Corporation, 425 13th Street, N.W., Suite 1148, Washington, D.C., 20004.

SUPPLEMENTARY INFORMATION: The Pennsylvania Avenue Development Corporation (the Corporation) is a wholly owned government corporation of the United States with authority to develop and rejuvenate 21 blocks along Pennsylvania Avenue, N.W., Washington, D.C. The Corporation has prepared a development plan, The Pennsylvania Avenue Plan—1974, which has been adopted by Congress. In order to facilitate development in accordance with the Plan, the Corporation has prepared this interim rule to provide a general description of the urban planning and design concepts expressed in The Pennsylvania Avenue Plan—1974, as amended. In addition, this interim rule provides that requirements and definitions that will be applicable throughout the development area, thereby eliminating the need to restate these in each set of Controls and Standards.

To simplify access to those regulations of the Corporation having a direct impact on planning and design issues, Chapter IX of Title 36 of the Code of Federal Regulations is separated into two Subchapters. This Part 920 is the first part of Subchapter B that is exclusively devoted to those issues. Subchapter A contains general administrative regulations and those required by statutes other than the Corporation's enabling legislation.

This interim rule has been reviewed against the "Design and Construction Guidelines for New Development" approved by the Advisory Council on Historic Preservation (ACHP) and is consistent with the document. Therefore, this Interim Rule is in compliance with Stipulation 5 of the Memorandum of Agreement between the Corporation and ACHP.

STATEMENT OF SIGNIFICANCE: The Pennsylvania Avenue Development Corporation has determined that this document is not a significant rule and does not require a regulatory analysis under Executive Order 12044.

36 CFR Chapter IX is amended by adding a new Part 920 to read as follows:

PART 920—GENERAL GUIDELINES AND UNIFORM STANDARDS FOR URBAN PLANNING AND DESIGN OF DEVELOPMENT WITHIN THE PENNSYLVANIA AVENUE DEVELOPMENT AREA.

Subpart A—General.

Sec.

920.1 Policy.
920.2 Purpose and program administration.

Subpart B—Urban Planning and Design Concerns.

920.10 General.
920.11 Comprehensive urban planning and design.
920.12 Development density.
920.13 Urban design of Washington, D.C.
920.14 Historic preservation.
920.15 New development design.
920.16 Land use.
920.17 Pedestrian circulation systems.
920.18 Vehicular circulation and storage systems.

Subpart C—Standards Uniformly Applicable to the Development Area.

920.30 General.
920.31 High architectural quality.
920.32 Historic preservation.
920.33 Off-street parking.
920.34 Accommodations for the physically handicapped.
920.35 Fine arts.
920.36 Energy conservation.
920.37 Fire and life safety.
920.38 Building exterior illumination.

Subpart D—Glossary of Terms.

920.50 General.
920.51 Access.
920.52 Buildable area.
920.53 Building restriction line.
920.54 Build-to height.
920.55 Build-to line.
920.56 Controls and standards.
920.57 Coordinated planning area.
920.58 Curb-cut.
920.59 Development.
920.60 Development parcel.
920.61 Gross floor area.
920.62 Height of development.
920.63 The plan.
920.64 Rehabilitation.
920.65 Replication.
920.66 Restoration.
920.67 Sidewalk setback.
920.68 Storefront.
920.69 Structural bay.
920.70 Vault.
920.71 Weather protection.

Authority: Section 6(8) Pennsylvania Avenue Development Corporation Act of 1972 (40 U.S.C. 875(8)).

Subpart A—General

§ 920.1 Policy.

(a) Public Law 92–578, The Pennsylvania Avenue Development Corporation Act of 1972, October 27, 1972, (the "Act"), established the Pennsylvania Avenue Development Corporation (the "Corporation") with jurisdiction over the Pennsylvania Avenue Development Area ("Development Area"). The Development Area is generally described as an area in Washington, D.C., bounded by Pennsylvania Avenue, N.W., on the south, East Executive Drive on the west, 3rd Street, N.W., on the east, and E and F Streets, N.W., on the north.

(b) Prior to creation of the Corporation, the Development Area had deteriorated, adversely impacting upon the physical, economic, and social life of Washington, D.C. The Corporation was created as the vehicle to develop, maintain, and use the Development Area in a manner suitable to its ceremonial, physical, and historic relationship to the legislative and executive branches of the Federal

government, to the governmental buildings, monuments, memorials, and parks in and adjacent to that area, and to the downtown commercial core of Washington, D.C. The Corporation was directed to prepare a development plan for the Development Area and to submit that plan to the United States Congress. Congress accepted that plan and directed its implementation by the Corporation. The Corporation through a broad range of statutory powers has begun this implementation process.

(c) The Pennsylvania Avenue Plan—1974, as amended (*the "Plan"*) is a blueprint for social, economic, and architectural rejuvenation of the Development Area. Its goal is to make the Development Area once again a relevant and contributing element of Washington, D.C. With the implementation of *the Plan*, the Development Area will become a showpiece of the Nation's Capital, proudly displaying the successful joint efforts of the Corporation, other Federal and District of Columbia government agencies, and private entrepreneurs.

(d) *The Plan*, containing the goals and objectives for *development*, is supplemented by various adopted policies and programs of the Corporation. *The Plan*, in conjunction with these policies and programs, represent the basis upon which the *development* and rejuvenation of the Development Area will proceed, whether publicly or privately inspired and accomplished. These policies and programs amplify, elaborate, and refine the planning and urban design concepts expressed in *the Plan*. Among these policies and programs are:

(1) the Public Improvements Program of the Corporation which is a comprehensive plan for the design and construction of public amenities by the Corporation in major public urban spaces and selected thoroughfares within the Development Area. This program outlines the details of street and sidewalk improvements, special landscaping, public space reconfiguration and pedestrian amenities;

(2) the Historic Preservation Plan of the Corporation which constitutes the Corporation's program for preservation, *rehabilitation*, and *restoration* of historically and architecturally significant properties located within the Development Area. The program establishes a methodology to guide the Corporation in both short and long term decision making that affects historic and significant architectural resources located within the Development Area.

§ 920.2 Purpose and Program Administration.

(a) Implementation of *the Plan* occurs through two component actions: public improvements construction and square development. Public improvements construction consists of implementation by the Corporation of the Public Improvements Program. Square development consists of design and construction of *development* projects primarily on city blocks, known as squares, within the Development Area. These development projects are generally pursued by private entrepreneurs with varying degrees of participation and involvement by the Corporation, through such means as land assemblage and leasing.

(b) This Subchapter B pertains solely to square development and specifies the regulatory mechanism for implementation of *the Plan* required by Chapter Six of *the Plan*.

(c) This Subchapter B provides interested parties with the urban planning and design information sufficient to understand and participate in the process of square development within the Development Area.

(1) This Part 920, General Guidelines and Uniform Standards for Urban Planning and Design of Development Within the Pennsylvania Avenue Development Area, identifies the general planning and design goals and objectives which govern the implementation of *the Plan*, provides a glossary of defined terms applicable to Subchapter B, and specifies standards which are uniformly applicable to *development* within the Development Area.

(2) Each subsequent part of Subchapter B, identified as *"Controls and Standards,"* is applicable to one *coordinated planning area* within the Development Area, a *coordinated planning area* being a square, a portion of a square, or a combination of squares. Each part specifies detailed urban planning and design requirements and recommendations which are applicable to the particular *coordinated planning area*. These requirements and recommendations set forth intentions and refinements of *the Plan* in light of the identified Planning and Design Concerns specified in Subpart B of this Part.

(d) Pursuant to Section 7(b) of the Act, each proposal for *development* within the Development Area must be submitted to the Corporation to determine its consistency with *the Plan*. The Corporation's adopted development policy, entitled "Development Policy of the PADC", sets forth the process for this determination. In determining whether a *development* proposal is consistent with *the Plan*, in regard to urban planning and design, the Corporation will apply the General Guidelines contained in this Part and the *Controls and Standards* for the *coordinated planning area* within which the proposed *development* is to be located.

(e) Pursuant to the Act, Federal and District of Columbia agencies and departments may exercise such existing authority and lawful powers over urban planning and design features of *development* as are consistent with *the Plan*. No department or agency may release, modify, or depart from any feature of *the Plan* without the prior approval of the Corporation.

Subpart B—Urban Planning and Design Concerns.

§ 920.10 General.

To facilitate review of each *development* proposal in light of the identified urban planning and design goals of *the Plan*, the following urban planning and design concerns will be the basis upon which the evaluation of such proposals will be made.

(a) Comprehensive planning and design;

(b) Development density;

(c) Urban design of Washington, D.C.;

(d) Historic preservation;

(e) New development design;

(f) Land use;

(g) Pedestrian circulation systems; and

(h) Vehicular circulation and storage systems.

§ 920.11 Comprehensive urban planning and design.

(a) All new *developments* are conceived as integral parts of their surroundings, which include the remainder of the Development Area, the Mall, the Federal Triangle, and the District's downtown, and should support Pennsylvania Avenue's function as a bridge between the monumental Federal core to the south and the District's downtown to the north.

(b) The design of any *development* shall take into account *the Plan's* proposed future treatment of buildings, squares, and pedestrian spaces in the immediate surrounding area.

(c) The design of any *development* shall be coordinated with the massing, architectural design, servicing, pedestrian amenities, and uses of nearby *development* as perceived under *the Plan*.

(d) Any *development* adjacent to F Street, N.W. shall be accomplished in a manner that will strengthen F Street as a major retail core of Washington, D.C.

(e) Any *development* along Pennsylvania Avenue shall be designed so as to support the transformation of the Avenue into an attractive and pleasant place for residents and visitors alike, offering pleasant places to stroll, rest, sit and talk, eat, and shop.

(f) All *developments* within a *coordinated planning area* shall, to the maximum extent possible, be integrated with regard to the off-street loading and servicing, pedestrian features.

§ 920.12 Development density.

(a) Land would be developed to the fullest extent appropriate in terms of uses, economics, and design so that new economic life can be brought in and the city's tax base can be increased.

(b) *The Plan* is structured to create high density commercial *developments* west of the FBI and lower density residential-commercial *developments* east of the FBI.

(c) New *development* shall be designed to achieve maximum development density within the building envelope delineated by specific height restrictions, but shall also establish a compatible and appropriate scale for historic preservation, residential and other uses, and other urban design elements.

(d) Development density is limited by the Zoning Regulations of the District of Columbia and may be further restricted by the Corporation in specific *coordinated planning areas.*

(e) The density of new *development* should bring new economic life—jobs, shopping, and business opportunities—to Pennsylvania Avenue, while also reinforcing existing activity both on the Avenue and in the adjacent downtown area.

§ 920.13 Urban design of Washington, D.C.

(a) The legacy of the L'Enfant Plan, which essentially consists of channeled vistas focusing on man-made objects or natural elements and open spaces created by buildings and trees, shall be reinforced and enriched.

(b) Pennsylvania Avenue's unique role as the physical and symbolic link between the White House and the U.S. Capitol should be reinforced by new *development* along it.

(c) In terms of relating to the L'Enfant Plan, the primary function of new *development* in the Development Area is to define open spaces and plazas, or to reinforce vistas along major streets and thoroughfares.

§ 920.14 Historic preservation.

(a) The Development Area is located almost entirely within the Pennsylvania Avenue National Historic Site, which was established to preserve the exceptional values of Pennsylvania Avenue and its environs in commemorating or illustrating the history of the United States. The Pennsylvania Avenue Area achieves national historic significance because of both its ceremonial role in the life of the nation and as the center of social and economic activity for the residents of Washington for more than a century.

(b) The sense of historic continuity and evolution that exists in the Historic Site would be maintained by ensuring that new buildings are designed within the evolutionary context of the Historic Site, responding sympathetically to the legacy of the L'Enfant Plan and buildings to be preserved.

(c) The Historic Preservation Plan of the Corporation sets forth the adopted policy of the Corporation to accomplish this objective and *development* within the Development Area must be consistent with this policy.

(d) New construction adjacent to historic structures will be required to take into account the qualities of the adjacent structures (with regard to height, scale, proportion, rhythm, texture, materials, architectural detail, and the amount of variety among the structures with respect to these qualities as well as style and date of erection) to ensure that these structures maintain their historic or architectural integrity, but will not necessarily be required to conform to them.

(e) Wholly new construction and new construction in conjunction with preservation will, where appropriate, take into account the historic buildings to remain, aiming for the highest quality of contemporary design, consistent with the goals and objectives of the Historic Preservation Plan.

§ 920.15 New development design.

(a) All new *developments* shall represent the best contemporary architectural and urban planning concepts.

(b) Where new *development* includes or relates to historic or architecturally meritorious buildings which are to be preserved, the design of the new *development* should be aimed at retaining as much of the significant fabric of the Development Area as is possible consistent with the goals of *the Plan.*

§ 920.16 Land use.

(a) *Development* within the Development Area shall provide, and stimulate in neighboring areas, more lively and varied shopping, cultural, entertainment, and residential opportunities, as well as high quality office uses.

(b) That portion of the Development Area west of the FBI Building is designated for high density commercial *development,* primarily office and hotel uses with attendant retail and service uses. That portion of the Development Area east of the FBI Building is designated for lower density *development* with residential uses predominating, supported by service and retail uses. Office, institutional and entertainment uses while permitted are of secondary importance in this portion of the Development Area.

(c) The kinds of uses and their location shall be directly related to creating a lively atmosphere within the Development Area, and to promoting an active street life throughout the day, evening, and weekend.

(d) While recognized as important to the commercial life of any inner city, uses that do not generate lively activities, are discouraged from locating along those street fronts within the Development Area which are considered major pedestrian thoroughfares.

§ 920.17 Pedestrian circulation system.

(a) An efficient, pleasant, and stimulating pedestrian circulation system shall be developed to link the components of the Development Area with the Mall and the city's downtown.

(b) Pedestrian circulation systems shall be designed to provide pedestrian comfort and convenience, to create more linear footage of shopfront, to encourage recognition of the location of various METRO stops or other mass transit locations, and to link various historic and architecturally significant buildings, sites, and monuments which are scattered throughout and beyond the Historic Site.

(c) Curb cuts across the north sidewalk areas of Pennsylvania Avenue shall be prohibited in order to reinforce its importance as the major pedestrian thoroughfare of the Development Area.

§ 920.18 Vehicular circulation and storage systems.

(a) Improvement of the existing vehiclar storage and circulation system is necessary in order to create the balanced transportation system called for in *the Plan,* which recognizes the need to maintain air quality, to encourage the use of mass transit, and to provide sufficient off-street parking and loading to make development economically viable.

(b) The general policies of the Corporation are as follows:

(1) by requiring adequate off-street loading facilities and integrated off-street parking facilities on a block-by-block basis, the conflict between vehicles and the need for storage space will be reduced;

(2) by limiting the number of parking spaces per *development*, the quantity of vehicles in the area will not substantially increase;

(3) by linking new *development* to transit stops through the system of pedestrian ways, more people will depend on public transportation rather than on private vehicles.

Subpart C—Standards Uniformly Applicable to the Development Area.

§ 920.30 General

In addition to the specific requirements and recommendations contained in the individual *Controls and Standards*, the Standards set forth in this Subpart C are uniformly applicable to any *development* within the Development Area.

§ 920.31 High Architectural Quality.

Development must maintain a uniformly high standard of architecture, representative of the best contemporary design and planning concepts. Great care and sensitivity must be shown in the architectural treatment of new buildings, particularly in terms of massing, facade design (including materials, composition, and detailing), the ground floor and sidewalk pedestrian environment, interior public spaces, and provisions for pedestrian and vehicular access. Special design considerations for each *coordinated planning area* are referenced in the *Controls and Standards*.

§ 920.32 Historic Preservation.

Rehabilitation of buildings within the Development Area, which, according to *the Plan* and the Historic Preservation Plan of the Corporation, are specified for preservation, shall be accomplished in accordance with the Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings," issued by the Technical Preservation Services Division, Heritage Conservation and Recreation Service, U.S. Department of the Interior, and consultation with the State Historic Preservation Officer for the District of Columbia.

§ 920.33 Off-Street Parking.

(a) Off-street parking as a principal use is prohibited. Off-street parking as an accessory use in a *development* is permitted.

(b) All parking spaces shall be located below grade level.

(c) The maximum number of parking spaces for a *development* may not exceed the aggregate of the number of spaces allowed for each use within the *development*. The schedule of limitations for parking spaces is as follows:

(1) Hotel: One parking space for each four sleeping rooms or suites;

(2) Places of public assemblage other than hotels: (i.e., arena, armory, theater, auditorium, community center, convention center, concert hall, etc.) one parking space for each ten seats of occupancy capacity for the first 10,000 seats plus one for each 20 seats above 10,000: Provided, That where seats are not fixed, each seven square feet of *gross floor area* usable for seating shall be considered one seat;

(3) Retail, trade, and service establishments: One parking space for each 750 square feet of *gross floor area;*

(4) Residential: One parking space for each 1.2 units;

(5) Offices: One parking space for each 1,800 square feet of *gross floor area.*

§ 920.34 Accommodations for the Physically Handicapped.

(a) Every *development* shall incorporate features which will make the *development* accessible by the physically handicapped. The standards in the "American Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by the Physically Handicapped," published by the American National Standards Institute, Inc. (ANSI A117.1–1961 (1971)), are recommended.

(b) Where a *development* includes a historic structure, the Advisory Council on Historic Preservation's policy, "Supplementary Guidance—Handicapped Access to Historic Properties," (45 Federal Register 9757), should be observed.

§ 920.35 Fine Arts.

(a) Fine arts, including sculpture, paintings, decorative windows, bas-reliefs, ornamental fountains, murals, tapestries, and the like, should be included in each *development*. Commissions for original works of art which are appropriate for the *development* are encouraged.

(b) The Corporation is available to assist a developer in selecting and evaluating artists and works of art.

(c) A reasonable expenditure for fine arts is deemed to be one half of one percent of the total construction cost of the *development*.

§ 920.36 Energy Conservation.

All new *development* should be designed to be economical in energy consumption. The Energy Guidelines of the Corporation, and the District of Columbia Energy Conservation Code Act of 1979 and its implementing regulations set forth the appropriate standards to be observed.

§ 920.37 Fire and Life Safety.

As a complementary action to satisfying required District of Columbia codes related to fire safety, it is highly recommended that all new *development* be guided by standards of the NFPA Codes for fire and life safety and that all buildings be equipped with an approved sprinkler system.

§ 920.38 Building Exterior Illumination.

Exterior illumination of a building shall be in conformance with the standards specified in the Pennsylvania Avenue Lighting Plan of the Corporation.

Subpart D—Glossary of Terms.

§ 920.50 General.

The definitions appearing in this Glossary of Terms are applicable to Subchapter B in its entirety. In addition, definitions appearing in the Section 1202 of the Zoning Regulations of the District of Columbia are also applicable to Subchapter B. Where a conflict between this subpart and Section 1202 of the Zoning Regulations arises in terminology or interpretation, this subpart shall be controlling.

§ 920.51 Access.

Access, when used in reference to parking or loading, means both ingress and egress.

§ 920.52 Buildable area.

Buildable area means that portion, as specified by the Corporation, of the established *development parcel*, which is utilized to compute the maximum *gross floor area* of the *development*. Generally, this area is bounded by any applicable *building restriction lines*, right-of-way lines and *development parcel* lines relevant to the specific parcel for which the maximum *gross floor area* is being computed.

§ 920.53 Building restriction line.

Building restriction line means a line beyond which an exterior wall of any building of a *development* may not be constructed or project, except that architectural articulation, minor architectural embellishments, and subsurface projections are permitted.

§ 920.54 Build-to height.

Build-to height means a minimum height to which the exterior wall of a building in a *development* must rise. Minor deviations from the *build-to height* for architectural embellishments and articulations of the cornice and roof level are permitted, unless otherwise prohibited by these *Controls and Standards* or the District of Columbia's codes and regulations.

§ 920.55 Build-to line.

Build-to line means a line with which the exterior wall of a building in a *development* is required to coincide. Minor deviations from the *build-to line* for such architectural features as *weather protection*, recesses, niches, ornamental projections, entrance bays, or other articulations of the facade are permitted, unless otherwise prohibited by the applicable *Controls and Standards* or the District of Columbia's codes and regulations.

§ 920.56 Controls and Standards.

Controls and Standards means the formal regulations adopted by the Corporation for each *coordinated planning area* that set forth the specific requirements and recommendations pertaining to urban planning and design and applicable to all *development* within the appropriate *coordinated planning area*. *Development* proposals submitted to the Corporation for a determination of consistency with *the Plan*, and therefore final approval by the Corporation, are reviewed against the applicable *Controls and Standards*, as well as the General Guidelines contained in Part 920.

§ 920.57 Coordinated planning area.

Coordinated planning area means a Square, portion of a Square, or group of Squares that is composed of one or more *development parcels* and is treated as a unit under these *Controls and Standards*, in order to achieve comprehensive planning and design.

§ 920.58 Curb-cut.

Curb-cut means that portion of the curb and sidewalk over which vehicular access is allowed. Unless otherwise specified, a single *curb-cut* shall accommodate no more than two *access* lanes.

§ 920.59 Development.

Development means a structure, including a building, planned unit development, or project resulting from the process of planning, land acquisition, demolition, construction, or *rehabilitation* consistent with the objectives and goals of *the Plan*.

§ 920.60 Development parcel.

Development parcel means an area of land established by the Corporation to be a minimum site on which a *development* may occur under *the Plan* and any applicable Planning and Design Objectives or *Controls and Standards* adopted by the Corporation.

§ 920.61 Gross floor area.

Gross floor area is defined in section 1202, Zoning Regulations of the District of Columbia and generally means the sum of the gross horizontal areas of the several floors of all buildings of a *development* occurring on a lot measured from the exterior faces of exterior walls and from the center line of walls separating two buildings.

§ 920.62 Height of development.

Height of development means the vertical distance measured from a specified point at the curb level to the highest point of the roof or parapet of the *development*, whichever is higher, exclusive of all *roof structures* except as otherwise specified.

§ 920.63 The Plan.

The Plan means The Pennsylvania Avenue Plan—1974, as amended, and prepared pursuant to Public Law 92–578, 86 Stat. 1266 (40 USC 871), and the document which sets forth the *development* concepts upon which these *Controls and Standards* are based.

§ 920.64 Rehabilitation.

Rehabilitation means the process of adapting improvements on real property to make possible an efficient contemporary use achieved by means of a combination of construction, repair or alteration, as well as *restoration* and *replication* of those portions and features of the property that are significant to its historic, architectural, and cultural values, consistent with the goals and objectives of *the Plan*.

§920.65 Replication.

Replication means the process of using modern methods and materials to reproduce the exact form and details of a vanished building, structure, object, or portion thereof, as it appeared at a particular period of time, and consistent with the objectives and goals of *the Plan*.

§ 920.66 Restoration.

Restoration means the process of accurately recovering the form and details of a property as they appeared at a particular period of time by means of removal of later work and the replacement of missing original work, consistent with the objectives and goals of *the Plan*.

§ 920.67 Sidewalk setback.

Sidewalk setback means that area between a *building restriction line* and the right-of-way of a street into which projections except architectural articulations, minor architectural embellishments, and subsurface structures, are prohibited. The area is to be dedicated to open space activities related to the public improvements program of the Pennsylvania Avenue Development Corporation. Subsurface structures may intrude into the area if they are in compliance with the standards and controls specified herein.

§ 920.68 Storefront.

Storefront means the street level frontage relating to a single establishment.

§ 920.69 Structural bay.

Structural bay means the distance or span from one vertical structural member fronting on a street to the immediately adjacent vertical structural member fronting on the same street.

§ 920.70 Vault.

A *vault* means an enclosure of space beneath the surface of the public space or *sidewalk setback*, except that the term *vault* shall not include public utility structures.

§ 920.71 Weather protection.

Weather protection means a seasonal or permanent shelter to protect pedestrians from sun or precipitation, consisting of arcades, canopies, awnings, or other coverings.

Dated: May 8, 1980

Thomas F. Murphy,

Chairman.

[FR Doc. 80–15492 Filed 5–21–80; 8:45 am]

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federal register

Thursday
May 22, 1980

Part VI

Department of the Interior

National Park Service

Mount McKinley National Park; Mining, Climbing and Vehicle Regulations

DEPARTMENT OF THE INTERIOR

National Park Service

36 CFR Part 7

Mount McKinley National Park; Mining, Climbing and Vehicle Regulations

AGENCY: National Park Service.

ACTION: Proposed rule.

SUMMARY: The purpose of this proposed rule is to delete three regulations and to revise a fourth for Mount McKinley National Park, Alaska. The three regulations recommended for deletion are founded in 36 CFR 7.44 (a), (b) and (e). The pertain to the registration of prospectors and miners, surface use of mineral land locations, and vehicle and traffic safety. The fourth regulation on mountain climbing, found in 36 CFR 7.44(g) is recommended for revision. This proposed action would delete unnecessary regulations, and is intended to encourage the most liberal use of Mount McKinley National Park for recreation purposes consistent with 16 U.S.C. 347 et seq.

DATES: Written comments, suggestions, or objections will be accepted until June 23, 1980.

ADDRESS: Comments should be directed to: Superintendent, Mount McKinley National Park, Post Office Box 9, McKinley Park, Alaska 99755.

FOR FURTHER INFORMATION CONTACT: Gary Brown, Chief Ranger, Mount McKinley National Park, Post Office Box 9, McKinley Park, Alaska 99755, Telephone: (907) 683–2294.

SUPPLEMENTARY INFORMATION:

Background

The purpose of this proposed action is to delete those subsections of the special regulations for Mount McKinley National Park that are now either adequately covered by other parts of this Chapter or are no longer necessary to provide for protection of park resources and visitor safety. No new regulations are proposed.

The Mining in the Partks act of September 28, 1976, 90 Stat. 1342 (16 U.S.C. 1901 *et seq.*), and subsequent promulgation of regulations contained in 36 CFR Part 9 Subpart A, created a comprehensive body of regulations governing mining and mining claims in all units of the National Partk System. Prior regulations specific to Mount McKinley are now duplicative, confusing, and serve no valid purpose. Deletion of 36 CFR 7.44(a) and 36 CFR 7.44(b) would clarify this situation.

Changes in climbing activities within Mount McKinley National Park have taken place in recent years which makes portions of 36 CFR 7.44(g)(1) and all of 36 CFR 7.44(g)(2) and 36 CFR 7.44(g)(3) unnecessary. Regulations governing mountain climbing within the park were first enacted in 1959 (24 FR 11049) and relaxed in 1970 (35 FR 13017). Since 1970 the annual number of total climbers has increased over 400 percent. In addition, better and more sophisticated equipment, techniques, and clothing, have reduced the need for regulated safety considerations. For example, while two-way radio communications are still an advisable precaution for any climbing party, the greater number of climbers and ready availability of citizen's band radios makes a regulated precaution requiring radio communications capability with Park Headquarters unnecessary. Registration for climbing Mount McKinley and Mount Foraker would be retained as a requirement since it affords a necessary level of safety for both climbers and potential rescue parties should a search be warranted.

Vehicle and traffic safety regulations are found in 36 CFR Part 4. Specific regulations governing vehicle speed limits (36 CFR 4.17) and load limitations (36 CFR 4.11), as well as the completion of state Highway No. 3 which passes through the park and connects Anchorage, and Fairbanks, Alaska, make 36 CFR 7.44(e) obsolete.

Public Participation

The policy of the Department of the Interior is whenever practicable, to afford the public an opportunity to participate in the rulemaking process. Accordingly, interested persons may submit written comments, suggestions, or objections regarding the proposed regulation to the address noted at the beginning of the rulemaking.

Impact Analysis

The National Park Service has determined that this document is not a significant rule requiring preparation of a regulatory analysis under Executive Order 12044 and Part 14 of Title 43 of the Code of Federal Regulations; nor is it a major Federal action significantly affecting the quality of the human environment; which would require preparation of an Environmental Impact Statement.

Drafting Information

The following persons participated in writing these regulations: Frank Betts, former Superintendent, and Gary Brown, Chief Ranger, Mount McKinley National Park; and William F. Paleck, Alaska Area Office.

Authority

Section 3 of the Act of August 25, 1916 (39 Stat. 535, as amended; 16 U.S.C. 3); 245 DM 1 (44 FR 23384); and National Park Service Order No. 77 (38 FR 7478), as amended.

Daniel J. Tobin, Jr.,

Associate Director, Management and Operations.

In consideration of the foregoing, § 7.44 of Title 36 of the Code of Federal Regulations is proposed to be revised to read as follows:

§ 7.44 Mount McKinley National Park, Alaska

(a) *Fishing limit of catch and in possession.* The limit of catch per person per day shall be 10 fish but not to exceed 10 pounds and one fish, except that the limit of catch of lake trout (mackinaw) per person per day shall be two fish including those hooked and released. Possession of more than one day's limit of catch by any one person at any one time is prohibited.

(b) *Special wildlife protection area.* The area within one mile of the park road (Denali Highway) between milepost 37 and milepost 42 (Sable Pass area) is closed to photographers, hikers, and other park visitors except as may be specifically authorized by the Superintendent. Observations and photography of wildlife and other features are permitted from the road shoulders and designated turnouts.

(c) *Motorboats.* Motorboats are prohibited on all the ponds, lakes and streams of Mount McKinley National Park.

(d) *Mountain Climbing.* Registration is required in advance on a form provided by the Superintendent for climbing Mount McKinley and Mount Foraker.

(e) *Aircraft operations.* Aircraft shall be operated within the park as provided by § 2.2 of this chapter, except as hereinafter specified:

Landing of aircraft shall be permitted on the airstrip locally known as the McKinley Park Station Airport, located in Secs. 3 and 4, T. 14 S., R. 7 W.; and Secs. 33 and 34, T. 13 S., R. 7 W., Fairbanks Meridian.

[FR Doc. 60-15720 Filed 5-21-80; 8:45 am]

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federal register

Thursday
May 22, 1980

Part VII

Environmental Protection Agency

Visibility Protection for Federal Class I Areas

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 51

[FRL 1487-2, Docket No. A-79-40]

Visibility Protection for Federal Class I Areas

AGENCY: U.S. Environmental Protection Agency (EPA).

ACTION: Proposed rulemaking.

SUMMARY: Section 169A of the Clean Air Act requires EPA to promulgate regulations to assure reasonable progress toward the congressionally declared goal of "the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution." Today's action proposes regulations which would require thirty-six States to develop and implement programs to address the congressionally declared national goal. EPA is also making available today certain guidelines which would provide analytical tools for carrying out the regulations. This proposal would also provide additional procedures for conducting visibility analyses under EPA's prevention of significant deterioration regulations. This notice establishes a 75-day comment period and schedules two legislative-type public hearings for the purpose of receiving comments on both the proposal and the guidelines.

DATES: Written comments must be postmarked no later than August 5, 1980. Public hearings will be held on June 30, 1980 (Washington, D.C.), and July 2, 1980 (Salt Lake City, Utah).

ADDRESS: All written comments should be submitted (in duplicate, if possible) to: Central Docket Section (A-130), Docket No. A-79-40, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460.

Docket No. A-79-40, containing material relevant to this action, is located in the U.S. Environmental Protection Agency, Central Docket Section, Room 2902, 401 M Street, S.W., Washington, D.C. 20460. The docket may be inspected between 8:00 a.m. and 4:00 p.m. on weekdays and a reasonable fee may be charged for copying.

Public hearings are scheduled for the following locations:

(a) Room 3906, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C., 9:00 a.m. (EDT), June 30, 1980.

(b) Little Theater, Salt Palace, 100 S.W. Temple, Salt Lake City, Utah, 9:00 a.m. (MDT), July 2, 1980.

FOR FURTHER INFORMATION CONTACT: Mr. Johnnie L. Pearson, Office of Air Quality Planning and Standards (MD-15), Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Telephone: (919) 541-5497.

I. Supplementary Information

A. Public Hearings

EPA is announcing two legislative-type public hearings on the proposed regulations. These public hearings will be held in Washington, D.C., and Salt Lake City, Utah. The purpose of these public hearings is to receive public comment on the proposed regulations. A verbatim transcript of each hearing will be made and placed in Docket No. A-79-40, Central Docket Section (A-130), U.S. Environmental Protection Agency, Room 2902, 401 M Street, SW., Washington, D.C. 20460.

Any person who wishes to speak at the meeting should, by June 23, 1980, notify the Information Contact listed above of the intent to make an oral presentation, giving name, address, telephone number, and length of presentation. In order to permit as many views as possible, presentations will, in general, be limited to 15 minutes. Additional time will be made available based upon the number of commenters and the demonstrated need for additional time. EPA will develop a schedule for presentations based upon the notices it receives. Persons not providing prior notice but desiring to speak will be accommodated as time permits. Persons with a written statement should submit three copies of the statement to aid in its prompt evaluation. A copy of any written statement received at the hearing will be placed in the docket noted above.

B. Request for Extension of Comment Period

The Agency recognizes the substantial amount of material presented by this proposal and accompanying guidelines but is confident the 75-day comment period and the two public hearings present ample opportunity for the written and oral presentations of data, views, and arguments, especially since this proposal was preceded by an Advance Notice of Proposed Rulemaking (ANPR), published November 30, 1979 (44 FR 69116), which itself established a 30-day written comment period and three public workshops that were held in Seattle, Washington; Salem, Oregon; and Denver, Colorado, the week of January 20, 1980. Thus, EPA intends to deny any request for extension of the comment period without a showing of extraordinary circumstances. EPA notes, additionally, that any extension of the comment period would seriously jeopardize its ability to promulgate final regulations by November 15, 1980 as it must under an order entered November 5, 1979 in the United States District Court for the District of Columbia in *Friends of the Earth, Inc. v. Costle*, No. 80-3081. This litigation resulted from EPA's inability to promugate regulations by August 7, 1979 as required by Section 169(a)(4) of the Clean Air Act (Act) 42 USC 7491(a)(4).

II. Background

A. The Statute

Section 169A of the Clean Air Act requires visibility protection for mandatory class I Federal areas where it has been determined that visibility is an important value. "Mandatory class I Federal areas" are all international parks and certain national parks and wilderness areas as described in Section 162(a) of the Act. To work toward meeting the national visibility goal set out in Section 169A(a)(1) of the prevention of any future and remedying of any existing man-made visibility impairment in such areas, Section 169A requires that the:

- Department of Interior review all mandatory class I Federal areas and identify those where visibility is an important value [Section 169(a)(2)].
- EPA, after consulting with the Department of Interior, promulgate a list of the mandatory class I Federal areas in which visibility is an important value [Section 169A(a)(2)].
- EPA prepare a report to Congress on methods for achieving progress toward the visibility goal. The report must include methods to determine visibility impairment, modeling techniques, methods for preventing and remedying man-made air pollution and resulting visibility impairment, and a discussion of visibility related pollutants and sources [Section 169A(a)(3)].
- EPA promulgate regulations which will (1) provide guidelines to States for including visibility protection in State Implementation Plans (SIPs); (2) require SIPs to include emission limits, schedules for compliance, and other measures as may be necessary to make reasonable progress toward meeting the national visibility goal; and (3) provide guidelines for determining best available retrofit technology emission limitations for fossil-fuel fired power plants in excess of 750 megawatts generating capacity [Section 169A(a)(4) and (b)].

• EPA approve or disapprove SIP revisions submitted in response to the promulgated requirements [Section 110(a)(2)] and promulgate regulations for those States which submit inadequate regulations or fail to submit regulations in response to EPA's requirements [Section 110(c)].

• In addition, Congress also included visibility protection requirements in the preconstruction requirements for prevention of significant deterioration (PSD) in Section 165 of the Act:

• Federal Land Managers have "an affirmative responsibility" to protect the visibility values of a class I area and may recommend the denial of a PSD permit if an adverse impact on visibility would result, even if the class I PSD increments would be met [Section 165(d)].

• PSD applicants must analyze the visibility at the site of the proposed construction and any area potentially affected by the proposed construction [Section 165(e)].

B. Rulemaking

On November 30, 1979, the Agency initiated informal regulatory development by publishing an Advance Notice of Proposed Rulemaking (ANPR) (44 FR 69116). The purpose of this ANPR was to inform the public of this effort and to solicit comments on various major issues which needed resolution during regulatory development. A summary and a copy of all comments received is included in Docket A–79–40. EPA's response to many of those comments is included in the various sections of this preamble. Also on November 30, 1979, EPA published its final determination under Section 169A(a)(2) of mandatory class I Federal areas where visibility is an important value (44 FR 69122).

C. Document Availability

The Agency relied on the documents listed below, which served as background to these proposed regulations. The Agency is soliciting comments, especially on the DRAFT documents. The documents listed as final have previously received substantial public review. Both draft and final documents are in Docket No. A–79–40 and are also available from the sources indicated below.

(1) "Protecting Visibility: An EPA Report to Congress' (EPA–450/5–79–008) (final), will be available shortly from: National Technical Information Service, 5285 Port Royal Rd., Springfield, Virginia 22161.

(2) "The Development of Mathematical models for the Prediction of Anthropogenic Visibility Impairment" (EPA–450/3–78–110 a, b, c), (final), National Technical Information Service, 5285 Port Royal Rd., Springfield, Virginia 22161 (PB 293119, PB 293120, PB 293121).

(3) "Criteria for the Identification of Integral Vistas (draft)," Control Programs Development Division (MD-15), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711. The Agency is proposing to incorporate this guideline by reference in the **Federal Register** and expects to ask the Director of the **Federal Register** for approval before promulgation.

(4) "Proposed Guidelines for Determining Best Available Retrofit Technoligy for Coal-Fired Power Plants and Other Major Stationary Sources (Draft)," Control Programs Development Division (MD–15), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711.

The Agency is proposing to incorporate this guideline by reference in the **Federal Register** and expects to ask the Director of the **Federal Register** for approval before promulgation.

(5) "Preliminary Assessment of Economic Impacts of Visibility Regulations (Draft)," Control Programs Development Division (MD–15), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711.

III. PROGRAM OVERVIEW

This preamble provides a brief description of the regulatory program, serving to introduce the specific regulatory language. Following the regulatory language is a Supplemental Statement of Basis and Purpose which discusses the reasons why we have taken certain positions in this proposal.

THE PROBLEM

Congress has set aside certain international parks and national wilderness areas, national memorial parks, and national parks (mandatory class I Federal areas) to preserve and enhance their beauty for present and future generations to enjoy. The intrinsic beauty of these areas, however, has been threatened due to visibility degrading pollution. Congress became aware of the need to protect visibility in these areas and directed EPA to explore the relationship between man-caused pollution and visibility.

From this research we can say there are generally two types of air pollution which reduce or impair visibility:

(1) smoke, dust, or colored gas plumes that are emitted from stacks and obscure the sky or horizon relatable to a single source or a small group of sources, and (2) widespread, regionally homogeneous haze from a multitude of sources which impairs visibility in every direction over a large area.

These types of pollution are caused by factories, plants, and other sources that emit particles and gases into the air. These substances either absorb or scatter the light, thus reducing the amount of light a person can receive from a viewed object. The practical effect is that impaired visibility degrades the aesthetic value of surrounding landscape by either discoloring the atmosphere to produce a visible plume or whitening the horizon and causing objects to appear flattened so that landscape colors and textures become less discernible or, in the case of a discernible plume, obsuring some portion of the landscape.

The Program

A Phased Approach to the Problem

Congress, in recognition of the need to protect such aesthetics declared as a national visibility goal the remedying of existing pollution and the prevention of any future pollution that interferes with visibility in mandatory class I Federal areas. We reviewed the techniques for identifying, measuring, predicting, and controlling visibility impairment, and In November, 1979, published "Protecting Visibility: An EPA Report to Congress" which discusses in detail the present scientific knowledge of visibility, including monitoring, modeling, and control of visibility impairment.

As described in that report, we determined that the present mathematical models and monitoring techniques, while showing promise, should be evaluated further before they are routinely required in a regulatory program which applies to existing sources that impair visibility. However, in some instances we can idenfity the origin of visibility impairment caused by a single source or small group of sources without the use of sophisticated analytical techniques. Simple monitoring techniques such as visual observation (either ground based or with aircraft) can often identify which source contributes to the impairment.

Modeling and monitoring techniques which address impairment caused by single sources will soon be available. Similar techniques which deal with multiple-source problems (regional haze and urban plumes) need additional research and will not be available for some time.

Recognizing the need to initiate protection as soon as possible while also realizing that certain scientific and technical limitations do exist, we are proposing a phased approach to

visibility protection, Phase I of this program would:

1. Require control of impairment that can be traced to a single major source or small group of sources.

2. Evaluate and control new sources to prevent future impairment, and

3. Require States to adopt other strategies to remedy existing and prevent future visibility impairment.

Future phases will further implement the visibility program by addressing more complex problems such as regional haze and urban plumes. We will propose and promulgate future phases when improvement in monitoring techniques provides more data on source specific levels of visibility, regional scale models become refined, and our general scientific knowledge of visibility improves.

Even though we are calling these proposed regulations "Phase I of the visibility protection program," the basic structure of the regulations provided today will remain constant for *all* phases. These regulations function as the basic framework from which this present program can be implemented and into which future phases can be incorporated. In other words, the basic plan requirements will remain consistent while only the elements which define the scope of the program will change in response to advances in our technical knowledge.

The proposed regulations require input into the program by all affected parties. Thus, coordination between the States, the Federal Land Managers, and EPA will be necessary to implement an effective visibility program. The State retains the primary responsibility of developing a viable visibility program. The Federal Land Manager has the responsibility of protecting the visibility values of Federal class I areas. These two must work together to ensure the visibility values of these areas are protected. EPA's responsibility is to (1) promulgate visibility regulations which would require States to revise their State Implementation Plans (SIPs), and (2) continue research into visibility for use in future phases.

The Program—In Detail

We are proposing regulations that require the 36 States containing mandatory class I Federal areas to submit revisions to their SIPs within 9 months. These revisions will (1) require certain existing major stationary sources to install the Best Available Retrofit Technology (BART) for controlling those pollutants which cause visibility impairment, (2) identify and evaluate long-term strategies for making reasonable progress toward remedying existing and preventing future impairment in the mandatory class I Federal Areas, and (3) require the adoption of certain measures that will supplement the States' new source review program regarding visibility impacts. These requirements are summarized below.

A. BART Requirements

1. *The Federal Land Managers and the States will begin early consultation with each other.* We expect these two groups to work closely with each other throughout the process of developing all aspects of the SIP revision. Because the Clean Air Act charges the Federal Land Managers with protecting air quality related values, including visibility, the State must adequately consider comments from the Federal Land Managers.

2. *The Federal Land Manager or the State identifies whether, within any mandatory class I Federal area, there exists any impairment of visibility.* This impairment must be identified within 90 days of promulgation of these regulations. We are defining "impairment" as any "humanly perceptible change in visibility (visual range, contrast, coloration) from that which would have existed under natural conditions."

3. *Federal Land Managers or the State will identify the integral vistas (if any) for each mandatory class I Federal area.* These regulations would permit the Federal Land Managers to identify integral vistas. An integral vista is a view from within the area of a scenic landmark that is located outside the boundary of the area.

4. *The State, in consultation with the Federal Land Managers, will identify the existing major stationary sources which cause the visibility impairment.* The regulation provides a specific definition for existing major stationary sources. During Phase I of the visibility program, the State and the Federal Land Manager must be able to "reasonably attribute" the visibility impairment in the mandatory class I Federal area to a major stationary source through visual observation or other monitoring technique. During later phases of the program, the Agency will likely require the State and Federal Land Managers to place more emphasis on the use of modeling in identifying pollution sources.

5. *The State, in consultation with the Federal Land Manager, will perform a BART analysis on existing major stationary sources identified as impairing visibility.* The BART analysis does not apply to any source which was in operation before August 7, 1962. In the BART analysis, the State determines what additional air pollution control technologies need to be required in order to reduce existing visibility impairment.

In conducting this analysis, the State first identifies those control techniques that could improve visibility. If techniques exist then the State proceeds with the BART analysis, but if no technique exists, then the State stops the analysis at this point. For example, while methods might exist for the partial control of a pollutant the reductions achievable may not be sufficient to achieve any improvement in visibility.

In such a case the State would not be obligated to require controls. If control techniques do exist that would improve visibility, the State begins studying alternative control strategies. The State should consider, on a case-by-case basis, how much various alternative control techniques would cost, the energy and environmental impact of the controls, what air pollution technologies the source already has in place, the remaining useful life of the source, and to what degree the control alternatives would improve visibility. In order to assist States in the analysis of BART,the Agency has developed a guideline. For large power plants, BART must be determined pursuant to this guideline. The BART guideline proposed today is necessarily general. The Agency is considering supplementing this guideline in the near future, particularly with regard to specific large fossil-fuel fired power plants or categories of such power plants.

The last stage of the BART analysis is for the State to specify an emission limitation that reflects BART. The source must then install, operate, and maintain the control technology to meet the emission limitation.

6. *The source may apply to the Administrator for an exemption from BART on the basis that the source does not cause or contribute to significant impairment of visibility.* The source must notify the Federal Land Manager of its application and must receive written concurrence from the State on the application. To receive an exemption, the source must demonstrate to the Administrator that it does not cause or contribute to significant impairment of visibility.

By significant impairment we mean the level of impairment that interferes with the intended use of the area. When applying for an exemption, a source should address the frequency, extent, time of occurrence, intensity and duration of the impairment. If the Administrator grants an exemption, the Federal Land Manager must concur

before the exemption will become effective.

B. Monitoring of Visibility Impacts.

1. *The State will develop a monitoring strategy.* This strategy would assess the State's need for visibility monitoring taking into consideration available and forthcoming monitoring techniques and guidelines.

2. *The State will provide for consideration of monitoring requirements for new sources.* The State should assess the need for monitoring by a source to provide information on any potential impacts on visibility in the Federal Class I area as part of the new source review process.

3. *The State will evaluate any available monitoring data.* Any existing monitoring data available to the State should be incorporated into the State's decision-making process for BART determinations and new source review decisions.

C. Development of the Long-Term Strategy.

The proposal would require each plan to include a long-term (10–15 year) strategy for making reasonable progress toward remedying existing and preventing future visibility impairment. The requirements are summarized below.

Remedying Existing Impairment

1. *The State must consider any land management plans to protect or enhance visibility in the mandatory class I Federal area.* This will also be useful in developing the part of the long-term strategy relating to prevention of future impairment.

2. *Some of the measures the State must consider are:*

a. *The effectiveness of existing air pollution control programs in reducing visibility impairment.* For example, the attainment/maintenance of National Ambient Air Quality Standards may have a positive effect on reducing or eliminating visibility impairment in mandatory class I Federal areas. If this is the case, the State should explain how this would contribute to reasonable progress.

b. *Additional emission limitations and schedules for compliance for uncontrolled or poorly controlled sources not covered by BART.* This recognizes that States may have to control sources not covered by BART to make reasonable progress toward the national goal.

c. *Retirement of existing sources and replacement with new, well controlled facilities.* Where possible this should be encouraged because this measure may have a positive effect on visibility.

3. *The State must do a reanalysis for each existing major stationary source which contributes to visibility impairment in a mandatory class I Federal area.* This reanalysis would occur when the Administrator determines new technology is available which would more effectively control a pollutant which causes visibility impairment. All pollutants would be analyzed for their contribution to the visibility impairment regardless of previous BART requirements. Where control representing BART has not been previously required for a pollutant reanalyzed, the State shall require the imposition of such control as indicated by this reanalysis.

Preventing Future Impairment

The States must review all major emitting facilities and major modifications as defined in EPA's Prevention of Significant (PSD) regulations for their anticipated impacts on visibility in mandatory class I Federal areas.

The prevention of future visibility impairment was a major concern of Congress. It is addressed not only in Section 169A, which deals exclusively with visibility, but also in Sections 160–169 on PSD. We have already promulgated regulations meeting the visibility requirements of the PSD Sections. In these PSD regulations, the owner or operator of new major emitting facilities or major modifications of a major emitting facility must assess whether they would impair visibility. Thus, a State's compliance with the PSD program would go a long way toward preventing future visibility impairment in mandatory class I Federal areas.

There is, however, a gap in the PSD regulations in that they do not call for the review of a major emitting facility or major modification locating in a "non-attainment" area, even if it would impair visibility in a mandatory class I Federal area. Today's proposal would remedy this with regard to visibility impacts by covering all such sources irrespective of their location.

D. Review of the Long-term Strategy.

The State will review its strategy in consultation with the Federal Land Manager and report its findings to the public and the Administrator at least every three years. We believe that the periodic review of the long-term strategy is an important part of assessing reasonable progress toward the national visibility goal. Because the visibility program is new and evolving, it is necessary to 1) take into account advances in technology, 2) evaluate progress toward the goal, 3) evaluate specific program effectiveness and 4) provide a reassessment of the reasonableness of measures incorporated into the long-term strategy. In this review of the long-term strategy the regulations would require certain analyses, including: an assessment of the progress achieved in remedying existing impairment, an evaluation of the change in visibility, an assessment of the strategy's long-term ability to prevent future impairment, and identification of additional measures that may be necessary to make reasonable progress toward the national goal.

E. New Source Review Requirements for Visibility Impacts.

EPA's PSD regulations require that a proposed major emitting facility or major modification evaluate its potential impact on visibility and, if the source would cause an adverse impact on visibility in a Federal class I area that the State deny the permit.

Commenters on the Advance Notice of Proposed Rulemaking noted that the States need additional guidance for new source review. We are therefore proposing a definition of "adverse impact" and clarifying certain procedural relationships between the Federal Land Manager and the State in the review of new source impacts on visibility in Federal class I areas. Section 51.307 of the visibility regulations specifies requirements the States must meet during the new source review process.

As the first step in the review process the State notifies the Federal Land Manager of any potential new source that may impact visibility in a Federal class I area. The State and Federal Land Managers then begin consulting with each other, which consultation will continue throughout the permitting process. Where the PSD class I increments are not violated, the Federal Land Manager may demonstrate that the source will have an adverse impact on visibility in the Federal class I area. The manager provides this demonstration to the State which then either grants or denies the permit application. If the State agrees with the Federal Land Manager's assessment that the source will adversely impact visibility, then the State will deny the permit. If the State disagrees with the Federal Land Manager's demonstration then it will provide the Federal Land Manager with a written explanation of its findings. The State may also require the source to monitor visibility at the proposed site as part of the PSD permit application.

F. *Conclusion*

The immediate, principal benefit of these regulations will be (1) the reduction or elimination of impacts reasonably attributable to specific existing sources, and (2) clarification of procedures for the review of new sources. The focus of these regulations will be principally in the West since western areas have generally good visibility now and are extremely sensitive to degradation of their visibility. Also, the majority of the mandatory class I Federal areas are located in the western United States.

The phased approach of these regulations will limit the amount of resources the States will have to expend on revising their SIPs. Preliminary indications are that a limited number of existing major stationary sources in a few States will have to retrofit controls. The one major requirement applicable to all 36 States would be the development of a long-term strategy, which includes a review of all new sources impacting visibility, for making reasonable progress toward the national visibility goal. EPA believes, however, that some of the basic elements of an acceptable strategy already exist within the framework of other air pollution programs. Therefore, the State will need to examine the feasibility and efficacy of only a few other measures to determine if they should or need to be included in the long-term strategy.

It should be noted, however, that although these regulations require a new source review program, *all* States must review new sources in accordance with PSD regulations. The visibility regulations *neither subsume* nor eliminate the State responsibility under the PSD program.

The other requirements of these proposed regulations are primarily procedural in nature and while they must be addressed, we believe that the regulations provide sufficient guidance to preclude the expenditure of vast State resources for compliance.

IV. REGULATORY IMPACT

The Agency has prepared a draft regulatory impact analysis for review in concert with these proposed rules. This document is included in Docket No. A-79-40 and may be obtained by writing Control Programs Development Division (MD-15), U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711.

V. SOLICITATION OF COMMENTS

The Agency actively solicits comments on all aspects of the proposed regulations and guidelines.

These proposed rules are issued under the authority granted in Sections 110, 114, 160-169, 169A, and 301 of the Clean Air Act. 42 U.S.C. 7410, 7414, 7470-7479, 7491, and 7601.

Dated: May 15, 1980.

Douglas Costle,

Administrator.

It is proposed to add a new Subpart P to Part 51, Title 40 of the Code of Federal Regulations to read as follows:

Subpart P—Protection of Visibility

Sec.

51.300 Purpose and applicability.
51.301 Definitions.
51.302 Implementation control strategies.
51.303 Exemptions from control.
51.304 Identification of integral vistas.
51.305 Monitoring.
51.306 Long-term strategy.
51.307 New Source review.

Authority: 42 U.S.C. 7410, 7414, 7470-7479, 7491, 7601.

Subpart P—Protection of Visibility

§ 51.300 Purpose and applicability

(a) *Purpose.* The primary purpose of this Subpart is (1) to require States to develop programs to assure reasonable progress toward meeting the national goal of preventing any future, and remedying any existing, impairment of visibility in mandatory class I Federal areas which impiarment results from man-made air pollution, and (2) to establish procedures for new source permit applicants, States, and Federal Land Managers to use in conducting the visibility impact analysis required at 40 CFR 51.24(p) for new sources.

(b) *Applicability.* (1) The provisions of this Subpart are applicable to: (i) each State and has a mandatory class I Federal area identified in 40 CFR Part 81, Subpart D, and (ii) each State in which there is any source the emissions from which may reasonably be anticipate to cause or contribute to any impairment of visibility in any such area. (iii) Section 51.307 is applicable to all States for the purpose of new source review under the Clean Air Act of visibility impacts in Federal class I areas.

(2) The provisions of this Subpart, except as provided for in subparagraph (iii) above, are applicable to the following States unless the Administrator later determines that the provisions of subparagraph (1) above are not met. Applicability of the provisions of this Subpart to other States shall become effective only upon the determination of the Adminstrator that either of the provisions in subparagraph (1) above apply.

(i) Alabama
(ii) Alaska
(iii) Arizona
(iv) Arkansas
(v) California
(vi) Colorado
(vii) Florida
(viii) Georgia
(ix) Hawaii
(x) Idaho
(xi) Kentucky
(xii) Louisiana
(xiii) Maine
(xiv) Michigan
(xv) Minnesota
(xvi) Missouri
(xvii) Montana
(xviii) Nevada
(xix) New Hampshire
(xx) New Jersey
(xxi) New Mexico
(xxii) North Carolina
(xxiii) North Dakota
(xxiv) Oklahoma
(xxv) Oregon
(xxvi) South Carolina
(xxvii) South Dakota
(xxviii) Tennessee
(xxix) Texas
(xxx) Utah
(xxxi) Vermont
(xxxii) Virginia
(xxxiii) Virgin Islands
(xxxiv) Washington
(xxxv) West Virginia
(xxxvi) Wyoming

§ 51.301 Definitions.

As used in this Subpart, all terms shall have the meaning provided for in the Clean Air Act except as defined herein.

(a) "Existing Major Stationary Source" means any of the following stationary sources of air pollutants which was not in operation prior to August 7, 1962, or reconstructed after that date, and was in existence on August 7, 1977 and has the potential to emit 250 tons per year or more of any pollutant regulated under the Clean Air Act:

(1) fossil-fuel fired steam electric plants of more than 250 million British thermal units per hour heat input,

(2) coal cleaning plants (thermal dryers),

(3) kraft pulp mills,

(4) Portland cement plants,

(5) primary zinc smelters,

(6) iron and steel mill plants,

(7) primary aluminum ore reduction plants,

(8) primary copper smelters,

(9) municipal incinerators capable of charging more than 250 tons of refuse per day,

(10) hydrofluoric, sulfuric, and nitric acid plants,

(11) petroleum refineries,

(12) lime plants,

(13) phosphate rock processing plants,

(14) coke oven batteries,
(15) sulfur recovery plants,
(16) carbon black plants (furnace process),
(17) primary lead smelters,
(18) fuel conversion plants,
(19) sintering plants,
(20) secondary metal production facilities,
(21) chemical process plants,
(22) fossil-fuel boilers of more than 250 million British thermal units per hour heat input,
(23) petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels,
(24) taconite ore processing facilities,
(25) glass fiber processing plants, and
(26) charcoal production facilities.

(b) "Potential to emit" means the capability at maximum design capacity to emit a pollutant after the application of air pollution control equipment. Annual potential shall be based on the maximum annual rated capacity of the stationary source assuming continuous year round operation. Enforceable permit conditions on the type of materials combusted or processed may be used in determining the annual potential. Fugitive emissions count, to the extent quantifiable, for each existing major stationary source in determining the annual potential. Secondary emissions are specifically excluded from the determination of annual potential.

(c) "Fugitive Emissions" means those emissions which do not pass through a stack, chimney, vent, or other functionally equivalent opening.

(d) "Secondary emissions" means emissions which occur or would occur as a result of the construction or operation of an existing major stationary source but do not come from the existing major stationary source.

(e) "Stationary Source" means any building, structure, facility, or installation which emits or may emit any air pollutant regulated under the Clean Air Act.

(f) "Building, structure, facility, or installation" means any grouping of pollutant emitting activities which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or persons under common control).

(g) "Best Available Retrofit Technology (BART)" means an emission limitation (including a visible emission standard) based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing major stationary source. The emission limitation shall be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any existing pollution control equipment in use at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

(h) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new component(s) exceeds 50 percent of the fixed capital cost of a comparable entirely new source. However, any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of 40 CFR 60.15(f)(1-3). A reconstructed source will be treated as a new major stationary source for purposes of this Subpart, except that use of an alternative fuel or raw material by reason of an order in effect under Section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, shall not be considered reconstruction.

(i) "Fixed capital cost" means the capital needed to provide all of the depreciable components.

(j) "Visibility impairment" means any humanly perceptible change in visibility (visual range, contrast, coloration) from that which would have existed under natural conditions.

(k) "Natural Conditions" means the visibility which would be expected to occur in the absence of man-made air pollution.

(l) "Significant impairment" means for purposes of Section 51.303 visibility impairment which, in the judgment of the Administrator, interferes with the management, protection, preservation, or enjoyment of the mandatory class I Federal area, including interference with and impairment of the visitor's visual experience. This determination shall be made on a case-by-case basis taking into account the extent, intensity, and duration of the impairment, frequency and time of occurrence of the impairment, the correlation between times of visitors use and access to the mandatory class I Federal area and the frequency of occurrence and timing of natural conditions.

(m) "Integral vista" means the perception from within the Federal class I area of a specific historical, cultural, or scenic landmark or panorama which is located outside the boundary of a Federal class I area, which vista is important to the vistor experience of the area or the fundamental purpose for which the area was established and preserved.

(n) "In operation" means engaged in activity related to the primary design function of the source.

(o) "Reasonably attributable" means attributable by means of visual observation or other monitoring technique.

(p) "In existence" means that the owner or operator has obtained all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations and either has (i) begun, or caused to begin, a continuous program of physical on-site construction of the facility or (ii) 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 construction of the facility to be completed in a reasonable time.

(q) "Major emitting facility" and "major modification" means "major stationary source" and "major modification" as defined in 40 CFR 51.24.

(r) "Adverse impact" means for purposes of § 51.307 visibility impairment which interferes with the management, protection, preservation, or enjoyment of the Federal class I area, including interference with and impairment of the visitor's visual experience. This determination shall be made on a case-by-case basis taking into account the extent, intensity and duration of visibility impairment, the frequency and time of occurrence of the impairment, the correlation between time of visitors use and access to the Federal class I area, and the frequency of occurrence and timing of natural conditions.

(s) "Federal Land Manager" means the secretary of the department with authority over any Federal class I area, the Chairman of the Roosevelt-Campobello International Park Commission, or their designated agents.

(t) "Agency" means the U.S. Environmental Protection Agency.

§ 51.302 Implementation control strategies.

(a) *Plan Revision Procedures.* (1) Each State identified in § 51.300(b)(2) shall submit, no later than nine months from the date of promulgation of this regulation, an implementation plan revision for the purposes of meeting the requirements of this Subpart.

(2)(i) The State, prior to adoption of any implementation plan required by this Subpart, shall conduct one or more public hearings on such plan.

(ii) Any hearing required by this Subpart shall be held only after reasonable notice, which shall include at least thirty days prior to the date of such hearing(s):

(A) Notice given to the public by prominent advertisement in the region affected announcing the data(s), time(s), and place(s) of such hearing(s);

(B) Availability of each proposed plan and all supporting documentation in at least one location in each region to which it will apply, and the availability of each compliance schedule for public inspection in at least one location in the region in which the affected source is located;

(C) Written notification to the Administrator (through the appropriate Regional Office);

(D) Written notification to each local air pollution control agency in each region to which the plan will apply;

(E) Written notification of each affected Federal Land Manager;

(F) In the case of interstate impacts, written notification to any other States which may be affected as a result of such plan; and

(G) A summary prepared by the Federal Land Manager of the conclusions and recommendations, if any, on the proposed plan.

(3) Submission of plans as required by this Subpart shall be conducted in accordance with the procedures in 40 CFR 51.5.

(4) The State shall include, as part of the information available to the public prior to public hearing(s) on such proposed plan, evidence of consultation with all affected Federal Land Managers and their conclusions and recommendations, if any, on the proposed plan.

(5) The Administrator, prior to proposed approval or disapproval of a plan submitted under this Subpart, shall consult with all appropriate Federal Land Managers.

(b) *State and Federal Land Manager Coordination.* (1) The State shall identify, to the Director of the National Park Service, the Director of the Fish and Wildlife Service, the Chief of the Forest Service and/or the Chairman of the Roosevelt-Campobello International Park Commission, as appropriate, in writing and within 30 days of the date of promulgation of these regulations, the title of the official to which the Federal Land Manager of any area listed in 40 CFR Part 81, Subpart D shall:

(i) Submit the list of integral vistas that are to be afforded visiability protection for the purpose of implementing Section 51.304, and

(ii) Identify visibility impairment for the purpose of implementing subparagraph (4)(ii) below.

(2) The State, at least 60 days prior to holding public hearings on the plan, shall consult in person with the affected Federal Land Manager on all aspects of the proposed plan revision for the purpose of meeting the requirements of this Subpart.

(3) The plan shall provide procedures for continuing consultation between the State and Federal Land Manager on the implementation of the visiability protection program required by this Subpart.

(c) *General Plan Requirements.* (1) The plan shall contain:

(i) A long-term (10–15 years) strategy, including such emission limitations, schedule of compliance, and other such measures, as may be necessary to make reasonable progress toward the national goal specified in § 51.300(a) in the manner specified in § 51.306.

(ii) An assessment prepared after consultation with the Federal Land Manager and including such comments as provided by the Federal Land Manager, of the impairment of visibility in each mandatory class I Federal area and a discussion of how each element of the plan addresses the impairment.

(2)(i) Any integral vista identified under § 51.304(b) shall be protected under the requirements of this Subpart to the same extent as any mandatory class I Federal area identified in 40 CFR Part 81, Subpart D. The plan shall identify all mandatory class I Federal areas, including all integral vistas to be protected.

(ii) The plan shall provide for the protection of additional integral vistas identified in accordance with § 51.304(c) at the earliest opportunity, but in no case less frequent than the time of the periodic review of the long-term strategy required by § 51.306(c).

(iii) The plan shall provide for the protection of integral vistas identified in accordance with § 51.304 (b) or (c) or (d) for purposes of review of new major emitting facilities and major modifications as provided for in § 51.306(d).

(iv) The State need not provide visibility protection of a vista identified as integral by the Federal Land Manager, if it demonstrates to the satisfaction of the Administrator, that such an integral vista has not been identified in accordance with "Criteria for the Identification of Integral Vistas."

(3) The plan shall require each source to maintain control equipment required by this Subpart and establish procedures to ensure such control equipment is properly operated and maintained.

(4) *Determination of BART.* (i) The plan shall include emission limitations representing BART for each existing major stationary source identified according to the procedures in subparagraph (ii) below.

(ii) The State, in consultation with the appropriate Federal Land Manager, shall analyze for BART each existing major stationary source which may reasonably be anticipated to cause or contribute to visibility impairment in any area identified in 40 CFR Part 81, Subpart D, which impairment is identified by the State, or by the appropriate Federal Land Manager within 90 days of promulgation of these regulations. The Federal Land Manager may recommend to the State for BART analysis existing major stationary sources suspected of causing or contributing to visibility impairment in the mandatory class I Federal area. The State, in determining whether the identified impairment is reasonably attributable to an existing major stationary source, shall consult with and take into account the recommendations of the affected Federal Land Manager and the appropriate EPA Regional Administrator, or his designated representative, and shall provide, in writing and at least 30 days prior to any public hearing on the plan, all supporting documentation on any existing major stationary source not analyzed for BART as recommended by the affected Federal Land Manager or appropriate EPA Regional Administrator.

(iii) If the State determines that technological or economic limitations on the applicability of measurement methodology to a particular existing major stationary source would make the imposition of an emission standard infeasible it may, in consultation with the Federal Land Manager, instead prescribe a design, equipment, work practice, or other operational standard, or combination thereof, to require the application of BART. Such standard, to the degree possible, is to set forth the emission reduction to be achieved by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(iv) Emission limitations set under this paragraph for fossil-fuel fired generating plants having a total generating capacity in excess of 750 megawatts shall be determined due to "Proposed Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other Major Stationary Sources."

(v) The plan shall require that each existing major stationary source required to install and operate BART do so as expeditiously as practicable but in no case later than five years after plan approval.

(vi) The plan shall require that each existing major stationary source required to install and operate BART install continuous emission monitoring, as applicable, in accordance with 40 CFR Part 51, Appendix P.

§ 51.303 Exemptions from control.

(a)(1) Any existing major stationary source required by action under § 51.302 to install, operate, and maintain BART may apply to the Administrator for an exemption from that requirement.

(2) An application under this Section shall include all available documentation relevant to the impact of the source's emissions on visibility for any area listed in 40 CFR Part 81, Subpart D, and a demonstration by the existing major stationary source that it does not or will not by itself or in combination with other sources emit any air pollutant which may be reasonably anticipated to cause or contribute to any significant impairment of visibility in any mandatory class I Federal area identified in 40 CFR Part 81, Subpart D.

(b) Fossil-fuel fired power plants with a total generating capacity of 750 megawatts or more may receive an exemption from BART only after demonstration to the satisfaction of the Administrator that such source is located at such a distance from all areas listed in 40 CFR Part 81, Subpart D that such power plant does not or will not, by itself or in combination with other sources, emit any air pollutant which may reasonably be anticipated to cause or contribute to significant impairment of visibility in any such area.

(c) Application under this Section must be accompanied by written concurrences from all affected States.

(d) The existing major stationary source shall provide for prior written notice to all affected Federal Land Managers of any application for exemption under this Section.

(e) The Federal Land Manager may provide an initial recommendation on the disposition of such application. Such recommendation, where provided, shall be part of the exemption application. This recommendation shall not be construed as the concurrence required under subparagraph (h) below.

(f) The Administrator, within 90 days of receipt of an application for exemption from control, shall provide notice and opportunity for public hearing on the application.

(g) After notice and opportunity for public hearing, the Administrator may grant or deny the exemption. For purposes of judicial review, final EPA action on an application for an exemption under this Section shall not occur until EPA approves or disapproves the State Implementation Plan revision.

(h) An exemption granted by the Administrator under this Section shall be effective only upon concurrence by the appropriate Federal Land Manager with the Administrator's determination.

§ 51.304 Identification of integral vistas.

(a) The Federal Land Manager may, in accordance with "Criteria for the Identification of Integral Vistas", identify to the State integral vistas to be afforded visibility protection.

(b) Integral vistas identified within 90 days from the date of promulgation of these regulations shall be subject to § 51.302(c)(2)(i).

(c) Integral vistas identified more than 90 days from the date of promulgation of the regulations shall be subject to § 51.302(c)(2)(ii).

(d) Integral vistas identified prior to the calendar year in which a complete new source permit application is filed shall be subject to § 51.302(c)(2)(iii).

(e) The State may identify such additional integral vistas, within its boundaries, as it deems necessary and appropriate.

(f) The provision for identification of integral vistas for mandatory class I Federal areas under paragraphs (c) and (d) above shall not be effective after December 31, 1985.

§ 51.305 Monitoring

(a) The State, in consultation with the Federal Land Manager, shall include in the plan a strategy for evaluating visibility in the mandatory class I Federal areas by visual observation or other monitoring techniques. Such strategy shall take into account current and anticipated visibility monitoring research and the availability of appropriate techniques for monitoring visibility and such guidance as is provided by the Agency.

(b) The plan shall provide for the consideration of available visibility data and shall provide a mechanism for its use in BART analyses, new source permit decisions, and other actions under the plan.

§ 51.306 Long-term strategy.

(a)(1) Each plan shall include a long-term (10–15 years) strategy for making reasonable progress toward the national goal specified in Section 51.300(a).

(2) A long-term strategy shall be identified for each area listed in 40 CFR Part 81, Subpart D.

(3) The plan shall set forth with reasonable specificity why the long-term strategy is adequate for making reasonable progress toward the national goal.

(b) The State, in developing a long-term strategy shall consider any plans and goals provided by the Federal Land Manager for the protection and enhancement of visibility in the mandatory class I Federal area.

(c)(1) The plan shall provide for periodic review and revision, as appropriate, of the long-term strategy not less than every three years. This review shall include consultation with the appropriate Federal Land Manager and a report to the public and the Administrator on progress toward the national goal.

(2) This report shall include:

(i) An assessment, prepared after consultation with the Federal Land Manager and including any evaluations as provided by the Federal Land Manager under § 51.302(c)(4)(ii) of the progress achieved in remedying existing impairment;

(ii) An evaluation, prepared after consultation with the Federal Land Manager and including any evaluations provided by the Federal Land Manager, of any change in visibility since the last such report, or, in the case of the first report, since plan approval;

(iii) A reassessment of the ability of the long-term strategy to prevent future impairment of the mandatory class I Federal area;.

(iv) An identification of additional measures, including the need for SIP revisions, that may be necessary to assure reasonable progress toward the national goal;

(v) An assessment of the progress achieved in implementing BART and meeting other schedules set forth in the long-term strategy; and

(vi) An assessment of the impact of an exemption granted under Section 51.303.

(d)(1) The long-term strategy shall provide for review of the impacts on visibility for any area listed in 40 CFR Part 81, Subpart D of all new major emitting facilities and major modifications.

(2) This review of new major emitting facilities and major modifications shall be in accordance with such guidance as is provided by the Agency.

(e) The long-term strategy shall include a review of the impacts on visibility of all pollutants regulated under the Clean Air Act at such times, as determined by the Administrator, as new technology becomes reasonably

available for the control of the pollutant for each existing major stationary source causing or contributing to impairment in any mandatory class I Federal area which impact is reasonably attributable to that source. Where control representing BART has not been previously required for a pollutant reanalyzed at the source, the plan shall require the imposition of such control as indicated by this reanalysis.

(f) The State in developing the long-term strategy shall consider, at a minimum, the following measures for incorporation into the long-term strategy:

(1) Emission reductions due to ongoing air pollution control programs,

(2) Additional emission limitations and schedules for compliance,

(3) Mitigation of impacts of construction activities,

(4) Source retirement and replacement schedules,

(5) Smoke management techniques for agricultural and forestry management purposes, and

(6) Enforceability of emission limitations and control measures.

(g) The plan shall discuss the reasons why the above and other reasonable measures considered in the development of the long-term strategy were or were not adopted as part of the long-term strategy.

(h) The plan shall include schedules for the implementation of the elements of the long-term strategy.

(i) The long-term strategy shall take into account the effect of new sources; and, for existing sources, the costs of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, the remaining useful life of any affected existing source and equipment therein, and the degree of improvement in visibility anticipated to result from control.

§ 51.307 New source review.

(a) For purposes of new source review under the Clean Air Act, the State plan shall provide for written notification of all appropriate Federal Land Managers of any proposed new major emitting facility or major modification that may affect visibility in any Federal class I area. Such notification shall be made in writing and within 30 days of receipt of and at least 30 days prior to public hearing by the State on the application for permit to construct. Such notification shall include an analysis of the anticipated impacts on visibility on the Federal class I area.

(b) The plan shall provide for consideration of any demonstration by a Federal Land Manager, provided within 30 days of the notification required by paragraph (a) above, that such proposed major emitting facility or major modification will have an adverse impact on visibility in any Federal class I area, including any integral vista identified in accordance with paragraph (h) below. Where the State finds that such a demonstration does not adequately support a determination by the State that an adverse impact will result, the State shall provide the Federal Land Manager with such analyses and discussion as supports the State's findings. This must be submitted to the Federal Land Manager in writing and at least 30 days prior to any public hearing on such application or, if there is no public hearing, 30 days prior to issuance of the permit.

(c) Where the State, in consultation with the Federal Land Manager, determines that an adverse impact on visibility in any Federal class I area will result from a new major emitting facility or major modification, the State shall not issue the permit.

(d) The State plan shall provide for the opportunity for review, by the public, of any new major emitting facility or major modification that may have an impact on visibility in any Federal class I area.

(e) The plan shall provide for consultation by the State with the appropriate Federal Land Manager on any application for a new source review permit submitted by any major emitting facility or major modification that may affect visibility in any Federal class I area.

(f) The State may, after considering the recommendation of the appropriate Federal Land Manager, require monitoring of visibility in the Federal class I area near the proposed new major emitting facility or major modification for such purposes and by such means as the State deems necessary and appropriate.

(g) The plan shall provide for an opportunity for consultation, prior to issuance of any new source review permit, with the Agency where a dispute between the Federal Land Manager and the State exists on the issuance of such permit.

(h) The plan shall provide for the protection of integral vistas for Federal class I areas identified in accordance with "Criteria for the Identification of Integral Vistas" as follow:

(1) For Federal class I areas so designated as of the date of promulgation of these regulations.

(i) Integral vistas identified prior to the calendar year in which a complete new source permit application is filed, and

(ii) Identified prior to December 31, 1985.

(2) For Federal class I areas designated after the date of promulgation of these regulations, as identified at the time of reclassification of such area to class I.

(3) The State need not provide visibility protection of a vista identified as integral by the Federal Land Manager, if it determines that such integral vista has not been identified in accordance with "Criteria for the Identification of Integral Vistas."

Supplemental Statement of Basis and Purpose [1]

The following discussion supplements various aspects of the basis and purpose for EPA's proposed regulations on visibility protection.

1. *The phased approach*—Congress required that EPA promulgate regulations to (a) assure reasonable progress toward meeting the national visibility goal set out in Section 169A(a)(1), (b) require BART analyses for existing major stationary sources, and (c) require development of a long-term strategy [Section 169A(a)(4), (b)(2)]. Congress, however, did not address the problem of visibility protection from a scientific perspective since, at the time of the Clean Air Act Amendments of 1977, there was scant technical and virtually no regulatory experience with the protection of visibility. Recognizing this, Congress left the appropriate techniques and methods for implementing the visibility protection program of Section 169A and, indeed, the precise definition of the problem to be addressed to EPA's study and regulations [Section 169A(a)(2), (a)(3), and (b)(1)]. EPA's subsequent study of visibility impairment revealed that man-made visibility impairment manifests itself in various forms. Some of these forms can be attributed to specific sources. EPA has determined, however, that there exist at present limitations in source/impairment relationships which make it impossible in many cases, particularly for multi-source impacts, to predict confidently that a given amount of control will yield a specific degree of improvement in visibility. EPA is thus proposing, as anticipated by the Advanced Notice of Proposed Rulemaking (ANPR), a "phased approach" to these regulations.

This phased approach will permit State control agencies to focus initially on the most clearly defined cases of existing impairment and on strategies to prevent future impairment, while

[1] Note: This statement will not appear in the Code of Federal Regulations.

allowing evolution of additional guidelines and control strategies as scientific understanding of source/impairment relationships improves. EPA received support for this approach in comments from representatives of both environmental and industrial groups.

Even though the Agency has referred to the proposed rules as Phase I the basic structure of the regulations provided today will remain consistent for all phases. These regulations function as the basic framework from which this present program can be implemented and future phases can be incorporated. In other words, the basic plan requirements will remain consistent while only the elements which define the scope of Phase I will change in response to advances in technical knowledge.

2. *General definitions*—As explained below several definitions are consistent with the proposed PSD regulations (44 FR 51924). Where modifications are made in the final promulgation, expected shortly, these definitions will be changed accordingly.

A. *"Existing major stationary source"*—Section 169A(g)(7) defines the term "major stationary source"; however, to avoid confusion with the PSD regulations, EPA has defined the term "existing major stationary source" which includes the age limitations specified in Section 169A(b)(2)(A). The proposed definition of "existing major stationary source" follows the definition in Section 169A(g)(7). It is limited to specific source categories with the potential to emit 250 tons or more per year of any pollutant regulated under the Act. The meaning of Section 169A(g)(7)'s definition of "stationary sources with the potential to emit 250 tons per year of any pollutant" depends on the interpretation of "potential to emit" and "stationary source." Since Congress used similar language in Section 169(1) without indicating a change in meaning, it is appropriate to examine what Congress intended in Section 169(1), in interpreting these terms [H. Rep. No. 95-564, 95th Cong., 1st Sess. 155 (1977)]. In *Alabama Power* v. *Costle*, 13 ERC 1993, the Court has already examined this and the result of this interpretation is the basis for today's proposed definition of "existing major stationary source" as defined in Section 169A(g)(7). Any change in EPA's proposed interpretation of Section 169(1) for purposes of PSD may affect the definition proposed today for visibility unless legal authority and differing program objectives would support different definitions for each program. Specifically, today's proposal defines "potential to emit" as "the capability at maximum design capacity to emit a pollutant after the application of air pollution control equipment." This definition parallels that proposed in the PSD regulations on September 5, 1979 (44 FR 51924). "Potential to emit" would be calculated on the assumption that air pollution control equipment incorporated into the design of a source will control emissions in the manner reasonably anticipated when the calculation is made. Therefore, whether a source is an existing major stationary source might depend primarily on what control equipment has been incorporated in its design.

The definition of "potential to emit" also states: "Annual potential shall be based on the maximum annual rated capacity of the stationary source assuming continuous year round operation.

Enforceable permit conditions on the type of materials combusted or processed may be used in determining the annual potential." This is consistent with the *Alabama Power* decision which calls for calculation of a source's "potential to emit" based on its "full design capacity" [13 ERC at 2003]. However, this calculation could reflect enforceable permit conditions on the amount of materials combused or processed. Also, again consistent with EPA's PSD proposal, "Secondary emissions" would not count in determining a source's potential to emit.

In determining whether a source, as defined in Section 169A(g)(7), has the potential to emit 250 tons per year of a pollutant, EPA proposes to take into account all of the emissions of that pollutant—even fugitive emissions, at least to the extent that they are reasonably quantifiable. EPA believes that there is no reason why a source of a particular pollutant should escape the BART requirement merely because the emissions of the pollutant are fugitive, when a source emitting the same pollutant might have to install BART if the emissions are vented through a stack or other opening. In both cases, the emissions could cause or contribute to visibility impairment.

In *Alabama Power*, the Court said fugitive emissions could not be counted in determining whether a source is major unless EPA issues an appropriate legislative rule [13 ERC at 2017]. Today's proposal, therefore, explicitly states that fugitive emissions shall be included in determining the potential to emit for each of the source categories listed in Section 169A(g)(7). Consistent with the Court's holding, the proposal defines "fugitive emissions" as "those emissions which do not pass through a stack, chimney, vent, or other functionally equivalent opening."

As for "stationary" in *Alabama Power*, the Court said that the definition of "stationary source" in Section 111(a)(3) controls the meaning of that term when used in the PSD part of the statute [13 ERC at 2038].

The proposed regulations would define "building, structure, facility, or installation" as "any grouping of pollutant-emitting activities which is located on one or more contiguous or adjacent properties and which are controlled by the same person (or by persons under common control)." This definition would be important in determining whether additions to, or reconstructions of, an existing stationary source in operation before August 7, 1962 would be subject to the BART requirement. For example, a fossile-fuel fired steam electric plant (power plant) of more than 250 million Btu an hour heat input may have been "in operation" before August 7, 1962, but also may have added two boilers in 1967. These two boilers would be considered an "existing major stationary source" if individually or together they had the potential to emit 250 tons a year or more of any pollutant, and if they were of more than 250 million Btu heat input since "source" would, in effect, mean *any* grouping of pollutant-emitting activities at one site and under common control. The two boilers would also be an "existing major stationary source" if they were "reconstructed." The proposed definition of "reconstruction" is consistent with that in 40 CFR 60.15, dealing with new source performance standards.

In *Alabama Power*, the Court stated that Congress gave EPA latitude to define the component terms of "stationary source" to reflect the purpose and structure of the program for which the definition is intended [13 ERC at 2040]. The purpose of the visibility regulations is to assure reasonable progress toward the remedying of any existing and the preventing of any future impairment of visibility in certain class I areas. Congress structured the program so that the BART requirement would be an important mechanism for achieving one part of that purpose, the remedying of existing visibility impairment. Although the BART analysis itself considers the remaining useful life of the source, cost, and other factors, Congress decided that EPA should not be required by statute to require BART for all sources regardless of age as a minimum condition for SIP approval.

Where a source has had an addition or reconstruction with the potential to emit 250 tons a year of a pollutant

between August 7, 1962 and August 7, 1977, EPA believes that the implicit concern of Congress regarding remaining useful life does not apply to the new components at the site and that, therefore, Congress did not intend to "grandfather" such additions or reconstructions. Such a "grandfathering" approach would be without reason and could seriously undermine progress toward remedying existing visibility impairment. Indeed, preliminary EPA data show that a source cited by Congress in the legislative history of the visibility provisions as causing existing visibility impairment in the Grand Canyon would escape BART review entirely under such a grandfathering approach, even though nearly half its boiler capacity was added since August 7, 1962.

On this basis, EPA believes both the proposed definition of "reconstruction" and "building, structure, facility, or installation" are authorized by the Act and are vital to achieving Congress' purpose.

B. *"In existence" and "in operation"*—The Section 169A requirement for a BART analysis applies only to a major stationary source "in existence" on August 7, 1977 and which, on that date, had not been "in operation" for more than 15 years. EPA has proposed to define "in existence" as meaning "that the owner or operator has obtained all necessary preconstruction or air quality laws or regulations and has either (i) begun or caused to begin, a continuous program of physical on-site construction of the facility or (ii) 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 construction of the facility to be completed in allowable time." The proposal would define "in operation" as meaning "engaged in activity related to the primary design function of the source." EPA intends a broad interpretation of "primary design function"; thus for example, the production of coke in a steel plant is related to its primary design function, just as is the production of steel.

EPA believes the Act requires that each existing major stationary source that started operation after August 7, 1962 be potentially subject either to the BART requirements or to the PSD requirements as set out in the Clean Air Act Amendments of 1977. EPA specifically solicits comment on whether this interpretation is correct and whether the proposed definition of "in existence" would serve that interpretation.

C. *Reasonably attributable*—The proposed regulations would define "reasonably attributable" to mean attributable by visual observation or other monitoring techniques. This is the mechanism that implements the first phase of the visability protection program. Thus, if an existing major stationary source emits any air pollutant which can normally be anticipated to cause or contribute to any impairment in an area which impairment can be reasonably attributable to such a source *only* by analytical techniques (i.e., modeling) it will not be subject to a BART analysis in this first phase of the visibility protection program. This definition will likely change in later phases to take advantage of any improvements in understanding of the source/impairment relationship for visibility. EPA specifically solicits comment on this approach to implementing the BART requirement, including whether there are circumstances where current modeling techniques could be employed to indicate that impairment is reasonably attributable to a source.

(3) *Visibility impairment*—EPA is proposing to define "visibility impairment" as any humanly perceptible change in visibility (visual range, contrast, and coloration) from that which would have existed under natural conditions.

The first part of this definition would require that the impairment be humanly perceptible. EPA, in the ANPR, solicited comment on three separate approaches to treating perceptibility as an element of visibility impairment. These were (1) the smallest measurable change in visibility which is detectable by instruments; (2) impairment which is perceptible to humans; and (3) a visually perceptible impairment which is considered significant or adverse. There were no comments received in support of the first approach. Several commenters supported the second approach, which EPA is today proposing, because the Act intends for visibility protection to be primarily directed at preserving the enjoyment and benefits of good visibility for people.

The restriction to perceptibility, as may be observed by humans, is critical. As noted, varying conditions can affect the perceptibility of a specific impact. Additionally, available instrumentation is more sensitive to contrast and reduction in visual range than is the human eye. The Agency feels that the interpretation used in these regulations is correct based upon the Congressional concern regarding visibility. The intent of Congress in including Section 169A in the Act was to protect the public's enjoyment of the class I area and, thus, impacts on visibility which cannot be perceived by a human observer should not be considered impairment in the context of the national visibility goal. As discussed below, the proposed regulations charge the appropriate Federal Land Managers with identifying impairment in an area and EPA expects that, in doing so, the Federal Land Managers will keep the public's enjoyment of that area in mind.

Also, several commenters suggested that the third approach to impairment suggested by the ANPR was the most appropriate because, they argued, Congress intended to remedy only that impairment that is considered significant or adverse. EPA believes Congress, in declaring the national goal of "the prevention of *any* future, and the remedying of *any* existing impairment of visibility" (emphasis added), clearly did not intend that the visibility protection program be directed at only those impacts considered significant or adverse. If this had been the intent, Congress clearly could have stated the national goal as the prevention of *significant* future impairment and the remedying of *significant* existing impairment. This it did not do. In the provisions of Section 169A which provide guidance on the nature of the regulations EPA should promulgate, the concept of "significant impairment" is mentioned only in connection with an exemption from BART [Section 169A(c)]. Clearly, it would be nonsensical for Congress to provide an exemption based on a lack of significant visibility impairment if, by definition, visibility impairment could not be other than "significant."

The second part of the proposed definition includes "contrast," as well as "visual range" and "coloration" as expressions of visibility impairment. EPA believes virtually all manifestations of visibility impairment can be expressed by one of these terms. Contrast, as discussed in the Report to Congress, is generally a much more easily understood indicator of visibility impairment and is mathematically interrelated to visual range. One can often perceive and express contrast changes in visibility more easily than changes in visual range or coloration.

Preliminary studies (see *Protecting Visibility: An EPA Report to Congress*) indicate that a contrast change in the range of 0.02 to 0.05 is capable of being perceived by a human observer. The variation expressed is a result of variability in observer sensitivity and

spacing of contrasting objects. Additionally, reductions in visual range as small as 5% may be perceptible to the human observer. Where the impairment is in the form of a coherent plume, the above values will not necessarily be limiting. In this case, other factors, such as a substantial difference in color between the sky and plume, may heighten the viewer's ability to perceive the contrast change. Current efforts to describe visibility impairment in terms of coloration are promising but are, as yet, incomplete. While strict values for contrast and visual range reduction have not been and may never be established, the vicinity of the lower bounds on perceptibility can be estimated. The final determination is, however, related directly to whether the effect could be observed by man. It is important to note that the Agency is continuing to evaluate visibility data and that data obtained from studies conducted in 1979 indicate a range of 0.01 to 0.04 contrast change may be perceptible. Additional studies are being conducted in 1980 to confirm past research.

One commenter on the ANPR argued that Section 169A(g)(6), which says "the terms 'visibility impairment' and 'impairment of visibility' shall include reduction in visual range and atmospheric discoloration," cannot be expanded to include "contrast." This argument contradicts the plain meaning of the statutory language. The use of the words "shall include" in Section 169A(g)(6), clearly indicates that EPA must treat "visibility impairment" as including "reduction in visual range and atmospheric discoloration." Just as clear, however, is Congress' intent that Section 169A(g)(6) be inclusive, not restrictive. Congress was explicit when it intended the statutory definition to be restrictive, as shown by the definitions in Section 169A(g) (3), (4), (5), and (7).

That Congress gave EPA discretion to clarify the meaning of visibility impairment is also supported by Section 169A(a)(3)(A). That section requires EPA to study and report to Congress "on available methods for implementing the national goal." That report must include recommendations for:

"(A) methods for identifying, characterizing, determining, quantifying, and measuring visibility impairment in [mandatory class I Federal areas]."

This language unmistakably indicates Congress' intent that EPA has discretion on how broadly "visibility impairment" should be defined to effectuate the national goal. This discretion was not solely for purposes of the Report to Congress. Section 169A(b)(1) says the visibility regulations shall "tak[e] into account the recommendations" in the Report to Congress. EPA's careful study of the visibility problem, including that contained in the Report to Congress, supports the definition of "visibility impairment" proposed today and, therefore, it is authorized.

Finally, the definition of impairment restricts impairment to that resulting from human activities, i.e., impairment which would not have existed under natural conditions. While visibility may be degraded as a result of natural causes, Congress clearly limited the scope of the national visibility goal by including only "impairment [which] results from manmade air pollution." Although the determination of natural conditions would be difficult and is to some extent dependent on the monitoring research being done, as discussed elsewhere in this notice, EPA believes such a determination will not be critical to some aspects of the first phase of the program. If impairment can, by visual means, be reasonably attributed to a source, the determination of whether the impairment is man-made involves no precise measurement of natural conditions.

The remedying of existing impairment will require the control of certain existing sources and, therefore, in some circumstances it may be appropriate to evaluate the potential improvement in visibility against existing conditions. However, as we approach the national goal the impact of new sources will become more perceptible and since new sources are expected to last longer than existing sources their impacts should be evaluated against natural conditions which would exist in the absence of man-made impairment. It will therefore be important to attempt to provide some assessment of natural and existing conditions. Although such an assessment will be difficult, one method of achieving this would be through an analysis of available information to determine the best visibility that currently exists in an area. In making this assessment the State should recognize that frequently visibility is dependent upon seasonal factors. As such, available information should be subdivided into seasonal patterns. The seasonal best visibility would then be chosen on the basis of seasonal variations in naturally occurring phenomena which would then represent natural conditions. Of course one valuable method for obtaining data is through visibility monitoring. Although the Agency is currently evaluating monitoring techniques, these proposed rules would require the State to develop a monitoring strategy which would include a strategy for assessing natural conditions and provide for the reevaluation of natural conditions, based upon new data for the purpose of assessing new source impacts on visibility.

(4) *Significant impairment*—The proposed regulations define significant impairment as "visibility impairment which, in the judgment of the Administrator, interferes with the management, protection, preservation, or enjoyment of the mandatory class I Federal area, including interference with and impairment of the visitor's visual experience. This determination shall be made on a case-by-case basis taking into account the extent, intensity, and duration of the impairment frequency and time of occurrence of the impairment, the correlation between times of visitor use and access to the mandatory class I Federal area and the frequency of occurrence and timing of natural conditions."

The Agency believes that while the national goal calls for "the prevention of *any* future, and the remedying of *any* existing impairment in visibility" (emphasis added), by establishing exemptions in Sections 169A(c)(1) and 169A(c)(2) of the Act, Congress clearly recognized that there may be circumstances where impairment may exist but, due to the circumstances surrounding that impairment, reduction or elimination of the impairment may not be appropriate.

Secondly, in determining whether impairment is significant, the Administrator will evaluate:

(a) How frequently the impairment occurs,

(b) The extent or degree of the impairment,

(c) The time at which the impairment occurs,

(d) The intensity of the impairment, and

(e) The duration of the impairment.

There are clearly cases where impairment may exist but does not interfere with the public's enjoyment of the mandatory class I Federal area as pointed out by several commenters. An example may be where the impairment occurred only when visitor use was negligible or nonexistent. Since the intent of Congress, through Section 169A, is to protect the public's enjoyment of these areas, impairment which does not affect public enjoyment should not be considered significant. The Administrator will consider the recommendations of the appropriate Federal Land Manager since the Federal Land Manager has expert knowledge of an area.

(5) *Reanalysis of BART*—Proposed Section 51.306(e) would require that BART be reanalyzed at such times as the Administrator determines that new technology exists for the control of a pollutant having an impact on visibility. The basic purpose of this requirement for reanalysis is to ensure the maximum opportunity for the consideration of new technology for the control of visibility impairment.

Where a source has had to retrofit controls for a pollutant as a result of a BART analysis, EPA believes that there may be instances where the source should not later be subject to a different requirement for retrofit control of that pollutant. However, EPA believes that, as a part of its long-term strategy, a State should reevaluate each existing major stationary source for the applicability of new controls for all pollutants. Since the State would be free to require additional controls for a pollutant even where BART has previously been required for that pollutant the State may desire to do so as part of its long-term strategy. Where the control representing BART has not been previously required for a pollutant reanalyzed at the source, the State must require the imposition of such control as indicated by this reanalysis. This reanalysis must also include a consideration of in-place controls.

EPA recognizes that a broader "grandfathering" of sources which have applied BART controls could insulate such sources from future BART requirements for a pollutant even if the previous BART control was minimal. For example, a power plant would have an incentive to modify its burners to reduce emissions of NO_x in response to a BART analysis in order to escape further BART requirements for NO_x even though much more effective control technology may become available in the future. EPA, thus, specifically invites comments on this and other approaches to the problem. Several alternatives commenters may wish to address are:

(1) Requiring reanalysis of sources and imposition of controls on pollutants regardless of previous BART determinations.

(2) Requiring automatic, periodic review of all BART determinations;

(3) Requirng reanalysis of sources and implementation of controls as a reasonable progress measure;

(4) Requiring reanalysis of BART for all pollutants during each new phase of regulatory development; and

(5) Not requiring reanalysis.

Commenters are encouraged to include a discussion of the legal and policy basis for any alternatives recommended.

6. *Visability monitoring*—Many commenters addressed the issue of visibility monitoring. Many of these comments dealt with whether EPA, the State, or the Federal Land Manager should have the primary responsibility for visibility monitoring. Today's proposal recognizes the need for cooperation and consultation in the area of visibility monitoring, not only in the area of instrumentation but in the use and interpretation of data obtained. Although EPA will be continuing research in the area of visibility monitoring, primarily for the purpose of developing EPA-approved standardized ("reference method") visibility monitoring techniques and data collection for validation of analytical techniques, this proposal would require the consideratin of visibility monitoring and data in two aspects. The first of these areas is the development of a visibility monitoring strategy. The Agency believes that the use of available monitoring data and the collection of supplemental data can serve the State well in preparation of the SIP revision and the assessment of the long-term strategy's ability to make reasonable progress toward the national goal. In this strategy the State is expected to discuss the use of visual observations and other monitoring techniques as decided upon by the State after consultation with the Federal Land Manager. It is anticipated that the supervisor of the particular mandatory class I Federal area will be able to provide some assessment over a period of time as to the impairment that exists or may not exist in the area. Where agreements of this type can be reached they should be incorporated into the monitoring strategy.

The second aspect of visibility monitoring is the consideration of the need for monitoring associated with a proposed major emitting facility or major modification. The permitting authority should consult with the Federal Land Manager on the individual decision and take into account available visibility monitoring data and the need for additional monitoring data. The authority can require new sources collect such data under the auspices of the PSD program. Where necessary, additional assistance can be obtained through the EPA Regional Offices.

Though the Agency is not prepared to promulgate "reference methods," there is substanial information available regarding visibility monitoring methods currently in use. A discussiion of techniques currently in use and under evaluation for visibility monitoring may be found in "Protecting Visibility: An EPA Report to Congress." Interim guidance on monitoring is expected to be released by the Agency in the near future. After appropriate public review and comment, the interim guidance will be incorporated by reference in the promulgated visibility regulations. A **Federal Register** notice will announce the document's availability.

7. *Visibility modeling*—Almost all commenters on the issue of visibility modeling agreed with the position set forth in the ANPR that visibility models should be used only with a recognition of their limitations. However, a substantial number of commenters expressed the opinion that limitations on visibility models were so substantial as to totally preclude their use. As noted in the ANPR, the Agency is attempting to validate several analytical techniques for the purpose of addressing visibility impacts. The Agency believes that although these techniques are currently unvalidated, they can provide valuable input in the decision-making process when combined with common sense interpretations of all available data. The Agency believes that the proposed regulations recognize both the limitations and the presence of these analytical techniques.

EPA is currently attempting to validate these techniques through various research programs, and will make available for public review and comments these results as soon as they are available. Additionally, the Agency is preparing interim guidance on the use of analytical techniques and will also make this available for review and public comment.

Results obtained from visibility analytical techniques may be useful in addressing the impacts of single sources on visibility in two parts of this proposed rule. The first of these is the BART guideline, the use of which is optional except for power plants with a generating capacity in excess of 750 megawatts. This guideline suggests the use of analytical techniques to estimate the degree of improvement anticipated from control of certain pollutants. The techniques would estimate the level of impairment under existing conditions and compare it with the impairment estimated by the "model" under a new control scenario. EPA specifically solicits comment on whether this comparison to existing conditions is appropriate in all circumstances, for example, where existing impairment may be attributed in part to other sources which have not been required to install reasonably available control technology.

EPA does not believe these predicted levels of impairment should be used in

an absolute manner for all pollutants. Instead, the Agency intends that the predicted levels of impairment only be used to assess the relative improvement that may be achieved under the new control scenario. However, EPA believes it is important to qualify this predicted relative improvement with all available data. For example, it would be useful to compare the impairment resulting from an actual source similar to the analyzed source to that estimated under the new control scenario. Thus, the guideline requires the estimated relative improvement to be qualified by other available data. While the above discussion qualifies the use of analytical techniques, it is important to remember that any such analysis should use all available tools recognizing that each provides valuable information relevant to the analysis and the limitations on the tool should be recognized.

The other program area for which analytical results can be of value is in the evaluation of visibility impacts from new sources. An interim guidance document for the assessment of these new sources is being developed and will be made available for public comment.

8. *Intergovernmental cooperation*—The Agency received 20 comments pertaining to the roles of States, Federal Land Managers, and EPA in the development and implementation of visibility regulations. Nine commenters felt the regulations should be structured to provide authoritative input form the Federal Land Managers. Others felt the Act gave the State final decision-making authority and the Federal Land Manager only an advisory role.

The regulations, as proposed, provide an active role for both Federal land Managers and States. The Federal Land Managers are guaranteed input into the SIP revision process, including identification of integral vistas and concurrence on any BART exemption. The State, however, retains final authority for the development of the SIP, BART determinations, and implementation of the visibility program. EPA would remain primarily in a technical and policy advisory position, continuing research on visibility and developing Phase II regulations when it becomes technically feasible.

EPA believes the visibility program should truly be a cooperative one. While the States are aware of local conditions and preferences, the Federal Land Managers remain most familiar with conditions unique to the parks and wildernesses and the importance of the visibility values to the visitor experience in an area. The regulations are structured to provide input into the decision-making process by both the States and the Federal Land Managers, but EPA believes for the visibility program to be a viable one, all affected parties must work together.

Several commenters were also concerned that the subjective judgment of the Federal Land Managers may be given too much weight. These commenters suggested that objective guidelines or specific minimum criteria be applied to any decision by the Federal Land Managers. Under the proposal, judgments by the Federal Land Managers will be necessarily somewhat subjective because visibility is a perceived quality and difficult to quantify. However, many of these decisions, such as identification of integral vistas, are to be made according to EPA quidelines or criteria which will provide consistency and prevent random, capricious determinations. Others will be made in coordination with the States or with assistance from EPA.

9. *Protection of integral vistas*—The proposed regulations would require a State to protect any integral vistas which are identified by the Federal Land Manager within 90 days of the promulgation of these regulations, unless the State in its SIP demonstrates to the Administrator that the Federal Land Manager did not identify the vista according to the criteria set out in "Criteria for the Identification of Integral Vistas". A vista identified by the Federal Land Manager more than 90 days after promulgation would have to be protected for visibility not later than at the time of the periodic review of the long-term strategy.

The reason for the 90-day period for identification of vistas to be affected by this first phase of visibility SIP revisions is that the Act requires SIPs to be revised within 9 months of the promulgation date and, in order for a state to meet this deadline, it will need to know within 90 days of the promulgation date what integral vistas must be protected in that revision. Some Federal Land Managers have informed EPA that identification within the 90-day period will be possible, although difficult, to meet while others have commented that, because of the need to integrate visibility protection with planning for certain other management objectives, identification of vistas within 90 days of promulgation is unlikely.

Under the proposed regulations, the decision when and whether to identify an integral vista is primarily the responsibility of the appropriate Federal Land Manager who, under the Act (and the legislation creating an area), has a special role in protecting the values of an area.

Although EPA recognizes the difficulties in identifying the vistas within 90 days, it believes in most cases the appropriate Federal Land Manager should be able to identify the integral vista within that time. All the areas have already been analyzed pursuant to action under Section 169A(a)(2) to determine whether visibility is an important value. Also, since it seems unlikely that EPA will promulgate these regulations before November 1980, the time by when the integral vistas must be identified to receive protection in the first phase of SIP revisions for visibility is still many months away. EPA is releasing the identification criteria for public comment along with this proposal and it should be possible for the Federal Land Managers to take preliminary steps now to prepare for the identification of integral vistas, even though the criteria may change in light of comments received. For example, one important criterion unlikely to be changed by public comment is whether the legislation creating an area specifically mentioned an integral vista as a reason for its being given special protection. It is important to note that the identification criteria present two different techniques for the final identification process. Comment is specifically requested on the appropriateness of both techniques.

Over the next few years Federal Land Managers will be developing area management programs which could include identification of additional integral vistas to be protected. As a result EPA has proposed a procedure which affords protection of integral vistas which have been identified by the Federal Land Manager prior to the calendar year in which a new source submits a complete permit application. However, EPA believes that this procedure could result in some uncertainty for new sources and therefore has proposed that no additional vistas be identified beyond December 31, 1985 for any Federal class I area which exists at the time of promulgation of these regulations. Additionally, the proposed procedure would allow a new source to escape the requirement for protection of an integral vista that may have been identified nearly a year before, by submitting a complete application late in the calendar year in which the vista was identified. The Agency also believes that the procedures for the reclassification of Federal Lands to class I should also involve the identification of integral vistas in order to prevent such uncertainties in the future. The Agency specifically solicits

comments on whether this procedure will result in too much uncertainty for new sources between now and December 31, 1985 and on other systems which could be used to accomplish the objective of protecting new integral vistas while providing time for the Federal Land Manager to develop management plans for their areas. Based upon the comment received, EPA may retain, modify, or delete this requirement. Three alternatives which the Agency is soliciting comment on are:

(1) providing protection for integral vistas identified at least a minimum time period prior to the submission of a complete application,

(2) a requirement that the source consult with appropriate Federal Land Manager at some designated interval prior to submission of the application and requiring protection of vistas identified within a specific time period after that consultation, and

(3) a provision which allows the Federal Land Manager to identify additional integral vistas within 30 days of being notified about a new source permit.

EPA recognizes that there are other procedural mechanisms that could be devised for identifying integral vistas. One alternative might be a procedure like that in Section 169A(a)(2) of the Act, whereby the Federal Land Managers recommend integral vistas to EPA, and EPA then promulgates the list with any change it feels is appropriate. EPA believes the proposed approach avoids the unnecessarily protracted process involved in this alternative, but specifically solicits comments on this and other alternative procedure for identification of integral vistas.

There has been comment that Congress did not intend to protect vistas which include places outside the boundaries of mandatory class I Federal areas. This intent is expressed, these commenters say, in the plan language of Section 169A(a)(1) which identifies the national goal of visibility protection "in" mandatory class I Federal areas. Examination of the statutory language and legislative history, however, reveals that they both support EPA's position and that removing integral vistas from protection would seriously undermine the purpose of Section 169A.

EPA's proposal agrees with the plain language of Section 169A. It protects no views into a class I area from outside the area as some commenters urged. The only visibility values protected are those "in" a mandatory class I Federal area, just as Section 169A provides. This follows because "visibility" is a perceptual value and the perception occurs "in" an area.

In identifying the visibility values of a mandatory class I Federal area, both the House and Senate Report counsel attention to the fundamental purposes for which Congress established such lands, and both quote the 1916 National Parks Organic Act (16 U.S.C. Section 1) that the purpose of such lands "is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" [H. Rep. No. 95–294, 95th Cong., 1st Sess. 137 (1977), S. Rep. No. 95–127, 1st Sess. 36 (1977)]. In 1978, Congress amended this act to "reaffirm" this purpose and direct that the "protection of [areas of the National Park System] shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of values and purposes for which these various areas have been established, except as may have been or shall be directly or specifically provided by Congress" [16 U.S.C. Section 1a-1]. The specific legislation establishing the mandatory class I Federal areas cited in many cases the magnificent scenery of the area as a reason for its establishment [44 FR 69122 (November 30, 1979)]. Congress, in framing the visibility regulations, clearly was aware that many of these areas were set aside because of their "extensive vistas, expansive scenic views, unique natural formations or primitive value" [123 Cong. Rec. S9172 (daily ed. June 8, 1977)]. EPA's proposal carries out Congress' intent that air quality-related values (including visibility) be protected. These values include vistas, regardless of the location of the places viewed, if they are an integral part of the visibility experience in an area. Some areas may have no integral vistas; others may. For example, the view from Mesa Verde National Park of Shiprock (New Mexico), a unique natural feature, could be identified as essential to the public enjoyment and values of the park. By requiring the participation of interested persons and a careful analysis of pertinent criteria, the proposal assures that integral vistas will not be identified carelessly as an air quality-related value of the area but, rather, that any such identification will result from a prudent, circumscribed effort.

The legislative history contains many references to the "grand," "distant," and "breathtaking" "vistas" and "panoramas" of mandatory class I Federal areas which merit visibility protection [See, e.g., H. Rep. No. 95–294, supra, at 148, 204, 205; 123 Cong. Rec. H8661, H8669 (daily ed. August 4, 1977)]. In addition, Congress repeatedly stressed that public enjoyment of the parks and the economic benefits tourism brings were reasons for protecting visibility in mandatory class I Federal areas [See, e.g., H. Rep. No. 95–294, supra, at 204]. Even opponents of far-ranging protection against deterioration of air quality recognized that "visibility" means the ability to see distant places and panoramic sweeps like the view from the top of a mountain, and that such visibility is a requisite to the full enjoyment of mandatory class I Federal areas [123 Cong. Rec. S9249 (daily ed. June 9, 1977)]. Nowhere is there the suggestion that grand vistas integral to public enjoyment of a mandatory class I Federal area were not entitled to protection if the place viewed lay outside the area. The reason is clear: denying such integral vistas protection would compromise Congress' intention to preserve the scenic values for which the area was created and which the public enjoys.

Another commenter inquired whether EPA intends to interpret the word "within" in Section 165(d)(2) to include integral vistas. As noted previously, EPA has promulgated PSD regulations implementing this section and this aspect of the regulations was not at issue in the *Alabama Power* decision which adjudicated various other issues relating to those PSD regulations. Whether a Federal Land Manager considers an integral vista to contribute to a visibility value of an area is for him to decide; he has the "affirmative responsibility" to protect those values. Although, as stated, EPA does not intend to change its PSD regulations regarding visibility protection, EPA does interpret both the statute and its PSD regulations as authorizing the protection of integral vistas. Congress could not have intended such vistas to be protected by one program and impaired by the other.

EPA urges that proposed major emitting facilities, early in the planning process, discuss with the appropriate Federal Land Manager the visibility values of the area including the existence of any integral vistas.

10. *Section 51.306 Long-Term Strategy*—Consistent with Section 169A(b)(2)(B), the proposed regulations would require each plan to contain a long-term strategy for making reasonable progress toward meeting the national goal. The proposal requires the strategy to contain several measures and suggests others the State should consider in devising the "mix" of measures appropriate for the particular

mandatory class I Federal area circumstances.

Because of the limited applicability of BART requirements, the development of long-term strategies will be central to making reasonable progress toward the national visibility goal. Consequently, EPA views the requirement as an exceedingly important one, even though it will be necessarily somewhat limited by the phased approach to the visibility program as discussed above. The long-term strategy can, however, begin to address the more complex problems such as regional haze. For example, although visibility impairment resulting from multi-source situations may not be reasonably attributable to any specific source, other programs for control of such sources should consider the impact, to the degree possible, of control decisions on visibility.

The ANPR suggested that, as an element of a long-term strategy, EPA might require the setting and meeting of reasonable progress visibility objectives. Today's proposal would not require specific objectives because EPA believes such objectives could be unduly rigid, easily misinterpreted, and difficult to assess. The proposed regulations would, however, require periodic review by the State and a report to the public on the efficacy of the long-term strategy. This review would primarily assess the effectiveness of the long-term strategy and in this way may be viewed as objective oriented.

Also required would be review of the impacts of all pollutants emitted by a source previously analyzed for BART when the Administrator determines that new control technology is available. Although the proposal would not automatically require the installation of additional control equipment for a pollutant for which a BART analysis has already imposed retrofit control, a State would have to do the analysis to determine whether additional retrofit control for the pollutant would be a sensible step toward the national visibility goal. In many cases EPA believes it would be a sensible step and, therefore, urges States to require imposition of retrofit control for any pollutant regardless of its control history if a BART reanalysis to consider new control equipment indicates such retrofitting is appropriate.

The proposal would require all new major emitting facilities and major modifications, as those terms are defined in EPA's PSD regulations, 40 CFR 51.24 and amendments, to be reviewed for their impacts on visibility for any area listed in 40 CFR Part 81, Subpart D. EPA is currently preparing a guideline for such review. This requirement will assure that any major new source that may impact visibility in any of these areas will be reviewed for such impacts. For example, a source located in a nonattainment area may not be reviewed under the PSD program for visibility impacts in such areas [*Alabama Power*, supra, 13 ERC at 2016].

Proposed Section 51.306(f) sets out certain measures which the State must consider in developing its long-term strategy. Although the State may develop its own particular "mix" of measures, the long-term strategy must be sufficient to make reasonable progress toward the national visibility goal. In evaluating the adequacy of the long-term (10–15 years) strategy, EPA will consider whether the elements incorporated provide sufficient consideration of impacts on visibility so that reasonable progress toward the national goal is a reasonable assumption. In order to ensure this, many of the elements are mandatory, and the State must explain why it did or did not incorporate the optional elements.

An essential starting point in developing long-term strategies is assessment of other air pollution related control programs. Many of these programs, such as SIP emission limits and compliance schedules for attainment and maintenance of the national ambient air quality standards, new source performance standards, motor vehicle emission standards, and PSD will likely contribute to making reasonable progress toward the national visibility goal. Once the impact of these and other regulatory programs is evaluated, the need for additional measures can be assessed.

Additional measures that must be considered include additional emission limitations and schedules for compliance, source retirement and replacement schedules, and smoke management techniques. Whether all of these measures (or other ones) are necessary to a long-term strategy for making reasonable progress toward meeting the national visibility goal depends on the particular circumstances of the area. Many commenters to the ANPR favored this flexible, area-specific approach. Others, however, felt EPA should establish a national visibility objective along with well designed timetables to monitor reasonable progress. EPA believes that regional differences in meteorological conditions around the country and varying degrees of visibility impairment and land management practices in and around the class I areas should be reflected in the visibility program. EPA's proposal would allow for this; setting a national visibility objective would not. The proposal is consistent with the Act and its legislative history which also required the BART analysis to consider local factors and recognized that a national visibility standard would be "impracticable" [H. Rep. No. 95–294, supra, at 205].

One area-specific measure, control of prescribed burning, i.e., burning for agricultural and forestry management purposes, will need to be considered in certain areas. Substantial comment was received on prescribed burning, its importance to forest and range management, and ability to influence its extent, timing, and duration. One comment suggested that prescribed burning was not man-made (a natural part of many ecosystems) and, thus, did not constitute "visibility impairment." Others noted the impacts of smoke from prescribed burning. EPA recognizes that prescribed fire is an ecologically sound forest and range management tool used both inside and outside class I areas. The Agency does not intend that prescribed burning be eliminated or unnecessarily restricted, but rather, that its impacts on visibility be reduced where feasible and appropriate. Prescribed burning is a necessary part of land management but EPA believes there are techniques to limit its effect on visibility. EPA has requested the Forest Service, U.S. Department of Agriculture, in coordination with land management and air regulatory agencies, to prepare a management guideline for the use of techniques to manage smoke from prescribed fires. It is anticipated that this guideline will not only include evaluation of alternatives to burn but will also suggest best management practices for minimizing adverse effects of smoke. This document is scheduled for completion in early 1981 and EPA intends to make a draft of the guideline available for public comment when it is completed.

(11) *Application of section 169A to new sources*—Today's proposal limits the BART requirements to certain existing sources, but applies the other requirements of Section 169A (such as the strategy for making reasonable progress toward the national goal) to new sources as well. Although EPA has received comment that the requirements of Section 169A apply to existing sources only, the Agency feels the plain language and legislative history of the visibility provisions support this proposal, as does common sense.

The plain language of Section 169A shows that this section is not limited to existing sources. The national goal

toward which the regulations must assure reasonable progress encompasses not only the "remedying of any existing" impairment of visibility, but also "the prevention of any future" impairment [Section 169A(a)(1)]. The recommendations in the Report to Congress, which are to be taken into account in the regulations, must include "methods for *preventing* and remedying * * * manmade air pollution and resulting visibility impairment" (emphasis added) [Sections 169A(a)(3)(C), (b)(1)]. While the BART requirement in Section 169A(b)(2)(A) focuses on control of existing sources, subparagraph (B) expressly requires "a long-term (ten to fifteen years) strategy for making reasonable progress toward meeting the national goal." There is no indication that a 15-year plan must be restricted to only existing sources.

The language of other sections of Part C of Title I of the Act underscores the intent to apply Section 169A to new sources in order to prevent future air degradation. In section 160, Congress states the purposes "of this part." "This part," means Part C. Part C includes Section 169A. Since nearly all the purposes in Section 160 relate to future goals and activities, and hence to new sources, it is apparent that Section 169A applies to new as well as existing sources. Similarly, Section 167, which is also in Part C, mandates enforcement action by the Administrator "to prevent the construction of a major emitting facility which does not conform to the requirements of this part. . . ." If Congress had intended this enforcement authority to be limited to PSD requirements, it would have referred to "this subpart." But using the term "this part," Congress included Section 169A. There would be no necessity to include the requirements of Section 169A in Section 167 unless Section 169A applied to new as well as existing sources.

The comment that Section 169A is limited to existing sources minimized the plain language of the Act and addressed two passages in the legislative history. The first is from the Conference Report:

"A major concern which prompted the House to adopt the visibility protection provision was the need to remedy existing pollution in Federal mandatory class I areas from existing sources. Issues with respect to visibility as an air quality value in application to new sources are to be resolved within the *procedures* for prevention of significant deterioriation." (emphasis added). H. Rep. No. 95-564, supra, at 155.

This passage simply recognizes that existing sources, in addition to new sources, must be controlled in order to make progress toward the national goal and that, for purposes of visibility protection, program procedures for new sources and those for existing sources be dovetailed so as to minimize any bureaucratic burden. Nothing in this passage, however, is inconsistent with EPA's proposal. The second passage is Senator Muskie's response to Senator McClure's question whether Section 169A applies only to existing sources. Senator Muskie replied:

"Yes, the Federal interest is limited to existing sources, which have been in existence 15 year or less. Visibility restrictions with regard to new sources would result under the [PSD] provisions." 123 Cong. Rec. S13709 (daily ed. Aug. 4, 1977).

Senator Muskie, however, is apparently speaking of the BART requirement being limited to existing sources and, like the conference report, of the desire to dovetail new source visibility requirements with PSD procedures.

Thus, these two passages of the legislative history, taken alone, do not support the commenter's position nor do they justify deviation from the plain language of the statute. Further, the House Committee left no doubt that Section 169A was intended to apply to new sources:

"* * * the committee recognizes that one mechanism which has been suggested for protecting these areas, the mandatory class I increments of new Section 160 [subpart 1 "Prevention of Significant Deterioration"] do not adequately protect visibility in class I areas.

* * * In light of the foregoing, the committee concluded that a separate approach was necessary to control the visibility problem, in mandatory Federal class I areas.

* * * The committee recognizes that [the national] goal cannot be achieved overnight. But the very difficulty of curing existing problems after the fact argues strongly for a strong preventive approach for the future." Rep. No. 95-294, supra, at 205-206.

The opponents of the measure in the House Committee also agreed that it would apply to new as well as existing sources. Id. at 529.

The conference committee report indicates that "[t]he conferees agreed to the House provision [on visibility protection] with modifications." The point, noted above, that the conference report does not in any way indicate that the substantive requirements of Section 169A were applicable only to existing sources was underscored by various House members:

"* * * as in the House bill, [Section 169A] as agreed to in conference applies both to new and existing sources. As pointed out in the House Committee report, merely meeting class I increments under prevention of significant deterioration will not be adequate to assure visibility protection. Clearly the conferees did not want to impose two separate pre-construction permit requirements for a new source for the purpose of assuring compliance with requirements. One permit should suffice." 123 Cong. Rec. H8663 (daily ed. Aug. 4, 1977).

Rep. Rogers provided further explanation on this point in his statement accompanying the technical amendments to the 1977 Clean Air Act Amendments (P.L. 95-190):

"It was suggested that the apparent conflict between the reading of some Senators and the House view on the visibility section (section 169A) should be resolved by a technical amendment. However, such an amendment seems unnecessary to me. The conference provision essentially adopted the House bill's approach. This is made clear at page 155 of the conference report. Nowhere in the conference report is it suggested that any limitation of the provision to existing sources was adopted by the conferees. While the report recognizes that '[a] major concern which prompted the House to adopt the visibility protection [provision] was the need to remedy existing pollution,' it does not state, nor does it imply that 'existing sources' were the only concern. As the House Committee report makes clear, new sources were also of concern. (H. Rep. No. 95-294). What sense would it make to solve existing problems, but allow the same situation to develop as a result of new sources?

The conference committee, of course, did not want to subject new sources to two separate procedural steps under the PSD and visibility protection provisions. That is why the conference report states, 'Issues with respect to visibility * * * in application to new sources are to be resolved within the *procedures* for prevention of significant deterioration.' (emphasis added). But in the one-stop permit process for new or modified major sources, the substantive criteria and standards of PSD and visibility provisions would have to be met. This point is underscored by the statutory language of section 169(A)(1) retaining as a national goal the prevention of any future * * * impairment of visibility in mandatory class I Federal areas. Given this clear statement of legislative intent, I do not believe any technical or conforming amendment is necessary." 123 Cong. Rec. H11958 (Nov. 1, 1977).

To answer Rep. Ropers' rhetorical question, it would make no sense to create a visibility program which attacks the problem by controlling older sources, but allows new sources simultaneously to create the problem anew. In effect, this would ignore the portion of the national goal calling for the prevention of new impairment.

(12) *Visibility Protection of Non-Mandatory Class I Lands*—The regulations required by Section 169A are limited to mandatory class I Federal areas where visibility is an important value [Section 169A(b)(2)]. In contrast, Section 165(d)(2), which concerns new

sources, applies to Federal lands in all class I areas. As noted above, EPA's PSD regulations also are not limited to "mandatory class I Federal areas," and this aspect of the regulations was not at issue in *Alabama Power*. This means that Federal Land Managers also have an "affirmative responsibility" to protect air quality-related values with respect to Federal lands that are redesignated class I by the States (or Congress). This directive to Federal Land Managers to respect State redesignations is consistent with the general principle in the Act to recognize State's authority to set stricter standards than the Act requires [Sections 116, 164].

The legislative history supports this interpretation. The summary and the discussion of Section 165(d) in the Senate Report express no intention to limit the air quality-related values test to mandatory class I Federal areas, but instead consistently refer to "class I areas." S. Rep. No. 95–294, supra, at 35–36. The Conference Report says flatly that the "air quality-related values test, including visibility, is applied to sources affecting class I areas" [H. Rep. No. 95–564, 95th Cong., 1st Sess. 153 (1977)]. Statements by conferees during House debate on the Conference Report corroborate this construction [123 Cong. Rec. H866], H8660 (daily ed. August 4, 1977)].

Section 165(d) does not, however, apply to redesignations of reservation land to class I by Indian tribes. This is because Indian land is not Federal land, and Indian tribes are not Federal Land Managers. The Act treats separately lands within the boundaries of Indian reservations and lands subject to the jurisdiction of Federal Land Managers.

It is the "Federal Land Manager * * * charged with direct responsibility for management of any lands within a class I area" that Section 165(d)(2) gives an "affirmative responsibility to protect the air quality-related values (including visibility) of any such lands within a class I area." Section 302(i) defines "Federal Land Managers" as, "with respect to any lands in the United States, the Secretary of the department with authority over such lands." This definition dropped the language from the Senate bill which included as Federal Land Managers "Indian tribes which have legal jurisdiction over tribal lands" [S. 252, 95th Cong., 1st Sess. Section 6 (May 10, 1977)]. This does not appear to have been inadvertent, since the Conference Report states the Federal Land Manager is "the Secretary of the Department which has the authority over any specific *Federal land*" (emphasis added) [H. Rep. No. 95–564, 95th Cong., 1st Sess. 172 (1977). Thus, Indian tribes are not Federal Land Managers.

As for the term "Federal land," Congress intended it to "hold its traditional context, and impl[y] no new departure from definitions or systems of classifying Federal lands and land-related rights" [S. Rep. No. 95–127, supra, at 34]. The traditional position of the Department of the Interior has been that lands within lands within Indain reservations are not Federal lands. There is, therefore, no Federal Land Manager to be charged with the "affirmative responsibility" of protecting under Section 165(d) Indian Lands redesignated class I. This interpretation is consistent with Part C of the Act which treats Indian lands uniquely and sets out in Section 164(e) a mechanism for protection of the air quality-related values of Indian lands affected by a redesignation.

(13) *National Emission Standards for Visibility*—One commenter suggested that the agency establish uniform national emission standards for the major stationary sources, but this would violate the intent of Congress which, in regard to the determination of BART, is clearly stated in Section 169A(b)(2)(A): "each major stationary source * * * shall procure, install, and operate, as expeditiously as practicable (and maintain thereafter) the best available retrofit technology, *as determined by the State*" (emphasis added). Section 169A(b) requires BART for large fossil-fuel fired power plants (750 MW) to "be determined pursuant to guidelines promulgated by the Administrator * * *" However, the only general authority of the administrator to determine BART for specific sources is for plans promulgated by the Administrator where the State has failed to fulfill the requirements of the Act. The Bart considerations include available technology, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any existing pollution control technology in use at the sources, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. Each of these considerations is source-specific and, therefore, BART must be decided on an individual source-by-source basis. Indeed, the conference committee specifically eliminated the regulations and Federal guidelines for determining this technology required by the House passed bill for determining BART except for fossil-fuel fired generating power plants having a total generating capacity in excess of 750 megawatts [H. Rep. No. 95–564, Supra, at 155]. The BART guideline for these large power plants is available for public review and comment (See Document Availability). Commenters should recognize that the retrofit of control technology is usually much more expensive than the incorporation of similar technology during construction of a new source. The Agency particularly solicits all available factual information on the cost of retrofitting control technology on existing large power plants.

(14) *Baseline*—In the ANPR, EPA introduced the term "baseline," stating that it might be useful in defining certain other terms used in the visibility program. The ANPR did note, however, that both of the contemplated definitions of "baseline" had drawbacks. Today's proposal does not use the term. EPA believes its use, as indicated by the comments received, would lead to confusion.

(15) *Plume blight*—Fifteen commenters expressed opinions on the definitions of plume blight and regional haze presented in the ANPR. EPA's intent in the ANPR was to focus on clearly definable cases of visibility impairment for purposes of Phase I regulations. The comments indicated that the term "plume blight" caused some confusion. Therefore, the Agency is defining the scope of the Phase I regulations by the term "reasonably attributable," which is defined as attributable to a single source or group of sources by visual observation or other monitoring technique. The key distinction between this Phase I definition and future phases is by what means a source can be identified. Most sources which contribute to long-range transport visibility impacts cannot be adequately assessed for their impacts on such impairment at present. As mentioned previously, these forms of impairment will be dealt with in future phases of the program.

One commenter felt water vapor should not be considered as visibility impairment. EPA agrees with this assessment. Water vapor plumes are generally confined to an area near the source and should not have an impact on visibility in a mandatory class I Federal area. However, there are cases in which the steam from an industrial process combines with other substances such as SO_2 or NO_2. This is not considered water vapor by the Agency and could be identified as visibility impairment.

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Part VIII

Department of Transportation

Federal Aviation Administration

Revision of Airport Aid Program Requirements

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 152

[Docket No. 19430; Amdt. No. 152-10]

Revision of Airport Aid Program Requirements

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final Rule.

SUMMARY: This amendment adopts revisions to the rules pertaining to the Airport Aid Program for airport development and planning grant projects. These revisions update current requirements and eliminate certain provisions that, based on the FAA's continuing review of the program, are considered unnecessary. This action is taken by the FAA in an effort to simplify the grant process.

EFFECTIVE DATE: May 22, 1980.

FOR FURTHER INFORMATION CONTACT: Peter T. Gourdouros (APP-510), Office of Airport Planning and Programming, 800 Independence Avenue, SW., Washington, DC 20591, telephone (202) 426-3050.

SUPPLEMENTARY INFORMATION:

A. Background

Interested persons have been afforded an opportunity to participate in the making of this final rule by a notice of proposed rule making (Notice No. 79-14) issued on August 2, 1979, and published in the **Federal Register** on August 9, 1979 (44 FR 46858). Due consideration has been given to all comments received in response to the notice.

Notice 79-14 proposed to amend Part 152, Airport Aid Program, of the Federal Aviation Regulations to provide regulations that are easier to understand and less of a burden on the sponsor or planning agency seeking assistance. The proposed changes were based on the FAA's continuing review of the program, and they implement the President's direction to simplify regulatory procedures, as expressed in Executive Order 12044, Improving Government Regulations (43 FR 12661; March 24, 1978). The Executive Order requires that regulations be as simple and clear as possible, and that they achieve legislative goals effectively and efficiently. In addition, the order requires that regulations impose no unnecessary burdens on the economy, on individuals, on public or private organizations, or on State or local governments.

In order to achieve these goals, the FAA made a comprehensive review of all provisions of Part 152. Wherever possible, this amendment simplifies these requirements, and deletes redundant and unnecessary material. As a result, the number of regulatory sections has been reduced from 72 to 41, and, even with the addition of a new appendix, the number of appendices has been reduced from 13 to 4.

Part 152 has been simplified and updated in the following ways: (1) By deleting discussion of FAA policy and procedures that do not impose a requirement on the sponsor or planning agency, and publishing them separately; (2) by deleting explanatory and descriptive material, including some unnecessary definitions, and making them available in advisory publications; (3) by removing lengthy technical requirements and incorporating them by reference in Part 152; (4) by omitting references to out-of-date provisions and revising the part to incorporate changed requirements of statutes other than the Airport and Airway Development Act of 1970 (AADA); (5) by consolidating certain provisions, eliminating redundant provisions and reorganizing the entire part on a chronological basis; (6) by revising the part to reflect certain changes already made in the Airport Aid Program as a result of changes in the AADA; (7) by adding a new appendix that publishes the assurances made by the applicant for an airport development grant or an airport planning grant at the time of application; (8) by reducing the number of requirements imposed on applicants to the extent that it is practicable and consistent with the FAA's responsibilities under the AADA; and (9) by deleting certain appendices that set out the requirements of other Federal agencies with respect to the administration of Federal grant programs and replacing them with references to those requirements.

B. Comments

The FAA received 8 public comments in response to Notice 79-14, all of which favored the adoption of the revised part. Comments stated that they expected the revised rule to "streamline the application process and lessen our paperwork burdens" and "greatly increase a sponsor's ability to use and understand Part 152."

Project Eligibility. Some commenters objected to proposed § 152.107, which requires that a project for airport development must involve more than $25,000 to be eligible for consideration. For a number of reasons the commenters would prefer that there be a lower minimum or none at all. However, this minimum amount was proposed to encourage sponsors to include all eligible airport development items within a single grant application, rather than filing separate applications for each eligible item. This is intended to reduce administrative costs which could meet or exceed the amount of U.S. funds approved for a small project. It should also be noted that almost all recent grant applications have been for projects in excess of $25,000, and that the rule does allow the Administrator to accept applications for projects of a smaller amount when circumstances warrant it.

Unified Planning Work Program. One commenter objected to proposed § 152.109(a)(4) that requires incorporation of proposed airport master planning projects, determined to have areawide significance, into a unified planning work program. The commenter contended that this would inject areawide agencies with no implementing powers into the planning process, thus making planning ineffective.

The intent of this incorporation is to improve coordination between areawide transportation planning and planning at individual airports. The unified planning work program serves as the vehicle for ensuring adequate consideration of airport development in relation to ground transportation systems. For this reason the rule has been adopted as proposed.

New Structures. Another commenter suggested that proposed § 152.203 should be revised to permit reimbursement for the cost of a new structure, when it would be less than the cost of removal or relocation of an existing building. However, expenditure of funds for the constuction of any building is prohibited by the AADA, except where the act specificially authorizes it.

New Legislation. Some commenters suggested that the revision of Part 152 be delayed until new legislation is enacted. Although the Airport and Airway Development Act of 1970 expires on September 30, 1980, a significant portion (approximately $400,000,000) of the fiscal year 1980 authorization ($640,000,000) will not be obligated until the fourth quarter of the fiscal year. Accordingly, a majority of the 1980 grants will be issued under the revised regulations, providing experience with, among other things, its waiver, exemption, and certification provisions. Experience with revised Part 152 will provide an important bridge to new regulations implementing post-1980 legislation.

C. Changes in the Final Rule

Some changes have been made in the rule as adopted based on comments received and further consideration by the FAA. These changes are discussed below.

§ 152.3 Definition of Audit.

The definition of the term "audit" in proposed § 152.3 has been revised to incorporate the requirements of Attachment P of Office of Management and Budget Circular (OMB) A–102 (44 FR 60958). That attachment sets forth uniform administrative audit requirements for federal grants-in-aid to state and local governments.

§ 152.5 Exemptions.

Section 152.5, as adopted, provides for the required publication of a summary of a grant or denial of a petition for exemption in the **Federal Register.** This publication provision parallels that of § 11.27 of the Federal Aviation Regulations (14 CFR 11.27), which provides procedures for processing petitions for exemption from Federal Aviation Regulations other than Part 152. However, since exemptions under Part 152 are processed by regional offices and basically concern local situations which are of limited interest to the general public, publication of the petition for exemption itself has not been provided for.

§§ 152.103 and 152.105 Eligible Sponsors and Planning Agencies.

Sections 152.103 and 152.105 have been corrected to provide that applicants for airport development projects and for airport master planning grants must be public agencies as required by the Airport and Airway Development Act of 1970.

§ 152.209 Withholding of Payment.

In accordance with OMB Circular A–102, § 152.209(g) has been expanded to provide for withholding payment to the sponsor or planning agency when it has withheld payment to a contractor to ensure satisfactory completion of work. These amounts will be paid to the sponsor or planning agency when it makes final payment, including the amount it withheld from the contractor.

§§ 152.111 and 152.113 Civil Rights Assurance.

On February 7, 1980, the FAA adopted a new Subpart E, Nondiscrimination in Airport Aid Program, to Part 152 (45 FR 10184; February 14, 1980). That new subpart is unaffected by this amendment, but has not been republished in this issue of the **Federal Register.**

Sections 152.111(f)(7) and 152.113(b)(6) have been expanded to require submission of the civil rights assurances required by § 152.405 of new Subpart E with each application.

§ 152.111 Compliance with Environmental Order.

Proposed § 152.111 would have required that a sponsor's application or preapplication for Federal assistance be accompanied by an environmental impact assessment report that complies with the applicable DOT and FAA environmental orders. In the rule, as adopted, the reference to the applicable FAA order has been updated to refer to FAA Order 1050.1C (45 FR 2244; January 10, 1980). The reference to the DOT order has been eliminated since the FAA order incorporates the applicable DOT requirements, and compliance with it results in compliance with the DOT order. Also the terminology used in the rule has been updated, and the rule has been revised to make it clear that an environmental assessment must be submitted only if one is required by the FAA order.

The FAA is currently issuing an Airport Environmental Handbook that contains detailed guidance for considering environmental impacts of Federal airport actions. In the near future, this handbook will be incorporated by reference into Part 152, and compliance with it will be required for airport development projects.

§ 152.115 Reduction of U.S. Share.

A new paragraph has been added to § 152.115 to provide that when project work for which costs have been incurred is deleted from a grant agreement, the Administrator reduces the maximum obligation of the United States proportionately, based on the cost or value of the deleted work as shown on the project application. This is required by the FAA's contract regulations which reflect the general rule of law that the Government does not have authority to waive or surrender gratuitously any vested right or interest acquired by contract.

§ 152.205 United States Share of Project Costs.

Section 152.205 has been revised to implement the Aviation Safety and Noise Abatement Act of 1979 (Public Law 96–193; February 18, 1980) which raises the United States share of allowable project costs to 90 percent for grants made from funds for fiscal year 1980.

§ 152.305 Accounting Records.

In lieu of the list in proposed § 152.305(a) of cost classifications for the sponsor's accounting records, the rule, as adopted, merely references the classifications set forth in Standard Form 271. This form, entitled "Outlay Report and Request for Reimbursement for Construction Programs," is published in OMB Circular A–102 (42 FR 45841), and is used by the sponsor in requesting reimbursement under its grant.

Appendices

The titles of Appendices A and C have been revised to make clear their content and distinguish them from one another.

Changes have been made in proposed Appendix C to reflect the revision of Attachment O to OMB Circular A–102 (44 FR 47874; August 15, 1979). The revised Attachment O provides for, and encourages, grantor agency review of grantee procurement systems.

Attachment O provides that, when a grantee procurement system meets the standards of Attachment O, it may be certified by the grantor agency, thus reducing the need for individual pre-award contract reviews by the grantor agency. Section 1 of Appendix C, as adopted, provides for reviews of this kind by the FAA, when funding and time permits. To be consistent with this review procedure, the individual pre-award review requirements for contracts in proposed section 13 of the appendix have also been revised as provided in Attachment O.

Proposed section 13 of Appendix C provided that the allowable project costs of the work, on which the Federal participation is computed, may not be more than the bid of the lowest responsible bidder. That provision has been removed because it would be inconsistent with the national policy to award a fair share of contracts to small and minority business firms, as expressed in section 9 of Attachment O of OMB Circular A–102 (44 FR 47875).

A new paragraph 15 has been added to Appendix C to require compliance with the equal employment opportunity requirements of the Department of Labor. This new paragraph updates and replaces the requirements of former § 152.61. Paragraph 15 has been renumbered as 16.

Assurances

The assurances contained in Appendix D which each sponsor or planning agency must submit with its application have been updated to reflect those currently in use.

Assurance 7, Access for the Handicapped, has been revised to require compliance with Part 27, Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefitting from Federal Financial Assistance, which was adopted by the Department of Transportation on May 25, 1979 (49 FR 31442; 14 CFR Part 27).

Assurance 17 has been revised to provide that the 20 year limitation on the effectiveness of the assurances does not apply to those affecting the use of real property acquired with Federal funds. This is consistent with attachments N, Property Management Standards, of OMB Circular A-102 which requires that the grantee use that property for the authorized purpose of the original grant as long as it is needed.

D. Economic Impact

While the actual cost benefits of this revision of Part 152 cannot be readily established, the benefits to sponsors and planning agencies will be tangible, and the government sector will benefit from a more efficient program. Simplification and clarification of the part, as well as improvement of its organization, will yield tangible administrative benefits to applicants and grantees.

The updating of some provisions will result in minor administrative costs to the applicant, but the over-all impact will be important savings in time and money.

Savings will result from no longer requiring the submission of certain documentation. Under the revised part, preapplications are no longer required for projects under $100,000. The Administrator may waive an application requirement where an item is already available to the FAA or where a substitute should be accepted. The amendment provides for the acceptance of the sponsor's certification that it has complied with a statutory or administrative requirement, in lieu of demonstrating compliance.

Sponsors will benefit from the issuance of exemptions from requirements of Part 152 where conditions beyond a sponsor's control make it difficult for it to comply with specific requirements.

E. Adoption Date

Because of the benefits to sponsors and planning agencies that will result from this revision of Part 152, good cause exists for making this amendment effective on publication in the **Federal Register** (May 22, 1980).

F. The Amendment

Accordingly, Part 152 of the Federal Aviation Regulations (14 CFR Part 152) is amended, effective May 22, 1980, by revising Subparts A, B, C, and D, and by adding a new Subpart F to read as follows:

PART 152—AIRPORT AID PROGRAM

Subpart A—General

Sec.
152.1 Applicability.
152.3 Definitions.
152.5 Exemptions.
152.7 Certifications.
152.9 Forms.
152.11 Incorporation by reference.

Subpart B—Eligibility Requirements and Application Procedures

152.101 Applicability.
152.103 Sponsors: airport development.
152.105 Sponsors and planning agencies: airport planning.
152.107 Project eligibility: airport development.
152.109 Project eligibility: airport planning.
152.111 Application requirements: airport development.
152.113 Application requirements: airport planning.
152.115 Grant agreement: offer, acceptance and amendment.
152.117 Public hearings.
152.119 Contract requirements and procurement standards.

Subpart C—Funding of Approved Projects

152.203 Allowable project costs.
152.205 United States share of project costs.
152.207 Proceeds from disposition of land.
152.209 Grant payments: general.
152.211 Grant payments: land acquisition.
152.213 Grant closeout requirements.

Subpart D—Accounting and Reporting Requirements

152.301 Applicability.
152.303 Financial management system.
152.305 Accounting records.
152.307 Retention of records.
152.309 Availability of sponsor's records.
152.311 Availability of contractor's records.
152.313 Property management standards.
152.315 Reporting on accrual basis.
152.317 Report of Federal cash transactions.
152.319 Monitoring and reporting of program performance.
152.321 Notice of delay or acceleration.
152.323 Budget revision: airport development.
152.325 Financial status report: airport planning.

Subpart E—Nondiscrimination in Airport Aid Program

* * * * *

Subpart F—Suspension and Termination of Grants

152.501 Applicability.
152.503 Suspension of grant.
152.505 Termination for cause.
152.507 Termination for convenience.
152.509 Request for reconsideration.
Appendix A—Contract Provisions and Labor Requirements
Appendix B—Advisory Circulars
Appendix C—Contracting Requirements
Appendix D—Assurances

Authority: Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 *et seq.*); sec. 1.47(f)(1) Regulations of the Office of the Secretary of Transportation (49 CFR 1.47(f)(1)).

Subpart A—General

§ 152.1 Applicability.

This part applies to airport planning and development under the Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 *et seq.*).

§ 152.3 Definitions.

The following are definitions of terms used throughout this part:

"AADA" means the Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 *et seq.*).

"Air carrier airport" means—

(1) An existing public airport regularly served, or a new public airport that the Administrator determines will be regularly served, by an air carrier, other than a charter air carrier, certificated by the Civil Aeronautics Board under section 401 of the Federal Aviation Act of 1958; and

(2) A commuter service airport.

"Airport" means—

(1) Any area of land or water that is used, or intended for use, for the landing and takeoff of aircraft;

(2) Any appurtenant areas that are used, or intended for use, for airport buildings, other airport facilities, or rights-of-way; and

(3) All airport buildings and facilities located on the areas specified in this definition.

"Airport development" means—

(1) Any work involved in constructing, improving, or repairing a public airport or portion thereof, including the removal, lowering, relocation, and marking and lighting or airport hazards, and including navigation aids used by aircraft landing at, or taking off from, a public airport, and including safety equipment required by rule or regulation for certification of the airport under section 612 of the Federal Aviation Act of 1958, and security equipment required of the sponsor by the FAA by rule or regulation for the safety and security of persons or property on the airport, and including snow removal equipment, and including the purchase of noise suppressing equipment, the construction of physical barriers, and landscaping for the purpose of diminishing the effect of aircraft noise on any area adjacent to a public airport.

(2) Any acquisition of land or of any interest therein, or of any easement through or other interest in airspace, including land for future airport development, which is necessary to permit any such work or to remove or mitigate or prevent or limit the establishment of, airport hazards; and

(3) Any acquisition of land or of any interest therein necessary to insure that such land is used only for purposes which are compatible with the noise levels of the operation of a public airport.

"Airport hazard" means any structure or object of natural growth located on or in the vicinity of a public airport, or any use of land near a public airport, that—

(1) Obstructs the airspace required for the flight of aircraft landing or taking off at the airport; or

(2) Is otherwise hazardous to aircraft landing or taking off at the airport.

"Airport layout plan" means a plan for the layout of an airport, showing existing and proposed airport facilities.

"Airport master planning" means the development for planning purposes of information and guidance to determine the extent, type, and nature of development needed at a specific airport.

"Airport system planning" means the development for planning purposes of information and guidance to determine the extent, type, nature, location, and timing of airport development needed in a specific area to establish a viable and balanced system of public airports.

"Audit" means the examination and verification of part or all of the documentary evidence supporting an item of project cost in accordance with Attachment P of Office of Management and Budget Circular A-102 (44 FR 60958).

"Commuter service airport" means an air carrier airport—

(1) That is not served by an air carrier certificated under section 401 of the Federal Aviation Act of 1958;

(2) That is regularly served by one or more air carriers operating under an exemption granted by the Civil Aeronautics Board from section 401(a) of the Federal Aviation Act of 1958; and

(3) At which not less than 2,500 passengers were enplaned during the preceding calendar year by air carriers operating under an exemption from section 401(a).

"Force account" means—

(1) The sponsor's or planning agency's own labor force; or

(2) The labor force of another public agency acting as an agent of the sponsor or planning agency.

"General aviation airport" means a public airport other than an air carrier airport.

"Landing area" means an area used, or intended to be used, for the landing, takeoff, or surface maneuvering of aircraft.

"NASP" means the National Airport System Plan.

"National Airport System Plan" means the plan for the development of public airports in the United States formulated by the Administrator under section 12 of the AADA.

"Nonrevenue producing public-use areas" means areas that are directly related to the movement of passengers and baggage in air commerce within the boundaries of the airport.

"Passengers enplaned" means—

(1) United States domestic, territorial, and international revenue passenger enplanements in scheduled and nonscheduled service of air carriers; and

(2) Revenue passenger enplanements by foreign air carriers in intrastate and interstate commerce.

"Planning agency" means a planning agency designated by the Administrator that is authorized by the laws of a State, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, or Guam, or by the laws of a political subdivision of any of those entities, to engage in areawide planning for the areas in which assistance under this part is to be used.

"Project" means a project for the accomplishment of airport development, airport master planning, or airport system planning.

"Project costs" means any costs involved in accomplishing a project.

"Project formulation costs" means, with respect to projects for airport development, any necessary costs of formulating a project including—

(1) The costs of field surveys and the preparation of plans and specifications;

(2) The acquisition of land or interests in land, or easement through or other interests in airspace; and

(3) Any necessary administrative or other incidental costs incurred by the sponsor specifically in connection with the accomplishment of a project for airport development, that would not have been incurred otherwise.

"Public agency" means—

(1) A state, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, the Government of the Northern Marianas, Guam, or any agency of those entities;

(2) A municipality or other political subdivision;

(3) A tax-supported organization; or

(4) An Indian tribe or pueblo.

"Public airport" means any airport that—

(1) Is used, or intended to be used, for public purposes;

(2) Is under the control of a public agency; and

(3) Has a property interest satisfactory to the Administrator in the landing area.

"Reliever airport" means a general aviation airport designated by the Administrator as having the primary function of relieving congestion at an air carrier airport by diverting from that airport general aviation traffic.

"Runway Clear Zone" means an area at ground level underlying a portion of the approach surface specified in the standards incorporated into this part by § 152.11.

"Satisfactory property interest" means—

(1) Title free and clear of any reversionary interest, lien, easement, lease, or other encumbrance that, in the opinion of the Administrator would—

(i) Create an undue risk that it might deprive the sponsor of possession or control;

(ii) Interfere with the use of the airport for public airport purposes; or

(iii) Make it impossible for the sponsor to carry out the agreements and convenants in its grant application;

(2) Unless a shorter term is authorized by the Administrator, a lease of not less than 20 years granted to the sponsor by another public agency, or the United States, that has title as described in paragraph (1) of this definition, on terms that the Administrator considers satisfactory;

(3) In the case of an off-airport area, title or an agreement, easement, leasehold or other right or property interest that, in the Administrator's opinion, provides reasonable assurance that the sponsor will not be deprived of its right to use the land for the intended purpose during the period necessary to meet the requirements of the grant agreement; or

(4) In the case of a runway clear zone, an easement or a covenant running with the land, giving the airport operator or owner enough control to rid the clear zone of all airport hazards and prevent the creation of future airport hazards.

"Sponsor" means any public agency that, whether individually or jointly with one or more other public agencies, submits to the Administrator, in accordance with this part, an application for financial assistance.

"Stage development" means airport development accomplished under stage construction over not less than two years where the sponsor assures that

any development not funded under the initial grant agreement will be completed with or without Federal funds.

"State" means a State of the United States or the District of Columbia.

"Terminal development" means airport development in the nonrevenue producing public-use areas which are associated with the terminal and which are directly related to the movement of passengers and baggage in air commerce within the boundaries of the airport, including, but not limited to, vehicles for the movement of passengers between terminal facilities and aircraft.

"Unified Planning Work Program" means a single document prepared by a local areawide planning agency that identifies all transportation and related planning activities that will be undertaken within the metropolitan area during a one-year or two-year period.

§ 152.5 Exemptions.

(a) Except as provided in paragraph (b) of this section, any interested person may petition the Regional Director concerned for a temporary or permanent exemption from any requirement of this part.

(b) The Regional Director concerned does not issue an exemption from any rule of this part if the grant of exemption would be inconsistent with a specific provision of, or the purpose of, the AADA, or any other applicable Federal law.

(c) Each petition filed under this section must—

(1) Unless otherwise authorized by the Regional Director concerned, be submitted not less than 60 days before the proposed effective date of the exemption;

(2) Be submitted in duplicate to the FAA Regional Office or Airports District Office having jurisdiction over the area in which the airport is located;

(3) Contain the text or substance of the rule from which the exemption is sought;

(4) Explain the nature and extent of the relief sought; and

(5) Contain any information, views, or arguments in support of the exemption.

(d) The Regional Director concerned either grants or denies the exemption and notifies the petitioner of the decision. The FAA publishes a summary of the grant or denial of petition for exemption in the **Federal Register.**

The summary includes—

(1) The docket number of the petition;

(2) The name of the petitoner;

(3) A citation of each rule from which relief is requested;

(4) A brief description of the general nature of the relief requested; and

(5) The disposition of the petition.

(e) Official FAA records, including grants and denials of exemptions, relating to petitions for exemption are maintained in current docket form in the Office of the Regional Counsel for the region concerned.

(f) Any interested person may—

(1) Examine any docketed material at the Office of the Regional Counsel, at any time after the docket is established, except material that is ordered withheld from the public under section 1104 of the Federal Aviation Act of 1958 (49 U.S.C. 1504); and

(2) Obtain a photostatic or similar copy of docketed material upon paying the same fee as that prescribed in 49 CFR Part 7.

§ 152.7 Certifications.

(a) Subject to such terms and conditions as the Administrator may prescribe, a sponsor or a planning agency may submit, with respect to any provision of this part implementing a statutory or administrative requirement imposed on the sponsor or planning agency under the AADA, a certification that the sponsor or planning agency has complied or will comply with the provision, instead of making the showing required.

(b) The Administrator exercises discretion in determining whether to accept a certification.

(c) Acceptance by the Administrator of a certification from a sponsor or planning agency may be rescinded by the Administrator at any time if, in the Administrator's opinion, it is necessary to do so.

(d) If the Administrator determines that it is necessary, the sponsor or planning agency, on request, shall show compliance with any requirement for which a certification was accepted.

§ 152.9 Forms.

Any form needed to comply with this part may be obtained at any FAA Regional Office or Airports District Office.

§ 152.11 Incorporation by reference.

(a) *Mandatory standards.* The advisory circulars listed in Appendix B to this part are incorporated into this part by reference. The Director, Office of Airport Standards, determines the scope and content of the technical standards to be included in each advisory circular in Appendix B, and may add to, or delete from, Appendix B any advisory circular or part thereof. Except as provided in paragraph (c) of this section, these guidelines are mandatory standards.

(b) *Modification of standards.* When necessary to meet local conditions, any technical standard set forth in Appendix B may be modified for individual projects, if it is determined that the modifications will provide an acceptable level of safety, economy, durability, and workmanship. The determination and modification may be made by the Director, Office of Airport Standards, or the appropriate Regional Director, in instances where the authority has not been specifically reserved by the Director, Office of Airport Standards.

(c) *State standards.* Standards established by a state for airport development at general aviation airports in the state may be the standards applicable to those airports when they have been approved by the Director, Office of Airport Standards, or the appropriate Regional Director, in instances where approval authority has not been specifically reserved by the Director, Office of Airport Standards.

(d) *Availability of advisory circulars.* The advisory circulars listed in Appendix B may be inspected and copied at any FAA Regional Office or Airports District Office. Copies of the circulars that are available free of charge may be obtained from any of those offices or from the FAA Distribution Unit, M–443.1, Washington, D.C. 20590. Copies of the circulars that are for sale may be bought from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Subpart B—Eligibility Requirements and Application Procedures

§ 152.101 Applicability.

This subpart contains requirements and application procedures applicable to airport development and planning projects.

§ 152.103 Sponsors: airport development.

(a) To be eligible to apply for a project for airport development with respect to a particular airport the following requirements must be met:

(1) Each sponsor must be a public agency authorized by law to submit the project application;

(2) If a sponsor is the holder of an airport operating certificate issued for the airport under Part 139 of this chapter, it must be in compliance with the requirements of Part 139.

(3) When any of the the following agreements is applicable to an airport which the sponsor owns or controls, the sponsor must have complied with the agreement, or show to the satisfaction of the Administrator that it will comply or,

for reasons beyond its control, cannot comply with the agreement:

(i) Each grant agreement made with it under the Federal Airport Act (49 U.S.C. 1101 *et seq.*), or the AADA.

(ii) Each convenant in a conveyance to it under section 16 of the Federal Airport Act or section 23 of the AADA.

(iii) Each convenant in a conveyance to it of surplus airport property under section 13(a) of the Surplus Property Act (50 U.S.C. App 1622(g)) or under Regulation 16 of the War Assets Administration.

(4) The sponsor, in the case of a single sponsor, or one or more of the cosponsors must have, or be able to obtain—

(i) Funds to pay all estimated costs of the project that are not to be born by the United States; and

(ii) Satisfactory property interests in the lands to be developed or used as part of, or in connection with, the airport as it will be after the project is completed.

(b) Another public agency may act as agent of the public agency that is to own and operate the airport, for the purpose of channeling grant funds in accordance with state or local law, without becoming a sponsor.

§ 152.105 Sponsors and planning agencies: airport planning.

(a) To be eligible to apply for a project for airport planning—

(1) If the project is for airport master planning—

(i) Each sponsor must be a public agency and meet the requirements of § 152.103(a)(3); and

(ii) The sponsor, in the case of a single sponsor, or one or more cosponsors must be legally able to implement the planning, within the existing or proposed airport boundaries, that results from the project study.

(2) If the project is for airport system planning, each sponsor must be a planning agency.

(b) Another public agency or planning agency may act as agent of another public agency or planning agency, for the purpose of channeling grant funds in accordance with state or local law, without becoming a sponsor.

§ 152.107 Project eligibility: airport development.

(a) Except in the case of approved stage development, each project for airport development must provide for—

(1) Development of an airport or unit of an airport that is safe, useful, and usable; or,

(2) An additional facility that increases the safety, usefulness, and usability of an airport.

(b) Unless otherwise authorized by the Administrator, a project for airport development must involve more than $25,000 in United States funds.

(c) The development included in a project for airport development must—

(1) In the opinion of the Administrator, be "airport development" as defined in § 152.3;

(2) Be identified as airport development in the mandatory standards incorporated into this part by § 152.11; and

(3) Be described in an approved airport layout plan.

(d) The airport involved in a project for airport development must be included in the current NASP.

(e) In complying with paragraph (a) of this section, the sponsor must—

(1) Own, acquire, or agree to acquire control over, or a property interest in, runway clear zones that the Administrator considers adequate; and

(2) Provide for approach and runway lighting systems satisfactory to the Administrator.

§ 152.109 Project eligibility: airport planning.

(a) *Airport master planning.* A proposed project for airport master planning is not approved unless—

(1) The location of the existing or proposed airport is included in the current NASP;

(2) In the opinion of the Administrator, the proposed planning would promote the effective location of public airports and the development of an adequate NASP;

(3) The project is airport master planning as defined in § 152.3;

(4) If the project has been determined to have areawide significance by an appropriate areawide agency, it has been incorporated into a unified planning work program; and

(5) In the case of a proposed project for airport master planning in a large or medium air traffic hub, in the opinion of the Administrator—

(i) There is an appropriate system plan identifying the need for the airport;

(ii) The absence of a system plan is due to the failure of the responsible planning agency to proceed with its preparation; or

(iii) An existing system plan is not acceptable.

(b) *Airport system planning.* A proposed project for airport system planning is not approved unless—

(1) In the opinion of the Administrator, the project promotes the effective location of public airports;

(2) In the opinion of the Administrator, the project promotes the development of an adequate NASP;

(3) The project is airport system planning as defined in § 152.3; and

(4) When the project encompasses a metropolitan area that includes a large or medium hub airport, the project is incorporated in a unified planning work program.

§ 152.111 Application requirements: airport development.

(a) An eligible sponsor that desires to obtain Federal aid for eligible airport development must apply to the FAA in accordance with this section. The sponsor must apply on a form and in a manner prescribed by the Administrator, through the FAA Airports District Office or Airports Field Office having jurisdiction over the area where the sponsor is located or, where there is no such office, the Regional Office having that jurisdiction.

(b) *Preapplication for Federal assistance.* A preapplication for Federal assistance must be submitted unless—

(1) The Federal fund request is for $100,000 or less; or,

(2) The project does not include construction, land acquisition, or land improvement.

(c) Unless otherwise authorized by the Administrator, the preapplication required by paragraph (b) of this section must be accompanied by the following:

(1) A list of the items of airport development requested for programming, together with an itemized estimated cost of the work involved.

(2) A sketch or sketches of the airport layout indicating the location for each item of work proposed, using the same item numbers used in the list required by paragraph (c)(1) of this section.

(3) If the proposed project involves the displacement of persons or the acquisition of real property, the assurances required by §§ 25.57 and 25.59, as applicable, of the Regulations of the Office of the Secretary of Transportation (49 CFR 25.57 and 25.59), whether or not remimbursement is being requested for the costs of displacement or real property acquisition.

(4) Any comments or statements required by Special Federal Aviation Regulation No. 35, FAA Interim Procedures Implementing OMB Circular A-95, with a showing that they have been considered by the sponsor.

(5) If the proposed development involves the construction of eligible airport buildings or the acquisition of eligible fixed equipment to be contained in those buildings, a statement whether the proposed development will be in an area of the community that has been identified by the Department of Housing and Urban Development as an area of special flood hazard, as defined in the

Flood Disaster Protection Act of 1973 (42 U.S.C. 4002 *et seq.*).

(6) If the proposed development is in an area of special flood hazard, a statement whether the community is participating in the National Flood Insurance Program (42 U.S.C. 4011 *et seq.*).

(7) The sponsor's environmental assessment prepared in conformance with Appendix 6 of Federal Aviation Administration "Policies and Procedures for Considering Environmental Impacts" (FAA Order 1050.1C, Appendix 6; 45 FR 2244, January 10, 1980) if an assessment is required by the order.

(8) A showing that the sponsor has complied with the public hearing requirements in § 152.117.

(9) In the case of a proposed new airport serving any area that does not include a metropolitan area, a showing that each community in which the proposed airport is to be located has approved the proposed airport site through the body having general legislative jurisdiction over it.

(10) In the case of a proposed project at an air carrier airport, a statement that the sponsor, in making the decision to undertake the project, has consulted with air carriers using the airport.

(11) In the case of a proposed project at a general aviation airport, a statement that the sponsor, in making the decision to undertake the project, has consulted with fixed-base operators using the airport.

(12) In the case of terminal development, a certification that the airport has, or will have, all safety and security equipment required for certification of the airport under Part 139 and has provided, or will provide, for access to the passenger enplaning and deplaning area to passengers enplaning or deplaning from aircraft other than air carrier aircraft.

(d) *Allocation of funds.* If the proposed project for airport development is selected by the Administrator for inclusion in a program, a tentative allocation of funds is made for the project and the sponsor is notified of the allocation. The tentative allocation may be withdrawn if the sponsor does not submit a project application in accordance with paragraph (f) of this section.

(e) *Application for Federal assistance.* As soon as practicable after receiving notice of a tentative allocation or, if a preapplication is not required (as provided in paragraph (b) of this section), an application for Federal assistance must be submitted.

(f) Unless otherwise authorized by the Administrator, the application required by paragraph (e) of this section must be accompanied by the following:

(1) When a preapplication has not been previously submitted, the information required by paragraph (c) of this section.

(2) A property map of the airport showing—

(i) the property interests of each sponsor in all the lands to be developed or used as part of, or in connection with, the airport as it will be when the project is completed; and

(ii) all property interests acquired or to be acquired, for which U.S. aid is requested under the project.

(3) With respect to all lands to be developed or used as a part of, or in connection with, the airport (as it will be when the project is completed) in which a satisfactory property interest is not held by a sponsor, a covenant by the sponsor that it will obtain a satisfactory property interest before construction is begun or within a reasonable time if not needed for construction.

(4) If the proposed project involves the displacement of persons, the relocation plan required by § 25.55 of the Regulations of the Office of the Secretary of Transportation.

(5) When the project involves an airport location, a runway location, or a major runway extension, a written certification from the Governor of the state in which the project may be located (or a delegatee), providing reasonable assurance that the project will be located, designed, constructed, and operated so as to comply with applicable air and water quality standards.

(6) A statement whether any building, installation, structure, location, or site of operations to be utilized in the performance of the grant or any contract made pursuant to the grant appears on the list of violating facilities distributed by the Environmental Protection Agency under the provisions of the Clean Air Act and Federal Water Pollution Control Act (40 CFR Part 15).

(7) The assurances on Civil Rights required by § 21.7 of the Regulations of the Office of the Secretary of Transportation (49 CFR 21.7) and § 152.405.

(8) Plans and specifications for the proposed development in accordance with the design and construction standards listed in Appendix B to this part.

(9) The applicable assurances required by Appendix D to this part.

(10) If cosponsors are not willing to assume, jointly and severally, the obligations imposed on them by this part and the grant agreement, a statement satisfactory to the Administrator indicating—

(i) The responsibilities of each sponsor with respect to the accomplishment of the proposed project and the operation and maintenance of the airport;

(ii) The obligations each will assume to the United States; and

(iii) The name of the sponsor or sponsors who will accept, receipt for, and disburse grant payments.

(g) *Additional documentation.* The Administrator may request additional documentation as needed to support specific items of development or to comply with other Federal and local requirements as they pertain to the requested development.

§ 152.113 Application requirements: airport planning.

(a) *Application for Federal assistance.* An eligible sponsor or planning agency that desires to obtain Federal aid for eligible airport master planning or airport system planning must submit an application for Federal assistance, on a form and in a manner prescribed by the Administrator, to the appropriate FAA Airports District Office or Airports Field Office having jurisdiction over the area where the sponsor or planning agency is located or, where there is no such office, the Regional Office having that jurisdiction.

(b) Unless otherwise authorized by the Administrator, the application required by paragraph (a) of this section must be accompanied by the following:

(1) Any comments or statements required by Special Federal Aviation Regulation No. 35, FAA Interim Procedures Implementing OMB Circular A–95.

(2) Budget (project costs) information subdivided into the following functions, as appropriate, and the basis for computation of these costs:

(i) Third party contracts.

(ii) Sponsor force account costs.

(iii) Administrative costs.

(3) A program narrative describing the proposed planning project including—

(i) The objective;

(ii) The results and benefits expected;

(iii) A Work Statement including—

(A) A detailed description of each work element;

(B) A list of each organization, consultant, and key individual who will work on the planning project, and the nature of the contribution of each; and

(C) A proposed schedule of work accomplishment; and

(iv) The geographic location of the airport or the boundaries of the planning area.

(4) If the sponsor proposes to accomplish the project with its own forces or those of another public or planning agency—

(i) An assurance that adequate, competent personnel are available to satisfactorily accomplish the proposed planning project, and

(ii) A description of the qualifications of the key personnel.

(5) If cosponsors are not willing to assume, jointly, and severally, the obligations imposed on them by this part and the grant agreement, a statement satisfactory to the Administrator indicating—

(i) The responsibilities of each sponsor with respect to the accomplishment of the proposed project;

(ii) The obligations each will assume to the United States; and

(iii) The name of the sponsor or sponsors who will accept, receipt for, and disburse grant payments.

(6) The assurances on Civil Rights required by § 21.7 of the Regulations of the Office of the Secretary of Transportation (49 CFR 21.7).

(7) The applicable assurances required by Appendix D of this part.

(c) *Additional documentation.* The Administrator may request additional documentation as needed to support a master plan or system plan, or to comply with other Federal and local requirements as they pertain to the requested plan.

§ 152.115 Grant agreement: offer, acceptance, and amendment.

(a) *Offer.* Upon approving a project for airport development, airport master planning, or airport system planning, the Administrator issues a written offer that sets forth the terms, limitations, and requirements of the proposed agreement.

(b) *Acceptance.* The acceptance of an offer or an amendment to a grant agreement must be in writing. The sponsor's or planning agency's attorney must certify that the acceptance complies with all applicable law, and constitutes a legal and binding obligation of the sponsor or planning agency.

(c) *Amendment: airport development grants.* The maximum obligation of the United States under a grant agreement for an airport development project may be increased by an amendment if—

(1) Except as otherwise provided by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, the maximum obligation of the United States is not increased by more than 10 percent;

(2) Funds are available for the increase;

(3) The sponsor shows that the increase is justified; and

(4) The change does not prejudice the interest of the United States.

(d) *Reduction of U.S. Share: airport development grants.* When project work for which costs have been incurred is deleted from a grant agreement, the Administrator reduces the maximum obligation of the United States proportionately, based on the cost or value of the deleted work as shown on the project application.

(e) *Amendment: airport planning.* A grant agreement for airport planning may be changed if—

(1) The change does not increase the maximum obligation of the United States under the grant agreement; and

(2) The change does not prejudice the interest of the United States.

§ 152.117 Public hearings.

(a) Before submitting a preapplication for Federal assistance for an airport development project involving the location of an airport, an airport runway, or a runway extension, the sponsor must give notice of opportunity for a public hearing, in accordance with paragraph (b) of this section, for the purpose of—

(1) Considering the economic, social, and environmental effects of the location of the airport, the airport runway, or the runway extension; and

(2) Determining the consistency of the location with the goals and objectives of any urban planning that has been carried out by the community.

(b) The notice of opportunity for public hearing must—

(1) Include a concise statement of the proposed development;

(2) Be published in a newspaper of general circulation in the communities in or near which the project may be located;

(3) Provide a minimum of 30 days from the date of the notice for submission of requests for a hearing by persons having an interest in the economic, social, or environmental effects of the project; and

(4) State that a copy is available of the sponsor's environmental assessment, if one is required by Appendix 6 of Federal Aviation Administration "Policies and Procedures for Considering Environmental Impacts" (FAA Order 1050.1C, Appendix 6; 45 FR 2244, January 10, 1980), and will remain available, at the sponsor's place of business for examination by the public for a minimum of 30 days, beginning with the date of the notice, before any hearing held under the notice.

(c) A public hearing must be provided if requested. If a public hearing is to be held, the sponsor must publish a notice of that fact, in the same newspaper in which the notice of opportunity for a hearing was published.

(d) The notice required by paragraph (c) of this section must—

(1) Be published not less than 15 days before the date set for the hearing;

(2) Specify the date, time, and place of the hearings;

(3) Contain a concise description of the proposed project; and

(4) Indicate where and at what time more detailed information may be obtained.

(e) If a public hearing is held, the sponsor must—

(1) Provide the Administrator a summary of the issues raised, the alternatives considered, the conclusion reached, and the reasons for that conclusion; and

(2) If requested by the Administrator before the hearing, prepare a verbatim transcript of the hearing for submission to the Administrator.

(f) If a hearing is not held the sponsor must submit with its preapplication a certification that notice of opportunity for a hearing has been provided in accordance with this section and that no request for a public hearing has been received.

§ 152.119 Contract requirements and procurement standards.

To the extent applicable, all grant agreements, contracts, and subcontracts involving airport development projects or airport planning must be in accordance with the contract requirements in Appendixes A and C, as applicable, and the procurement standards in Attachment O of Office of Management and Budget Circular A-102 (42 FR 45828).

Subpart C—Funding of Approved Projects

§ 152.201 Applicability.

This subpart contains the requirements for funding projects for airport development, airport master planning, and airport system planning.

§ 152.203 Allowable project costs.

(a) *Airport development.* To be an allowable project cost, for the purposes of computing the amount of an airport development grant, an item that is paid or incurred must, in the opinion of the Administrator—

(1) Have been necessary to accomplish airport development in conformity with—

(i) The approved plans and specifications for an approved project; and

(ii) The terms of the grant agreement for the project;

(2) Be reasonable in amount (subject to partial disallowance to the extent the Administrator determines it is unreasonable);

(3) Have been incurred after the date the grant agreement was executed, except that project formulation costs may be allowed even though they were incurred before that date.

(4) Be supported by satisfactory evidence;

(5) Have not been included in an airport planning grant; and

(6) Be a cost determined in accordance with the cost principles for State and local governments in Federal Management Circular 74–4 (39 FR 27133; 43 FR 50977).

(b) *Airport Planning.* To be an allowable project cost, for the purposes of computing the amount of an airport planning grant, an item that is paid or incurred must, in the opinion of the Administrator—

(1) Have been necessary to accomplish airport planning in comformity with an approved project and the terms of the grant agreement for the project;

(2) Be reasonable in amount;

(3) Have been incurred after the date the grant agreement was entered into, except for substantiated and reasonable costs incurred in designing the study effort;

(4) Be supported by satisfactory evidence; and

(5) Be figured in accordance with Federal Management Circular 74–4 (39 FR 27133; 43 FR 50977).

§ 152.205 United States share of project costs.

(a) *Airport development.* Except as provided in paragraphs (b) and (c) of this section, the following is the United States share of the allowable cost of an airport development project approved for the specified year:

(1) 90 percent in the case of grants made from funds for fiscal years 1976, 1977, and 1978, and grants from funds for fiscal year 1980 made after February 17, 1980, for—

(i) Each air carrier airport, other than a commuter service airport, which enplanes less than one quarter of one percent of the total annual passengers enplaned as determined for purposes of making the latest annual apportionment under section 15(a)(3) of the AADA;

(ii) Each commuter service airport; and

(iii) Each general aviation or reliever airport.

(2) 80 percent in the case of grants made from funds for fiscal year 1979 and grants from funds for fiscal year 1980 made before February 18, 1980, for the airports specified in paragraph (a)(1) of this section.

(3) 75 percent in the case of grants made from funds for fiscal years 1976 through 1980 for airports other than those specified in paragraph (a)(1) of this section.

(b) In a State in which the unappropriated and unreserved public lands and nontaxable Indian lands, both individual and tribal, are more than five percent of the total land in that State, the United States' share under paragraph (a) of this section—

(1) Except as provided in paragraph (b)(2) of this section, shall be increased by the smaller of—

(i) 25 percent; or

(ii) A percentage (rounded to the nearest one-tenth of a percent) equal to one-half of the percentage which the area of those lands is of the total land area of the state; and

(2) May not exceed the greater of—

(i) The percentage share determined under paragraph (a) of this section; or

(ii) The percentage share applying on June 30, 1975, as determined under paragraph (b)(1) of this section.

(c) In the case of terminal development, the United States share shall be 50 percent.

(d) *Airport planning.* The United States share of the allowable project costs of an airport planning project shall be—

(1) In the case of an airport master plan, that percent for which a project for airport development at that airport would be eligible;

(2) In the case of an airport system plan, 75 percent.

§ 152.207 Proceeds from disposition of land.

Unless otherwise authorized by the Administrator, when a release has been granted authorizing the sponsor to dispose of land acquired with assistance under Part 151 of this chapter or this part, or through conveyances under the Surplus Property Act, the proceeds realized from the disposal may not be used as matching funds for any airport development project or airport planning grant, but may be used for any other airport purpose.

§ 152.209 Grant payments: general.

(a) An application for a grant payment is made on a form and in a manner prescribed by the Administrator, and must be accompanied by any supporting information, that the FAA needs to determine the allowability of any costs for which payment is requested.

(b) *Methods of payment.* Grant payments to sponsors and planning agencies will be made by—

(1) Letter of credit;

(2) Advance by Treasury check; or

(3) Reimbursement by Treasury checks.

(c) *Letter of credit funding.* Letter of credit funding may not be used unless—

(1) There is or will be a continuing relationship between a sponsor or planning agency and the FAA for at least a 12-month period and the total amount of advances to be received within that period is $120,000 or more;

(2) The sponsor or planning agency has established or demonstrated to the FAA the willingness and ability to establish procedures that will minimize the time elapsing between the transfer of funds and their disbursement by the grantee; and

(3) The sponsor's or planning agency's financial management system meets the standards for fund control and accountability prescribed in Attachment G of Office of Management and Budget Circular A–102 (42 FR 45828).

(d) *Advance by Treasury check.* Advance of funds by Treasury check may be made subject to the following conditions—

(1) The sponsor or planning agency meets the requirements of paragraphs (c) (2) and (3) of this section;

(2) The timing and amount of cash advances are as close as administratively feasible to actual disbursements by the sponsor or planning agency; and

(3) Except as provided in paragraph (e) of this section, in the case of an airport development project, advance payments do not exceed the estimated project costs of the airport development expected to be accomplished within 30 days after the date of the sponsor's application for the advance payment.

(e) No advance payment for airport development projects may be made in an amount that would bring the aggregate amount of all partial payments to more than the lower of the following:

(i) 90 percent of the estimated United States' share of the total estimated cost of all airport development included in the project, but not including contingency items; or

(ii) 90 percent of the maximum obligation of the United States as stated in the grant agreement.

(f) *Reimbursement by Treasury check.* Reimbursement by Treasury check will be made if the sponsor or planning agency does not meet the requirements of paragraphs (c) (2) and (3) of this section.

(g) *Withholding of payments.* Payment to the sponsor or planning agency may be withheld at any time during the grant

period under the following circumstances:

(1) The sponsor or planning agency has failed to comply with the program objectives, grant award conditions, or Federal reporting requirements.

(2) The sponsor or planning agency is indebted to the United States and collection of the indebtedness will not impair accomplishment of the objectives of any grant program sponsored by the United States.

(3) The sponsor or planning agency has withheld payment to a contractor to assure satisfactory completion of work. Payment will be made to the sponsor or planning agency when it has made final payment to the contractor, including the amounts withheld.

(h) *Labor violations.* If a contractor or a subcontractor fails or refuses to comply with the labor provisions of a contract under a grant agreement for an airport development project, further grant payments to the sponsor are suspended until—

(1) The violations are corrected;

(2) The Administrator determines the allowability of the project costs to which the violations relate; or

(3) If the violations consist of underpayments to labor, the sponsor furnishes satisfactory assurances to the FAA that restitution has been or will be made to the affected employees.

(i) *Excess payments.* Upon determination of the allowability of all project costs of a project, if it is found that the total of grant payments to the sponsor or planning agency was more than the total United States share of the allowable costs of the project, the sponsor or planning agency shall promptly return the excess to FAA.

§ 152.211 Grant payments: land acquisition.

If an approved project for airport development includes land acquisition as an item for which payment is requested, the sponsor may apply to the FAA for payment of the United States share of the allowable project costs of the acquisition, after—

(a) The Administrator determines that the sponsor has acquired satisfactory title to the land; or

(b) In the case of a request for advance payment under § 152.209(d), the Administrator is assured that a satisfactory title will be acquired.

§ 152.213 Grant closeout requirements.

(a) *Program income.* Sponsors or planning agencies that are units of local government shall return all interest earned on advances of grant-in-aid funds to the Federal Government in accordance with a decision of the Comptroller General (42 Comp. Gen. 289). All other program income (gross income) earned by grant-supported activities during the grant period shall be retained by the sponsor and, if required by the grant agreement—

(1) Be added to funds committed to the project by the FAA and the sponsor and used to further eligible program objectives; or

(2) Be deducted from the total project cost for the purpose of determining the net costs on which the Federal share of costs will be based.

(b) *Financial reports.* The sponsor or planning agency shall furnish, within 90 days after completion of all items in a grant, all reports, including financial performance reports, required as a condition of the grant.

(c) *Project completion.* When the project for airport development or planning is completed in accordance with the grant agreement, the sponsor or planning agency may apply for payment for all incurred costs, as follows:

(1) *Airport development.* When allowability of costs can be determined under § 152.203, payment may be made to the sponsor if—

(i) A final inspection of all work at the airport site has been made jointly by the appropriate FAA office and representatives of the sponsor and the contractor, unless that office agrees to a different procedure for final inspection; and

(ii) The sponsor has furnished final "as constructed" plans, unless otherwise agreed to by the Administrator.

(2) *Airport planning.* When the final planning report has been received and accepted by the FAA.

(d) *Property accounting reports: airport development projects.* The sponsor of an airport development project shall account for any property acquired with grant funds or received from the United States, in accordance with the provisions of Attachment N of Office of Management and Budget Circular A–102 (42 FR 45828).

(e) *Final determination of U.S. share.* Based upon an audit or other information considered sufficient in lieu of an audit, the Administrator determines the total amount of the allowable project costs and makes settlement for any adjustments to the Federal share of costs.

Subpart D—Accounting and Reporting Requirements

§ 152.301 Applicability.

This subpart contains accounting and reporting requirements applicable to—

(a) Each sponsor of a project for airport development;

(b) Each sponsor of a project for airport master planning; and

(c) Each planning agency conducting a project for airport system planning.

§ 152.303 Financial management system.

Each sponsor or planning agency shall establish and maintain a financial management system that meets the standards of Attachment G of Office of Management and Budget Circular A–102 (42 FR 45828).

§ 152.305 Accounting records.

(a) *Airport development.* Each sponsor of a project for airport development shall establish and maintain, for each individual project, an accounting record satisfactory to the Administrator which segregates cost information into the cost classifications set forth in Standard Form 271 (42 FR 45841).

(b) *Airport planning.* Each sponsor of a project for airport master planning and each planning agency conducting a project for airport system planning shall establish and maintain, for each planning project, an adequate accounting record that segregates and groups direct and indirect cost information in the following classifications:

(1) Third party contract costs.

(2) Force account costs.

(3) Administrative costs.

§ 152.307 Retention of records.

Each sponsor or planning agency shall retain, for a period of 3 years after the date of submission of the final expenditure report—

(a) Documentary evidence, such as invoices, cost estimates, and payrolls, supporting each item of project costs; and

(b) Evidence of all payments for items of project costs, including vouchers, cancelled checks or warrants, and receipts for cash payments.

§ 152.309 Availability of sponsor's records.

(a) The sponsor or planning agency shall allow any authorized representative of the Administrator, the Secretary of Transportation, or the Comptroller General of the United States access to any of its books, documents, papers, and records that are pertinent to grants received under this part for the purposes of accounting and audit.

(b) The sponsor or planning agency shall allow appropriate FAA or DOT representatives to make progress audits at any time during the project, upon reasonable notice to the sponsor or planning agency.

(c) It audit findings have not been resolved, the applicable records shall be retained by the sponsor or planning agency until those findings have been resolved.

(d) Records for nonexpendable property that was acquired with Federal funds shall be retained for three years after final disposition of the property.

(e) Microfilm copies of original records may be substituted for original records with the approval of the FAA.

(f) If the FAA determines that certain records have long-term retention value, the FAA may require transfer of custody of those records to the FAA.

§ 152.311 Availability of contractor's records.

The sponsor or planning agency shall include in each contract of the cost reimbursable type a clause that allows any authorized representative of the Administrator, the Secretary of Transportation, or the Comptroller General of the United States access to the contractor's records pertinent to the contract for the purposes of accounting and audit.

§ 152.313 Property management standards.

(a) The sponsor shall establish and maintain property management standards in accordance with Attachment N of Office of Management and Budget Circular A–102 (42 FR 45828) for the utilization and disposition of property furnished by the Federal government, or acquired in whole or in part by the sponsor with Federal funds.

(b) A sponsor may use its own property management standards and procedures as long as the standards required by paragraph (a) of this section are included.

§ 152.315 Reporting on accrual basis.

(a) Except as provided in paragraph (b) of this section each sponsor or planning agency shall submit all financial reports on an accrual basis.

(b) If records are not maintained on an accrual basis by a sponsor or planning agency, reports may be based on an analysis of records or best estimates.

§ 152.317 Report of Federal cash transactions.

When funds are advanced to a sponsor or planning agency by Treasury check, the sponsor or planning agency shall submit the report form prescribed by the Administrator within 15 working days following the end of the quarter in which check was received.

§ 152.319 Monitoring and reporting of program performance.

(a) The sponsor or planning agency shall monitor performance under the project to ensure that—

(1) Time schedules are being met;

(2) Work units projected by time periods are being accomplished; and,

(3) Other performance goals are being achieved.

(b) Reviews shall be made for—

(1) Each item of development or work element included in the project; and

(2) All other work to be performed as a condition of the grant agreement.

(c) *Airport development.* Unless otherwise requested by the Administrator, the sponsor of a project for airport development shall submit a performance report, on an annual basis, that must include—

(1) A comparison of actual accomplishments to the goals established for the period, made, if applicable, on a quantitative basis related to cost data for computation of unit costs;

(2) The reasons for slippage in each case where an established goal was not met; and

(3) Other pertinent information including, when appropriate, an analysis and explanation of each cost overrun and high unit cost.

(d) *Airport planning.* The sponsor of a project for airport master planning or a planning agency conducting a project for airport system planning shall submit a performance report, on a quarterly basis, that must include:

(1) A comparison of actual accomplishments to the goals established for the period, made, if applicable, on a quantitative basis related to costs for computation of work element costs;

(2) Reasons for slippage in each case where an established goal was not met; and

(3) Other pertinent information including, when appropriate, an analysis and explanation of each cost overrun and high work element cost.

§ 152.321 Notice of delay or acceleration.

(a) The sponsor or planning agency shall promptly notify the FAA of each condition or event that may delay or accelerate accomplishment of the project.

(b) In the event that delay is anticipated, the notice required by paragraph (a) of this section must include—

(1) A statement of actions taken or contemplated; and

(2) Any federal assistance needed.

§ 152.323 Budget revision: airport development.

(a) If any performance review conducted by the sponsor discloses a need for change in the budget estimates, the sponsor shall submit a request for budget revision on a form prescribed by the Administrator.

(b) A request for prior approval for budget revision shall be made promptly by the sponsor whenever—

(1) The revision results from changes in the scope or objective of the project; or

(2) The revision increases the budgeted amounts of Federal funds needed to complete the project.

(c) The sponsor shall promptly notify the FAA whenever the amount of the grant is expected to exceed the needs of the sponsor by more than $5,000, or 5 percent of the grant amount, whichever is greater.

§ 152.325 Financial status report: airport planning.

Each sponsor of a project for airport master planning and each planning agency conducting a project for airport system planning shall submit a financial status report on a form prescribed by the Administrator at the completion of the project.

Subpart F—Suspension and Termination of Grants

§ 152.501 Applicability.

This subpart contains procedures for suspending or terminating grants for airport development projects and airport planning.

§ 152.503 Suspension of grant.

(a) If the sponsor or planning agency fails to comply with the conditions of the grant, the FAA may, by written notice to the sponsor or planning agency, suspend the grant and withhold further payments pending—

(1) Corrective action by the sponsor or planning agency; or

(2) A decision to terminate the grant.

(b) Except as provided in paragraph (c), after receipt of notice of suspension, the sponsor or planning agency may not incur additional obligations of grant funds during the suspension.

(c) All necessary and proper costs that the sponsor or planning agency could not reasonably avoid during the period of suspension will be allowed, if those costs are in accordance with Appendix C of this part.

§ 152.505 Termination for cause.

(a) If the sponsor or planning agency fails to comply with the conditions of the grant, the FAA may, by written notice to the sponsor or planning

agency, terminate the grant in whole, or in part.

(b) The notice of termination will contain—

(1) The reasons for the termination, and

(2) The effective date of termination.

(c) After receipt of the notice of termination, the sponsor or planning agency may not incur additional obligations of grant funds.

(d) Payments to be made to the sponsor or planning agency, or recoveries of payments by the FAA, under the grant shall be in accordance with the legal rights and liabilities of the parties.

§ 152.507 Termination for convenience.

(a) When the continuation of the project would not produce beneficial results commensurate with the further expenditure of funds, the grant may be terminated in whole, or in part, upon mutual agreement of the FAA and the sponsor or planning agency.

(b) If an agreement to terminate is made, the sponsor or planning agency—

(1) May not incur new obligations for the terminated portion after the effective date; and

(2) Shall cancel as many obligations, relating to the terminated portion, as possible.

(c) The sponsor or planning agency is allowed full credit for the Federal share of the noncancellable obligations that were property incurred by the sponsor before the termination.

§ 152.509 Request for reconsideration.

If a grant is suspended or terminated under this subpart, the sponsor or planning agency may request the Administrator to reconsider the suspension or termination.

Appendix A—Contract and Labor Provisions

This appendix sets forth contract and labor provisions applicable to grants under the Airport and Airway Development Act of 1970.

This appendix does not apply to: (1) Any contract with the owner of airport hazards, buildings, pipelines, powerlines, or other structures or facilities, for installing, extending, changing, removing, or relocating that structure or facility, and (2) any written agreement or understanding between a sponsor and another public agency that is not a sponsor of the project, under which the public agency undertakes construction work for or as agent of the sponsor.

I. Contract Provisions Required by the Regulations of the Secretary of Labor

Each sponsor entering into a construction contract for an airport development project shall insert in the contract and any supplemental agreement:

(1) The provisions required by the Secretary of Labor, as set forth in paragraphs A through K;

(2) The provisions set forth in paragraph L, and

(3) Any other provisions necessary to ensure completion of the work in accordance with the grant agreement.

The provisions in paragraphs A through K and provision (5) in paragraph L need not be included in prime contracts of $2,000 or less.

A. Minimum wages. (1) All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act [29 CFR Part 3], the full amounts due at time of payment computed at wage rates not less than those contained in the wage determination decision(s) of the Secretary of Labor which is (are) attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics; and the wage determination decision(s) shall be posted by the contractor at the site of the work in a prominent place where it (they) can be easily seen by the workers. For the purpose of this paragraph, contributions made or costs reasonably anticipated under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of subparagraph (4) below. Also for the purpose of this paragraph, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period (29 CFR 5.5(a)(1)(i)).

(2) Any class of laborers or mechanics, including apprentices and trainees, which is not listed in the wage determination(s) and which is to be employed under the contract, shall be classified or reclassified conformably to the wage determination(s), and a report of the action taken shall be sent by the [insert sponsor's name] to the FAA for approval and transmittal to the Secretary of Labor. In the event that the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics, including apprentices and trainees, to be used, the question accompanied by the recommendation of the FAA shall be referred to the Secretary of Labor for final determination (29 CFR 5.5(a)(1)(ii)).

(3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the contractor is obligated to pay a cash equivalend of such a fringe benefit, an hourly cash equivalent thereof shall be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question accompanied by the recommendation of the FAA shall be referred to the Secretary of Labor for determination (29 CFR 5.5(a)(1)(iii)).

(4) If the contractor does not make payments to a trustee or other third person, he may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretary of Labor which is a part of this contract: *Provided, however,* the Secretary of Labor has found, upon written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program (29 CFR 5.5(a)(1)(iv)).

B. Withholding: FAA from sponsor. Pursuant to the terms of the grant agreement between the United States and [insert sponsor's name], relating to Airport Development Aid Project No. ———, and Part 152 of the Federal Aviation Regulations (14 CFR Part 152), the FAA may withhold or cause to be withheld from the [insert sponsor's name] so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices and trainees, employed by the contractor or any subcontractor on the work the full amount of wages required by this contract. In the event of failure to pay any laborer or mechanics, including any apprentice or trainee, employed or working on the site of the work all or part of the wages required by this contract, the FAA may, after written notice to the [insert sponsor's name], take such action as may be necessary to cause the suspension of any further payment or advance of funds until such violations have ceased (29 CFR 5.5(a)(2)).

C. Payrolls and basic records. (1) Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records will contain the name and address of each such employee, his correct classification, rates of pay (including rates of contributions or costs anticipated of the types described in section 1(b)(2) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv) (see subparagraph (4) of paragraph A above), that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits (29 CFR 5.5(a)(3)(i)).

(2) The contractor will submit weekly a copy of all payrolls to the [insert sponsor's name] for availability to the FAA. The copy shall be accompanied by a statement signed by the employer or his agent indicating that the payrolls are correct and complete, that

the wage rates contained therein are not less than those determined by the Secretary of Labor and that the classifications set forth for each laborer or mechanic conform with the work he performed. A submission of a "Weekly Statement of Compliance" which is required under this contract and the Copeland regulations of the Secretary of Labor (29 CFR Part 3) and the filing with the initial payroll or any subsequent payroll of a copy of any findings by the Secretary of Labor under 29 CFR 5.5(a)(1)(iv) (see subparagraph (4) of paragraph A above), shall satisfy this requirement. The prime contractor shall be responsible for submission of copies of payrolls of all subcontractors. The contractor will make the records required under the labor standards clauses of the contract available for inspection by authorized representatives of the FAA and the Department of Labor, and will permit such representatives to interview employees during working hours on the job. Contractors employing apprentices or trainees under approved programs shall include a notation on the first weekly certified payrolls submitted to the [insert sponsor's name] for availability to the FAA, that their employment is pursuant to an approved program and shall identify the program (29 CFR 5.5(a)(3)(ii)).

D. Apprentices and trainees. (1) *Apprentices.* Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not a trainee as defined in subparagraph (2) of this paragraph or is not registered or otherwise employed as stated above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to furnish to the [insert sponsor's name] or a representative of the Wage-Hour Division of the U.S. Department of Labor written evidence of the registration of his program and apprentices as well as the appropriate ratios and wage rates (expressed in percentages of the journeyman hourly rates), for the area of construction prior to using any apprentices on the contract work. The wage rate paid apprentices shall be not less than the appropriate percentage of the journeyman's rate contained in the applicable wage determination (29 CFR 5.5(a)(4)(i)).

(2) *Trainees.* Except as provided in 29 CFR 5.15 trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training. The ratio of trainees to journeymen shall not be greater than permitted under the plan approved by the Bureau of Apprenticeship and Training. Every trainee must be paid at not less than the rate specified in the approved program for his level of progress. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Bureau of Apprenticeship and Training shall be paid not less than the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to furnish the [insert sponsor's name] or a representative of the Wage-Hour Division of the U.S. Department of Labor written evidence of the certification of his program, the registration of the trainees, and the ratios and wage rates prescribed in that program. In the event the Bureau of Apprenticeship and Training withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved (29 CFR 5.5(a)(4)(ii)).

(3) *Equal employment opportunity.* The utilization of apprentices, trainees and journeymen under this paragraph shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30 (29 CFR 5.5(a)(4)(iii)).

(4) *Application of 29 CFR 5.5(a)(4).* On contracts in excess of $2,000 the employment of all apprentices and trainees as defined in 29 CFR 5.2(c) shall be subject to the provisions of 29 CFR 5.5(a)(4) (see paragraph D(1), (2), and (3) above).

E. Compliance with Copeland Regulations. The contractor shall comply with the Copeland Regulations (29 CFR Part 3) of the Secretary of Labor which are herein incorporated by reference (29 CFR 5.5(a)(5)).

F. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of 8 hours in any calendar day or in excess of 40 hours in such workweek unless such laborer or mechanic received compensation at a rate not less than 1½ times his basic rate of pay for all hours worked in excess of 8 hours in any calendar day or in excess of 40 hours in such workweek, as the case may be (29 CFR 5.5(c)(1)).

G. Violations; liability for unpaid wages; liquidated damages. In the event of any violation of paragraph F of this provision, the contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed, with respect to each individual laborer or mechanic employed in violation of said paragraph F of this provision, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of 8 hours or in excess of the standard workweek of 40 hours without payment of the overtime wages required by said paragraph F of this provision (29 CFR 5.5(c)(2)).

H. Withholding for unpaid wages and liquidated damages. The FAA may withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in paragraph G of this provision (29 CFR 5.5(c)(3)).

I. Working conditions. No contractor may require any laborer or mechanic employed in the performance of any contract to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous to his health or safety as determined under construction safety and health standards (29 CFR Part 1926) and other occupational and health standards (29 CFR Part 1910) issued by the Department of Labor.

J. Subcontracts. The contractor will insert in each of his subcontracts the clauses contained in paragraphs A through K of this provision, and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made (29 CFR 5.5(a)(6), 5.5(c)(4)).

K. Contract termination debarment. A breach of clause A, B, C, D, E, or J may be grounds for termination of the contract, and for debarment as provided in § 5.6 of the Regulations of the Secretary of Labor as codified in 29 CFR 5.6 (29 CFR 5.5(a)(7)).

L. Additional contract provisions. (1) *Airport Development Aid Program Project.* The work in this contract is included in Airport Development Aid Program Project No. ——— which is being undertaken and accomplished by the [insert sponsor's name] in accordance with the terms and conditions of a grant agreement between the [insert sponsor's name] and the United States, under the Airport and Airway Development Act of 1970 (84 Stat. 219) and Part 152 of the Federal Aviation Regulations (14 CFR Part 152), pursuant to which the United States has agreed to pay a certain percentage of the costs of the project that are determined to be allowable project costs under that Act. The United States is not a party to this contract and no reference in this contract to the FAA or any representative thereof, or to any rights granted to the FAA or any representative thereof, or the United States, by the contract, makes the United States a party to this contract.

(2) *Consent to assignment.* The contractor shall obtain the prior written consent of the [insert sponsor's name] to any proposed

assignment of any interest in or part of this contract.

(3) *Convict labor.* No convict labor may be employed under this contract.

(4) *Veterans preference.* In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to qualified individuals who have served in the military service of the United States (as defined in section 101(1) of the Soldiers' and Sailors' Civil Relief Act of 1940 (50 U.S.C. App. 501) and have been honorably discharged from the service, except that preference may be given only where that labor is available locally and is qualified to perform the work to which the employment relates.

(5) *Withholding: sponsor from contractor.* Whether or not payments or advances to the [insert sponsor's name] are withheld or suspended by the FAA, the [insert sponsor's name] may withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics employed by the contractor or any subcontractor on the work the full amount of wages required by this contract.

(6) *Nonpayment of wages.* If the contractor or subcontractor fails to pay any laborer or mechanic employed or working on the site of the work any of the wages required by this contract the [insert sponsor's name] may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment or advance of funds until the violations cease.

(7) *FAA inspection and review.* The contractor shall allow any authorized representative of the FAA to inspect and review any work or materials used in the performance of this contract.

(8) *Subcontracts.* The contractor shall insert in each of his subcontracts the provisions contained in paragraphs [insert designation of 6 paragraphs of contract corresponding to subparagraphs (1), (3), (4), (5), (6), and (7) of this paragraph], and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(9) *Contract termination.* A breach of paragraphs [insert designation of 3 paragraphs corresponding to subparagraphs (6), (7), and (8) of this paragraph] may be grounds for termination of the contract.

II. Adjustment in Liquidated Damages

A contractor or subcontractor who has become liable for liquidated damages under the provision set out in paragraph I.G of this appendix and who claims that the amount administratively determined as liquidated damages under section 104(a) of the Contract Work Hours and Safety Standards Act is incorrect or that he violated inadvertently the Contract Work Hours and Safety Standards Act, notwithstanding the exercise of due care, may—

(1) If the amount determined is more than $100, apply to the Administrator for a recommendation to the Secretary of Labor that an appropriate adjustment be made or that he be relieved of liability for the liquidated damages; or

(2) If the amount determined is $100 or less, apply to the Administrator for an appropriate adjustment in liquidated damages or for release from liability for the liquidated damages.

III. Corrected Wage Determinations

The Secretary of Labor corrects any wage determination included in any contract under this Appendix whenever the wage determination contains clerical errors. A correction may be made at the Administrator's request or on the initiative of the Secretary of Labor.

IV. Applicability of Interpretations of the Secretary of Labor

When applicable by their terms, the regulations of the Secretary of Labor (29 CFR 5.20–5.32) interpreting the "fringe benefit - provisions" of the Davis-Bacon Act apply to the contract provisions in this Appendix.

V. Records

A sponsor who is required to include in a construction contract the labor provisions required by this appendix shall require the contractor to comply with those provisions and shall cooperate with the FAA in effecting that compliance. For this purpose the sponsor shall—

(1) Keep, and preserve, the record described in paragraph IC for a 3-year period beginning on the date the contract is completed, each affidavit and payroll copy furnished by the contractor, and make those affidavits and copies available to the FAA, upon request, during that period;

(2) Have each of those affidavits and payrolls examined by its resident engineer (or any other of its employees or agents who is qualified to make the necessary determinations), as soon as possible after receiving it, to the extent necessary to determine whether the contractor is complying with the labor provisions required by this appendix and particularly with respect to whether the contractor's employees are correctly classified;

(3) Have investigations made during the performance of work under the contract, to the extent necessary to determine whether the contractor is complying with those labor provisions, including in the investigations, interviews with employees and examinations of payroll information at the work site by the sponsor's resident engineer (or any other of its employees or agents who is qualified to make the necessary determinations);

(4) Keep the appropriate FAA office fully advised of all examinations and investigations made under this appendix, all determinations made on the basis of those examinations and investigations, and all efforts made to obtain compliance with the labor provisions of the contract; and

(5) Give priority to complaints of alleged violations, and treat as confidential any written or oral statements made by any employee in connection with a complaint, and not disclose an employee's statement made in connection with a complaint to a contractor without the employee's consent.

Appendix B—List of Advisory Circulars Incorporated by 152.11

(a) Circulars available free of charge.

Number and Subject

150/5100–12—Electronic Navigational Aids Approved for Funding Under the Airport Development Aid Program (ADAP).
150/5190–3A—Model Airport Hazard Zoning Ordinance.
150/5210–7A—Aircraft Fire and Rescue Communications.
150/5210–10—Airport Fire and Rescue Equipment Building Guide.
150/5300–2C—Airport Design Standards—Site Requirements for Terminal Navigational Facilities.
150/5300–4B—Utility Airports—Air Access to National Transportation.
150/5300–6—Airport Design Standards—General Aviation Airports—Basic and General Transport.
150/5300–8—Planning and Design Criteria for Metropolitan STOL Ports.
150/5320–6B—Airport Pavement Design and Evaluation.
150/5320–10—Environmental Enhancement at Airports—Industrial Waste Treatment.
150/5320–12—Methods for the Design, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces.
150/5325–2C—Airport Design Standards—Airports Served by Air Carriers—Surface Gradient and Line-of-Sight.
150/5325–4—Runway Length Requirements for Airport Design.
150/5325–6A—Airport Design Standards—Effect and Treatment of Jet Blast.
150/5325–8—Compass Calibration Pad.
150/5335–1A—Airport Design Standards—Airports Served by Air Carriers—Taxiways.
150/5335–2—Airport Aprons.
150/5335–3—Airport Design Standards—Airports Served by Air Carriers—Bridges and Tunnels on Airports.
150/5335–4—Airport Design Standards—Airports Served by Air Carriers—Runway Geometrics.
150/5340–1D—Marking of Paved Areas on Airports.
150/5340–4C—Installation Details for Runway Centerline and Touchdown Zone Lighting Systems.
150/5340–5A—Segmented Circle Airport Marker System.
150/5340–8—Airport 51-foot Tubular Beacon Tower.
150/5340–14B—Economy Approach Lighting Aids.
150/5340–17A—Standby Power for Non-FAA Airport Lighting System.
150/5340–18—Taxiway Guidance Sign System.
150/5340–19—Taxiway Centerline Lighting System.
150/5340–20—Installation Details and Maintenance Standards for Reflective Markers for Airport Runway and Taxiway Centerlines.
150/5340–21—Airport Miscellaneous Lighting Visual Aids.
AC/5340–22—Maintenance Guide for Determining Degradation and Cleaning of Centerline and Touchdown Zone Lights.
150/5340–23A—Supplemental Wind Cones.

150/5340-24—Runway and Taxiway Edge Lighting System.
150/5340-25—Visual Approach Slope Indicator (VASI) Systems.
150/5345-1E—Approved Airport Lighting Equipment.
150/5345-2—Specification for L-810 Obstruction Light.
150/5345-3C—Specification for L-821 Panels for Remote Control of Airport Lighting.
150/5345-4—Specification for L-829 Internally Lighted Airport Taxi Guidance Sign.
150/5345-5—Specification for L-847 Circuit Selector Switch, 5,000 Volt 20 Ampere.
150/5345-7C—Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits.
150/5345-10C—Specification for L-828 Constant Current Regulators.
150/5345-11—Specification for L-812 Static Indoor Type Constant Current Regulator Assembly; 4 KW and 7½ KW, With Brightness Control for Remote Operation.
150/5345-12A—Specification for L-801 Beacon.
150/5345-13—Specification for L-841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits.
150/5345-18—Specification for L-811 Static Indoor Type Constant Current Regulator Assembly, 4 KW; With Brightness Control and Runway Selection for Direct Operation.
150/5345-21—Specification for L-813 Static Indoor Type Constant Current Regulator Assembly; 4 KW and 7½ KW; for Remote Operation of Taxiway Lights.
150/5345-26A—Specification for L-823 Plug and Receptacle, Cable Connectors.
150/5345-27A—Specification for L-807 Eight-foot and Twelve-foot Unlighted or Externally Lighted Wind Cone Assemblies.
150/5345-28C—Specification for L-851 Visual Approach Slope Indicators and Accessories.
150/5345-36—Specification for L-808 Lighted Wind Tee.
150/5345-39A—FAA Specification for L-853, Runway and Taxiway Retroreflective Markers.
150/5345-42A—FAA Specification L-857, Airport Light Bases, Transformer Housings, and Junction Boxes.
150/5345-43B—FAA/DOD Specification L-856, High Intensity Obstruction Lighting Systems.
150/5345-44A—Specification for L-858 Retroreflective Taxiway Guidance Sign.
150/5345-45—Lightweight Approach Light Structure.
150/5345-46—Specification for Semiflush Airport Lights.
150/5345-47—Isolation Transformers for Airport Lighting Systems.
150/5345-48—Specification for Runway and Taxiway Edge Lights.
150/5360-6—Airport Terminal Building Development with Federal Participation.
150/5360-7—Planning and Design Considerations for Airport Terminal Building Development.
150/5370-7—Airport Construction Controls to Prevent Air and Water Pollution.
150/5370-9—Slip-Form Paving—Portland Cement Concrete.
150/5370-11—Use of Nondestructive Testing Devices in the Evaluation of Airport Pavements.

(b) *Circulars for sale.*

Number and Subject

150/5320-5B—Airport Drainage; $1.30.
150/5370-10—Standards for Specifying Construction of Airports; $7.25.
150/5390-1A—Heliport Design Guide; $1.50.

Appendix C—Procurement Procedures and Requirements

There is set forth below procurement procedures and requirements applicable to grants for airport development under the Airport and Airway Development Act of 1970.

1. *General.* Each contract under a project must meet the requirements of local law and the requirements and standards contained in this appendix. The sponsor shall establish procedures for procurement of supplies, equipment, construction, and services funded under the project which meet the requirements of Attachment O of Office of Management and Budget (OMB) Circular A-102 (44 FR 47874) and of this appendix. Subject to funding and time limitations, the FAA reviews the sponsor's procurement system to determine whether it may be certified in accordance with Attachment O of OMB Circular A-102.

2. *Out-of-state labor.* No procedure or requirement shall be imposed by any grantee which will operate to discriminate against the employment of labor from any other State, possession, or territory of the United States in the construction of a project.

3. *Bid guarantee.* All bids for construction or facility improvement in excess of $100,000 shall be accompanied by a bid guarantee consisting of a firm commitment such as a bid bond, certified check or other negotiable instrument equivalent to five percent of the bid price as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

4. *Construction work.* All construction work under a project must be performed under contract, except in a case where the Administrator determines that the project, or a part of it, can be more effectively and economically accomplished on a force account basis by the sponsor or by another public agency acting for or as agent of the sponsor.

5. *Change order.* Unless otherwise authorized by the Administrator, no sponsor may issue any change order under any of its construction contracts or enter into a supplemental agreement unless three copies of that order or agreement have been sent to, and approved by, the FAA.

6. *Beginning work.* No sponsor may allow a contractor or subcontractor to begin work under a project until—

a. The sponsor has furnished three conformed copies of the contract to the appropriate FAA office;

b. The sponsor has, if applicable, submitted a statement that comparable replacement housing, as defined in § 25.15 of the Regulations of the Office of the Secretary of Transportation, will be available within a reasonable period of time before displacement.

c. The appropriate FAA office has agreed to the issuance of a notice to proceed with the work to the contractor.

7. *Supervision and inspection.* No work will be commenced until the sponsor has provided for adequate supervision and inspection of construction and advised the appropriate FAA office.

8. *Engineering and planning services.* Unless otherwise authorized by the Administrator, each proposal for engineering and planning services shall be reviewed by FAA before the commencement of the Development of design plans and specifications.

9. *Advertising general.* Unless the Administrator approves another method for use on a particular airport development project, each contract and supplemental agreement for construction work on a project in the amount of more than $10,000 must be awarded on the basis of public advertising and open competitive bidding under the local law applicable to the letting of public contracts.

10. *Advertising: conditions and contents.* There may be no advertisement for bids on, or negotiation of, a construction contract or supplemental agreement until the Administrator has either approved the plans and specifications or accepted a certification in accordance with § 152.7 that they meet all applicable standards prescribed by this part. The advertisement shall inform the bidders of the equal employment opportunity requirements of Part 152. Unless the estimated contract price or construction cost is $2,000 or less, there may be no advertisement for bids or negotiations until the Administrator has given the sponsor a copy of a decision of the Secretary of Labor establishing the minimum wage rates for skilled and unskilled labor under the proposed contract. In each case, a copy of the wage determination decision, including fringe benefits, must be set forth in the initial invitation for bids or proposed contract, or incorporated therein by reference to a copy set forth in the advertised or negotiated specifications.

11. *Procedures for obtaining wage determinations.* (a) *Specific request for wage determination.* At least 60 days before the intended date of advertising or negotiating of this section, the sponsor shall send to the appropriate FAA office, completed Department of Labor Form DB-11 or DB-11(a), as appropriate, with only the classifications needed in the performance of the work checked. General entries (such as "entire schedule" or "all applicable classifications") may not be used. Additional necessary classifications not on the form may be typed in the blank spaces or on an attached separate list. A classification that can be fitted into classifications on the form, or a classification that is not generally recognized in the area or in the industry, may not be used. Except in areas where the wage patterns are clearly established, the Form must be accompanied by any available pertinent wage payment or locally prevailing fringe benefit information.

(b) *General wage determination.* Whenever the wage patterns in a particular area for a

particular type of construction are well settled and whenever it may be reasonably anticipated that there will be a large volume of procurement in that area for that type of construction, the Secretary of Labor, upon the request of a Federal agency or in his discretion, may issue a general wage determination when, after consideration of the facts and circumstances involved, he finds that the applicable statutory standards and those of Part 1, 29 CFR, Subtitle A, will be met. This general wage determination is used for all projects located in the area and for the type of construction covered by the general wage determination.

12. *Advertising: wage determinations.* (a) Wage determinations are effective only for 120 days from the date of the determinations. If it appears that a determination may expire between bid opening and award, the sponsor shall so advise the FAA as soon as possible. If it wishes a new request for wage determination to be made and if any pertinent circumstances have changed, it shall submit the appropriate form of the Department of Labor and accompanying information. If it claims that the determination expires before award and after bid opening due to unavoidable circumstances, it shall submit proof of the facts which it claims support a finding to that effect.

(b) The Secretary of Labor may modify any wage determination before the award of the contract or contracts for which it was sought. If the proposed contract is awarded on the basis of public advertisement and open competitive bidding, any modification that the FAA receives less than 10 days before the opening of bids is not effective, unless the Administrator finds that there is reasonable time to notify bidders. A modification may not continue in effect beyond the effective period of the wage determination to which it relates. The Administrator sends any modification to the sponsor as soon as possible. If the modification is effective, it must be incorporated in the invitation for bids, by issuing an addendum to the specifications or otherwise.

13. *Awarding contracts.* (a) A sponsor may not award a construction contract without the written concurrence of the Administrator (through the appropriate FAA office) that the contract prices are reasonable. A sponsor that awards contracts on the basis of public advertising and open competitive bidding, shall, after the bids are opened, send a tabulation of the bids and its recommendations for award to the appropriate FAA office. The sponsor may not accept a bid by a contractor whose name appears on the current list of ineligible contractors published by the Comptroller General of the United States under § 5.6(b) of the regulations of the Secretary of Labor (29 CFR Part 5), or a bid by any firm, corporation, partnership, or association in which an ineligible contractor has a substantial interest.

(b) A sponsor's proposed contract must have pre-award review and approval by the FAA in any of the following circumstances:

(1) The sponsor's procurement system is not in compliance with one or more significant aspects of Attachment O of OMB Circular A–102 or with the standards of this appendix.

(2) The procurement is expected to exceed $10,000 and is to be awarded without competition or only one bid or offer is received in response to solicitation.

(3) The procurement is expected to exceed $10,000 and specifies a "brand name" product.

(c) The FAA may require pre-award review and approval of a sponsor's proposed contract under any of the following circumstances:

(1) The sponsor's procurement system has not yet been reviewed by the FAA for compliance with OMB Circular A–102 and this appendix.

(2) The sponsor has requested pre-award assistance.

(3) The proposal is for automatic data processing in accordance with paragraph C1 of Attachment B to Federal Management Circular 74–4 (39 FR 27133; 43 FR 50977).

(4) The proposal is one of a series with the same firm.

(5) The proposal is to be performed outside the recipient's established procurement system or office.

(6) The proposal is for construction and is to be awarded through the negotiation procurement method or without competition.

14. *Force account work.* Before undertaking any force account construction work, the sponsor (or any public agency acting as agent for the sponsor) must obtain the written consent of the Administrator through the appropriate FAA office. In requesting that consent, the sponsor must submit—

(a) Adequate plans and specifications showing the nature and extent of the construction work to be performed under that force account;

(b) A schedule of the proposed construction and of the construction equipment that will be available for the project;

(c) Assurance that adequate labor, material, equipment, engineering personnel, as well as supervisory and inspection personnel as required by this appendix, will be provided; and

(d) A detailed estimate of the cost of the work, broken down for each class of costs involved, such as labor, materials, rental of equipment, and other pertinent items of cost.

15. *Each sponsor shall—*

(a) Include the equal opportunity clause required by 41 CFR 60–1.4(b) in each nonexempt construction contract and subcontract.

(b) Prior to the award of each nonexempt contract, require each prime contractor and subcontractor to submit the certification required by 41 CFR 60–1.8(b);

(c) Include the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246) required by 41 CFR 60–4.2 in all solicitations for offers and bids on each nonexempt construction contract and subcontract;

(d) Include the Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246) required by 41 CFR 60–4.3(a) in each nonexempt construction contract and subcontract.

16. *Exceptions.* (a) Paragraphs 1 through 5 and paragraphs 9 through 13 of this section do not apply to contracts with the owners of airport hazards, buildings, pipelines, powerlines, or other structures or facilities, for installing, extending, changing, removing, or relocating any of those structures or facilities. However, the sponsor must obtain the approval of the appropriate FAA office before entering into such a contract.

(b) Any oral or written agreement or understanding between a sponsor and another public agency that is not a sponsor of the project, under which that public agency undertakes construction work for or as agent of the sponsor, is not considered to be a construction contract for the purposes of this appendix.

Appendix D—Assurances

There is set forth below the assurances that the sponsor or planning agency must submit with its application in accordance with §§ 152.111 or 152.113, as applicable.

I. General Assurance

Each applicant for an airport development grant or an airport planning grant shall submit the following assurance:

The applicant hereby assures and certifies that it will comply with the regulations, policies, guidelines, and requirements, including Office of Management and Budget Circulars No. A–95 (41 FR 2052), A–102 (42 FR 45828), and FMC 74–4 (39 FR 27133; as amended by 43 FR 50977), as they relate to the application, acceptance, and use of Federal funds for this federally-assisted project.

II. Airport Development

A. *Assurances.* Each applicant for an airport development grant shall submit the following assurances:

1. *Authority of applicant.* It possesses legal authority to apply for the grant, and to finance and construct the proposed facilities; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body, authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

2. *E.O. 11296 and E.O. 11288.* It will comply with the provisions of: Executive Order 11296, relating to evaluation of flood hazards, and Executive Order 11288, relating to the prevention, control, and abatement of water pollution.

3. *Sufficiency of funds.* It will have sufficient funds available to meet the non-Federal share of the cost for construction projects. Sufficient funds will be available when construction is completed to assure effective operation and maintenance of the facility for the purposes constructed.

4. *Construction.* It will obtain approval by the appropriate Federal agency of the final working drawings and specifications before the project is advertised or placed on the market for bidding; that it will construct the project, or cause it to be constructed, to final

completion in accordance with the application and approved plans and specification; that it will submit to the appropriate Federal agency for prior approval changes that alter the costs of the project, use of space, or functional layout; that it will not enter into a construction contract(s) for the project or undertake other activities until the conditions of the construction grant program(s) have been met.

5. *Supervision, inspection, and reporting.* It will provide and maintain competent and adequate architectural engineering supervision and inspection at the construction site to insure that the completed work conforms with the approved plans and specifications; that it will furnish progress reports and such other information as the Federal grantor agency may require.

6. *Operation of facility.* It will operate and maintain the facility in accordance with the minimum standards as may be required or prescribed by the applicable Federal, State and local agencies for the maintenance and operation of such facilities.

7. *Access to records.* It will give the grantor agency and the Comptroller General through any authorized representative access to and the right to examine all records, books, papers, or documents related to the grant.

8. *Access for handicapped.* It will require the facility to be designed to comply with Part 27, Nondiscrimination on the Basis of Handicap in Federallly Assisted Programs and Activities Receiving or Benefiting from Federal Financial Assistance, of the Regulations of the Office of the Secretary of Transportation (49 CFR Part 27). The applicant will be responsible for conducting inspections to insure compliance with these specifications by the contractor.

9. *Commencement and completion.* It will cause work on the project to be commenced within a reasonable time after receipt of notification from the approving Federal agency that funds have been approved and that the project will be prosecuted to completion with reasonable diligence.

10. *Disposition of interest.* It will not dispose of or encumber its title or other interests in the site and facilities during the period of Federal interest or while the Government holds bonds, whichever is the longer.

11. *Civil Rights.* It will comply with Title VI of the Civil Rights Act of 1964 (Pub. L. 88–352) and in accordance with Title VI of that Act, no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the applicant receives Federal financial assistance and will immediately take any measures necessary to effectuate this agreement. If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the Applicant, this assurance shall obligate the Applicant, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which the Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits.

12. *Private gain.* It will establish safeguards to prohibit employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.

13. *Relocation assistance.* It will comply with the requirements of Title II and Title III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Pub. L. 91–646) which provides for fair and equitable treatment of persons displaced as a result of Federal and federally assisted programs.

14. *OMB Circular A–102.* It will comply with all requirements imposed by the Federal grantor agency concerning special requirements of law, program requirements, and other administrative requirements approved in accordance with Office of Management and Budget Circular No. A–102.

15. *Hatch Act.* It will comply with the provisions of the Hatch Act which limit the political activity of employees.

16. *Federal Fair Labor Standards Act.* It will comply with the minimum wage and maximum hours provisions of the Federal Fair Labor Standards Act, as they apply to hospital and eduational institution employees of State and local governments.

17. *Effective date and duration.* These covenants shall become effective upon acceptance by the sponsor of an offer of Federal aid for the Project or any portion thereof, made by the FAA and shall constitute a part of the Grant Agreement thus formed. These covenants shall remain in full force and effect throughout the useful life of the facilities developed under this Project, but in any event not to exceed twenty (20) years from the date of said acceptance of an offer of Federal aid for the Project. However, these limitations on the duration of the covenants do not apply to the covenant against exclusive rights and real property acquired with Federal funds. Any breach of these covenants on the part of the sponsor may result in the suspension or termination of, or refusal to grant Federal assistance under, FAA administered programs, or such other action which may be necessary to enforce the rights of the United States under this agreement.

18. *Conditions and limitations on airport use.* The Sponsor will operate the Airport as such for the use and benefit of the public. In furtherance of this covenant (but without limiting its general applicability and effect), the Sponsor specifically agrees that it will keep the Airport open to all types, kinds, and classes of aeronautical use on fair and reasonable terms without discrimination between such types, kinds, and classes. Provided, that the sponsor may establish such fair, equal, and not unjustly discriminatory conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the Airport; And Provided Further, That the Sponsor may prohibit or limit any given type, kind, or class of aeronautical use of the Airport if such action is necessary for the safe operation of the Airport or necessary to serve the civil aviation needs of the public.

19. *Exclusive right.* The Sponsor—

a. Will not grant or permit any exclusive right forbidden by Section 308(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1349(a)) at the Airport, or at any other airport now owned or controlled by it;

b. Agrees that, in furtherance of the policy of the FAA under this covenant, unless authorized by the Administrator, it will not, either directly or indirectly, grant or permit any person, firm or corporation the exclusive right at the Airport, or at any other airport now owned or controlled by it, to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity.

c. Agrees that it will terminate any existing exclusive right to engage in the sale of gasoline or oil, or both, granted before July 17, 1962, at such an airport, at the earliest renewal, cancellation, or expiration date applicable to the agreement that established the exclusive right; and

d. Agrees that it will terminate any other exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under the Airport and Airway Development Act.

20. *Public use and benefit.* The Sponsor agrees that it will operate the Airport for the use and benefit of the public, on fair and reasonable terms, and without unjust discrimination. In furtherance of the covenant (but without limiting its general applicability and effect), the Sponsor specifically covenants and agrees:

a. That in its operation and the operation of all facilities on the Airport, neither it nor any person or organization occupying space or facilities thereon will discriminate against any person or class of persons by reason of race, color, creed, or national origin in the use of any of the facilities provided for the public on the Airport.

b. That in any agreement, contract, lease or other arrangement under which a right or privilege at the Airport is granted to any person, firm, or corporation to conduct or engage in any aeronautical activity for furnishing services to the public at the Airport, the Sponsor will insert and enforce provisions requiring the contractor—

(1) to furnish said service on a fair, equal, and not unjustly discriminatory basis to all users thereof, and

(2) to charge fair, reasonable, and not unjustly discriminatory prices for each unit or service; Provided, That the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.

c. That it will not exercise or grant any right or privilege which would operate to prevent any person, firm or corporation operating aircraft on the Airport from performing any services on its own aircraft

with its own employees (including, but not limited to maintenance and repair) that it may choose to perform.

d. In the event the Sponsor itself exercises any of the rights and privileges referred to in subsection b, the services involved will be provided on the same conditions as would apply to the furnishing of such services by contractors or concessionaires of the Sponsor under the provisions of such subsection b.

21. *Nonaviation activities.* Nothing contained herein shall be construed to prohibit the granting or exercise of an exclusive right for the furnishing of nonaviation products and supplies or any service of a nonaeronautical nature or to obligate the Sponsor to furnish any particular nonaeronautical service at the Airport.

22. *Operation and maintenance of the airport.* The Sponsor will operate and maintain in a safe and serviceable condition the Airport and all facilities thereon and connected therewith which are necessary to serve the aeronautical users of the Airport other than facilities owned or controlled by the United States, and will not permit any activity thereon which would interfere with its use for airport purposes: Provided, That nothing contained herein shall be construed to require that the Airport be operated for aeronautical uses during temporary periods when snow, flood, or other climatic conditions interfere with such operation and maintenance; And Provided Further, That nothing herein shall be construed as requiring the maintenance, repair, restoration or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the Sponsor. In furtherance of this covenant the sponsor will have in effect at all times arrangements for—

a. Operating the airport's aeronautical facilities whenever required;

b. Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and

c. Promptly notifying airmen of any condition affecting aeronautical use of the Airport.

23. *Airport Hazards.* Insofar as it is within its power and reasonable, the Sponsor will, either by the acquisition and retention of easements or other interests in or rights for the use of land or airspace or by the adoption and enforcement of zoning regulations, prevent the construction, erection, alteration, or growth of any structure, tree, or other object in the approach areas of the runways of the Airport, which would constitute an airport hazard.

In addition, the Sponsor will not erect or permit the erection of any permanent structure or facility which would interfere materially with the use, operation, or future development of the Airport, in any portion of a runway approach area in which the Sponsor has acquired, or hereafter acquires, property interests permitting it to so control the use made of the surface of the land.

24. *Use of adjacent land.* Insofar as it is within its power and reasonable, the Sponsor will, either by the acquisition and retention of easements or other interests in or rights for the use of land or airspace or by the adoption and enforcement of zoning regulations, take action to restrict the use of land adjacent to or in the immediate vicinity of the Airport to activities and purposes compatible with normal airport operations including landing and takeoff of aircraft.

25. *Airport layout plan.* The Sponsor will keep up to date at all times an airport layout plan of the Airport showing (1) boundaries of the Airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the Sponsor for airport purposes, and proposed additions thereto; (2) the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities; and (3) the location of all existing and proposed nonaviation areas and of all existing improvements thereon. Such airport layout plan and each amendment, revision, or modification thereof, shall be subject to the approval of the FAA, which approval shall be evidenced by the signature of a duly authorized representative of the FAA on the face of the airport layout plan. The Sponsor will not make or permit any changes or alterations in the airport or in any of its facilities other than in conformity with the airport layout plan as so approved by the FAA, if such changes or alterations might adversely affect the safety, utility, or efficiency of the Airport.

26. *Federal use of facilities.* All facilities of the Airport developed with Federal aid and all those usable for the landing and taking off of aircraft, will be available to the United States at all times, without charge, for use by government aircraft in common with other aircraft, except that if the use by government aircraft is substantial, a reasonable share, proportional to such use, of the cost of operating and maintaining facilities so used, may be charged. Unless otherwise determined by the FAA, or otherwise agreed to by the Sponsor and the using agency, substantial use of an airport by government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the FAA, would unduly interfere with use of the landing area by other authorized aircraft, or during any calendar month that—

a. Five (5) or more government aircraft are regularly based at the airport or on land adjacent thereto; or

b. The total number of movements (counting each landing as a movement and each takeoff as a movement) of government aircraft is 300 or more, or the gross accumulative weight of government aircraft using the Airport (the total movements of government aircraft multiplied by gross certified weights of such aircraft) is in excess of five million pounds.

27. *Areas for FAA Use.* Whenever so requested by the FAA, the Sponsor will furnish without cost to the Federal government, for construction, operation, and maintenance of facilities for air traffic control activities, or weather reporting activities and communication activities related to air traffic control, such areas of land or water, or estate therein, or rights in buildings of the Sponsor as the FAA may consider necessary or desirable for construction at Federal expense of space or facilities for such purposes. The approximate amounts of areas and the nature of the property interests and/or rights so required will be set forth in the Grant Agreement relating to the project. Such areas or any portion thereof will be made available as provided herein within 4 months after receipt of written requests from the FAA.

28. *Fee and rental structure.* The airport operator or owner will maintain a fee and rental structure for the facilities and services being provided the airport users which will make the Airport as self-sustaining as possible under the circumstances existing at the Airport, taking into account such factors as the volume of traffic and economy of collection.

29. *Reports to FAA.* The Sponsor will furnish the FAA with such annual or special airport financial and operational reports as may be reasonably requested. Such reports may be submitted on forms furnished by the FAA, or may be submitted in such manner as the Sponsor elects so long as the essential data are furnished. The Airport and all airport records and documents affecting the Airport, including deeds, leases, operation and use agreements, regulations, and other instruments, will be made available of inspection and audit by the Secretary and the Comptroller General of the United States, or their duly authorized representatives, upon reasonable request. The Sponsor will furnish to the FAA or to the General Accounting Office, upon request, a true copy of any such document.

30. *System of accounting.* All project accounts and records will be kept in accordance with a standard system of accounting if so prescribed by the Secretary.

31. *Interfering right.* If at any time it is determined by the FAA that there is any outstanding right or claim of right in or to the Airport property, other than those set forth in Part II of the Application for Federal Assistance, the existence of which creates an undue risk of interference with the operation of the Airport or the performance of the covenants of this Part, the sponsor will acquire, extinguish, or modify such right or claim of right in a manner acceptable to the FAA.

32. *Performance obligation.* The Sponsor will not enter into any transaction which would operate to deprive it of any of the rights and powers necessary to perform any or all of the covenants made herein, unless by such transaction the obligation to perform all such covenants is assumed by another public agency found by the FAA to be eligible under the Act and Regulations to assume such obligations and having the power, authority, and financial resources to carry out all such obligations. If an arrangement is made for management or operation of the Airport by any agency or person other than the Sponsor or an employee of the Sponsor, the Sponsor will reserve sufficient rights and authority to insure that the Airport will be operated and maintained in accordance with the Act, the Regulations, and these covenants.

33. *Meaning of terms.* Unless the context otherwise requires, all terms used in these covenants which are defined in the Act and

the Regulations shall have the meanings assigned to them therein.

B. *Airport Layout Plan Approval.* A sponsor seeking FAA approval of a new or revised airport layout plan shall submit with the plan an environmental assessment prepared in conformance with Appendix 6 of Federal Aviation Administration "Policies and Procedures for Considering Environmental Impacts" (FAA Order 1050.1C, Appendix 6; 45 FR 2244, January 10, 1980) if an assessment is required by the order.

III. Airport Planning

Each applicant for an airport planning grant shall submit the assurances numbered 1 (except for the phrase "and to finance and construct the proposed facilities"), 7, 9, 11 (except for the last sentence), and 12, 14, 15, 30, and 33 of Part II of this appendix.

(Airport and Airway Development Act of 1970, as amended (49 U.S.C. § 1701 *et seq.*); Sec. 1.47 (f) (1) Regulations of the Office of the Secretary of Transportation (49 CFR 1.47 (f) (1)))

Note.—The FAA has determined that this document involves a regulation which is not significant under Executive Order 12044, as implemented by the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A copy of the final regulatory evaluation prepared for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified above under the caption "For Further Information Contact:".

Issued in Washington, D.C., on May 16, 1980.

Langhorne Bond,

Administrator.

[FR Doc. 80-15672 Filed 5-21-80; 8:45]

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Part IX

Environmental Protection Agency

Motor Vehicles; Emission Control System Performance Warranty Short Tests and Warranty Regulations; Final Rules

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 85

[FRL 1488-3]

Motor Vehicles; Emission Control System Performance Warranty Short Tests

AGENCY: U.S. Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: This action establishes emission performance warranty "short tests" as provided in Section 207(b) of the Clean Air Act, 42 U.S.C. 7541(b). These short tests and corresponding warranty regulations (proposed April 20, 1979; 44 FR 23784) will be used in conjunction with state and local government vehicle inspection/maintenance (I/M) programs. Under certain circumstances, a vehicle owner will be entitled to repairs at the manufacturer's expense if his vehicle exceeds short test standards. This action promulgates three test procedures; idle, two speed idle and a two mode loaded tests for 1981 and later model year light duty vehicles and light duty trucks. For each test, uniform standards apply to all vehicles: 1.0% CO and 200 ppm HC (hexane) on the two speed idle test, 1.2% CO and 220 ppm HC (hexane) for the idle and two mode loaded procedures. The regulations give the manufacturers the option of requesting alternate standards and procedures if the general provisions are not appropriate because of special designs, unique technology and other similar factors.

EFFECTIVE DATE: These regulations take effect on June 23, 1980.

FOR FURTHER INFORMATION CONTACT: Richard W. Nash, Inspection/Maintenance Staff, 2565 Plymouth Road, Ann Arbor, MI 48105, (313) 668-4412; FTS 374-8412.

SUPPLEMENTARY INFORMATION: On May 25, 1977 a notice of proposed rulemaking to establish emission performance warranty short tests was published, 42 F.R. 26742. In that notice five specific short tests were proposed with various alternate standard setting mechanisms. Under the proposal, standards would have been developed for groups of vehicles, each group having common characteristics. To establish standards, a number of production vehicles would have been tested on the various short tests.

In light of the comments received, and further consideration of the issues by the Agency, the proposed approach to the short test and associated standards has been simplified. The number of short tests under consideration was reduced to three (idle, two speed idle, two mode loaded). Instead of developing short test standards for many different groups of vehicles, a single uniform set of standards appeared to be the best approach. (Standards were developed by analyzing data collected in EPA's Portland Oregon I/M evaluation project.) The comment period was reopened for 30 days by **Federal Register** notice on January 31, 1980, 45 FR 6960. All comments have been reviewed and considered in formulating the final regulations.

These short tests will also be available in non-Inspection/Maintenance areas. Under the dealer certification provisions of the proposed warranty regulations (40 CFR 85.108, 44 FR 23797), the manufacturer would be responsible for repairing any vehicle which fails a short test within three months of its initial sale. This requirement is not dependent upon an I/M program with its "penalties or sanctions"; it may be invoked upon failure of the short test.

Statutory Requirements

Vehicle emission inspections are an effective tool in combating urban air pollution. Several jurisdictions have I/M programs operating, and more will take effect over the next few years. While in many instances failure of an emission inspection is caused by improper maintenance, some failures can be attributed to the vehicle manufacturer. An effective emission performance warranty will remove the financial burden of repairs attributable to the manufacturer (for the warranty period). In addition, this potential remedy should make I/M programs more attractive to states and the general public, thereby encouraging their adoption for areas in which they are needed.

This action is taken under authority of Section 207(b) of the Clean Air Act, 42 U.S.C. 7541(b), which provides in pertinent part:

> If the Administrator determines that:
> (i) There are available testing methods and procedures to ascertain whether when in actual use * * * each vehicle * * * complies with (applicable) emission standards * * *
> (ii) Such methods and procedures are in accordance with good engineering practices, and
> (iii) Such methods and procedures are reasonably capable of being correlated with (certification tests), then * * *
> he shall establish such methods and procedures by regulation * * *.

The first criterion requires that testing methods and procedures be available. The second and third criteria establish the parameters that the testing methods and procedures must meet: the tests must be consistent with good engineering practices (section 207(b)(ii)) and must be reasonably capable of being correlated with the tests used in certification (section 207(b)(iii)).

Those three requirements have been satisfied; accordingly, this action establishes the short tests and associated standards. The final emission performance warranty regulations, needed to complete this scheme, will be promulgated in the very near future.

A short test is "available" if equipment exists and can be readily obtained and also if the procedure can be reasonably expected to serve its function: identifying non-complying vehicles. The adopted tests clearly meet this requirement. These, or similar procedures, are currently in use in a number of jurisdictions as inspection tools. Many private repair facilities also have the capability of performing either of the idle tests; and, in fact, it has been common practice for a vehicle manufacturer to specify an idle CO concentration for tune-up purposes or for major carburetor repairs.

The second criterion, which requires that the procedures be in accordance with good engineering practices, is satisfied if the tests can be conducted within the reasonable capability of personnel and equipment. Again, these tests meet the requirements. Test results on almost 6000 vehicles have been analyzed. These results indicated that the short test can accurately identify high-emitting vehicles. These tests were performed in a number of locations and, in some cases, included actual I/M lane results. (As suggested in comments to the original NPRM, "real world" experience was deemed to be necessary to validate any short tests and standards.) Over 2200 vehicles were tested at an actual I/M lane with typical equipment and personnel. Short test results obtained were compared with FTP emissions determined by EPA's contractor. Such a long term and extensive evaluation of an operating program is an excellent way to determine if the procedures comply with good engineering practice. Further, a comparison of results obtained on the short tests (using "garage" equipment) with certification test results (using "laboratory" equipment) verified that these procedures are within the capabilities of field equipment.

By far the most difficult aspect of short test development is the

"correlation" requirement. A bit of background may prove useful in explaining this item. Before a new passenger car (light duty vehicle) or light truck may be sold in the United States, it must be tested for emissions and must receive a certificate of conformity from the Environmental Protection Agency. These emission tests are performed on a limited number of prototype vehicles; the test is complex and covers a great many operating modes. When Congress passed Section 207(b), it required that any short test be "reasonably capable of being correlated" with the certification test, known as the Federal Test Procedure (FTP). A possible motive for this requirement was to insure that the manufacturer only be required to certify his vehicle to the existing Federal Test Procedure and not have to face a new set of standards imposed by any short tests that the Agency would adopt. Also, without the correlation requirement, the vehicle manufacturer might be required to make warranty repairs on properly functioning cars and trucks. Trying to match the complicated, lengthy test with a procedure to be used for "production line" or "in-use" inspections, however, is most difficult.

In the NPRM several methods of correlation were proposed. These methods employed standard statistical tools (linear regressions, contingency tables), at that time believed to be feasible methods for determining correlation. In an effort to promote the maximum possible correlation, vehicles were to be classified into groups with many common elements (engines, weight, etc.). Extensive test programs would be run on each group to determine its correlation characteristics and, subsequently, to set short test standards.

Comments received in response to the NPRM pointed out the limitations of the linear regression and contingency table techniques as well as the difficulty in achieving perfect correlation due to the nature of the two tests. The FTP is a "cold start" test while the I/M short tests all begin with a warm, running engine. (During the FTP, a vehicle is kept in a controlled temperature environment. This insures that the cold start is as repeatable as possible. For short tests, vehicles are tested at operating temperature since this also lends itself to repeatable testing.) Since vehicles have high emissions during cold starts, it is impossible for a practical I/M test to detect such emissions. Concerns were also raised about the large amount of testing necessary to establish short test standards for each vehicle group, and about the type of vehicles which would be tested. After careful consideration of the comments and analysis of data from an I/M evaluation program in Portland, Oregon, a simplified approach is being adopted. A uniform set of short test standards will apply to all vehicles, with standards set to detect a substantial portion of emissions in excess of the certification standards.

The agency has chosen a correlation methodology which holds false short test failures, i.e. errors of commission (Ec's), to the same approximate level as if the full FTP had been used as the short test. An Ec occurs if a vehicle which would pass the FTP is failed by the short test. EPA believes that this approach satisfies the requirement of "reasonable correlation"; further, the Agency emphatically rejects the contention that "perfect correlation" (i.e. prediction of numerical FTP results) is required. "Perfect correlation" would mean that the short test would have to accurately predict both FTP passes and failures. Such a requirement certainly cannot be met at this time, if it can be met at all. The FTP is an extremely complicated test which begins with a cold engine; a large portion of the total HC and CO emissions comes from the cold start, which requires at least a 12 hour shut-down. Since no practical short test can ever begin with a cold start, it appears that perfect correlation can never be obtained. EPA believes that Congress could not have intended such an impossible construction, which would in effect prevent the creation of a program which Congress wished to see implemented. None of the commenters who raised objections to EPA's correlation methodology proposed any alternatives that satisfied their objections.

A statute should ordinarily be read to effectuate its purposes rather than to frustrate them. In construing Section 207(b), one should not lightly infer that Congress intended to adopt a requirement that simply cannot be met. Indeed, the fact that Congress chose the language *"reasonably* capable of being correlated" (emphasis added) indicates its intent that the short test be a reasonable predictor of what could be expected if a vehicle were subjected to the certification (FTP) test. Reading Section 207(b) in its entirety suggests that Congress intended only that the short test identify non-conforming vehicles with reasonable accuracy.

In any event, the approach EPA has chosen in setting short test standards is quite conservative; in order to avoid an excessive Ec rate, the standards have been set high. However, these standards will identify a substantial portion of any emissions above FTP standards. For current technology cars, these short tests and standards will identify approximately 75 percent of the excess emissions. The end result is an emission performance warranty program which will identify most high emitting vehicles and will have about the same Ec rate as the FTP. Accordingly, I conclude that the short test methods and procedures adopted are reasonably correlated with the FTP and are totally in keeping with the language and spirit of Section 207(b).

No short test for NOx emissions is being adopted at this time. NO_x emissions are more difficult to measure than HC and CO emissions and require a more demanding test procedure. Satisfying the correlation requirement for NO_x is an even more difficult task. Since the law does not specifically require that all three pollutants be covered by the short test, the Agency believes that omitting a test for NO_x at this time is justified. Further, to delay the emission performance warranty while a NO_x test is being developed would frustrate the Congressional intent to have a Section 207(b) warranty program established. Efforts will continue to be made to develop NO_x short tests, and a notice of proposed rulemaking will be issued if an adequate NO_x short test is developed. Lack of an NO_x short test does not detrimentally impact vehicle manufacturers since any additional requirements would only increase their exposure to warranty claims. No commenter objecting to the lack of such a test was able to suggest a simple, inexpensive test for NO_x.

Short Test/Standard Discussion

The idle test is adopted as an approved short test because it meets the statutory criteria and also because of its widespread use and simplicity. It is currently used by several jurisdictions in their inspection programs. A number of manufacturers make the equipment required to perform this test. This equipment is priced such that many garages, service stations, and dealerships are now using it in their normal maintenance work. It is also significant that the idle mode represents a substantial portion of the Federal Test Procedure, about 19 percent of the total test time. For that reason, even if correcting a vehicle's idle emissions did nothing to the non-idle modes it would still have the benefit of significant air quality improvements. However, the idle test does more. It accurately predicts excessive emissions from many operating modes by indicating the presence of defective parts and maladjustments. A vehicle with high idle

emissions will generally not pass the Federal Test Procedure.

A variation on the idle test is also approved as a short test. It is the two-speed idle, a sequence of idle-2500 rpm-idle. Results from the idle or 2500 rpm modes (or both) can be used. Also, the lowest HC and the lowest CO readings from the two low speed idle modes are combined to yield a composite score. This latter procedure gives the vehicle owner (and the manufacturer) the benefit of any test or vehicle variability.

The third approved short test is a two mode loaded procedure. It is a simplification of the proposed Federal Three Mode (42 FR 26754). The first test condition is a cruise at 30 mph under a dynamometer load of 9.0 hp. This test condition applies to all vehicles, and is followed by an idle in neutral. The single loaded test condition was adopted to promote efficiency and eliminate errors at the I/M lanes. It imposes a modest load on the vehicle's engine and should detect some malfunctions which are not apparent at idle.

The transient tests originally proposed (Federal Short Cycle and New Jersey/New York Composite) have not been adopted at this time due to the expense involved in purchasing and operating the necessary equipment.

A fixed set of standards applicable to all light duty vehicles and light duty trucks is being adopted in this regulation. This represents a change from the proposal. In the NPRM, standards were to be set for numerous groups of vehicles with similar technologies by testing large samples of then current model year vehicles. Since numerous problems with this approach were raised in comments on the NPRM, this approach has been modified. Rather than obtaining the maximum possible correlation (and correspondingly the most stringent standards) for each group of vehicles, a uniform standard is being adopted for a broad group of vehicles, i.e. all cars and light trucks. This approach is significantly less expensive since large numbers of cars from each group will not have to be tested to establish standards. Also, short test standards will be in place at the start of the model year and will not have to be delayed while the testing of assembly line, certification or in-use vehicles is completed. Finally, the actual standards will be known well in advance of the time they would have been under the previous approach. This will benefit the manufacturer's warranty repair stations, I/M officials and the general public in that the administrative burden to determine if short test standards have been issued for a particular vehicle will be eliminated. Under the NPRM, testing would have taken place at the start of the model year. Test results would be analyzed and short test standards for specific vehicle types would have been established. In order to ensure the greatest extent of warranty coverage standards would have been published as they were developed. Ascertaining if a vehicle was covered and what the standards were would be cumbersome. Of necessity, this uniform standard is less stringent. However, even with less stringent standards, large air quality impacts are possible because vehicles failing these short tests are the ones with the highest FTP emission levels. Also, the uniform standards will eliminate confusion and the burden on the I/M lane of determining what standard applies to a given vehicle with a particular engine.

Optional short tests and standards will be made available if those promulgated today are not appropriate for a particular vehicle type. An example would be a vehicle which meets certification standards while exceeding short test limits.

The short test standards were derived by examining current model, 1975 through 1977, light duty vehicles tested in EPA's Portland Oregon I/M evaluation program. (This program was designed to evaluate an actual I/M program for effectiveness and appropriateness of short test standards.) These vehicles have significantly higher emission standards than their 1981 and later counterparts. Since lower emission standards are applicable in 1981, future model year passenger cars should also have lower short test emissions. Thus, the standards derived from tests on 1975–1977 model year light duty vehicles are conservative; failure rates and errors of commission should be lower for light duty vehicles required to meet the 1981 standards, since those vehicles are required to meet more stringent requirements than the 1975 to 1977 models.

Since 1981 and later light truck emission standards were designed to be of equivalent stringency to 1977 passenger car emission standards, the Agency believes that it is appropriate to develop short test standards for light duty trucks from the Portland data. Cars and light trucks have used similar engines and emission control technologies, and when malfunctioning, truck engines will respond to short tests about the same as passenger cars. The higher numerical values for light duty trucks reflect the slightly higher weight and larger frontal areas.

Applicable Federal emission standards are listed in the table below:

Federal Emission Standards—g/mile

	Passenger cars		Light trucks—
	1975–79	1981 and later	1981 and later [1]
HC	1.5	0.41	1.7
CO	15.0	[2] 3.4	18.0

[1] More stringent standards expected in 1983.
[2] Possible waiver to 7.0 g/mile for 1981 and 1982 under Section 202 of the Clean Air Act.

As indicated above, the short test standards were developed from emission test results on 1975 through 1977 in-use light duty vehicles tested in EPA's Portland, Oregon project. Approximately 2200 vehicles were involved. The vehicles were borrowed from their owners and represent a cross-section of available emission control systems. Each vehicle was tested under the Federal Test Procedure and the proposed short tests. By means of a computer, a number of simulated short test standards were applied to the fleet. The vehicles which "failed" were checked to determine their FTP emissions. The percentage of excess emissions identified, as well as the failure rate and number of Ec's were noted. As a result of this analysis, EPA has determined that the short test standards shown in Table 1 are appropriate:

Table 1.—*Short Test Warranty Standards*

Test and mode	HC [1] (ppm)	CO (percent)
Idle: Idle	220	1.2
2-speed idle:		
2500 rpm	200	1.0
[2]Idle	200	1.0
Two mode loaded:		
30 mph loaded	220	1.2
Idle	220	1.2

[1] Ppm as hexane.
[2] Lowest readings observed of the two idle modes.

When these standards are applied to the Portland data base, the results shown in Table 2 are obtained. These short tests have acceptable error of commission rates while identifying a large portion of the excess (above standard) emissions. The FTP is shown for comparison purposes; its own test variability will produce an estimated 5.3% Ec's and less than 100% identification of excess emissions.

Table 2 shows the short test results. For example, if the idle mode of the two speed idle test is used, 37% of the Portland vehicles failed with 4% (of all vehicles) being failed incorrectly; 63% passed. The failed vehicles were responsible for 81% of the "excess" HC and 83% of the "excess" CO; "excess" meaning the total emissions over the certification standards. If the idle and

2500 RPM modes are combined, the failure rate rises to 42% with corresponding increases in the other parameters. While not all the vehicles which failed the FTP were detected, an extremely high percentage of the excess emissions were identified.

Table 2.—*Short Test Results*

[In percentage]

Test and mode	Failure rate	Errors of commission	Excess emissions identified	
			HC	CO
Idle Test: Idle	39	5.6	82	84
Two speed idle test:				
2500 RPM	22	2.8	60	59
Idle	37	4.0	81	83
Combined	42	6.0	87	90
Two mode loaded test:				
30 mph loaded	24	4.3	59	54
Idle	40	5.2	83	85
Combined	46	7.0	93	93
FTP (Comparison only)	53	[1] 5.3	[2] 100	[2] 100

[1] Estimated from test variability.
[2] Actually slightly less than 100% due to test variability.
Standards: 1.2% CO/220 ppm HC except two speed idle 1.0% CO/200 ppm HC.

NOTES

Failure Rate—Percentage of all Portland vehicles that failed the short test.
Ec's—(Errors of Commission) Vehicles which failed the short test but met certification standards.
Excess Emissions Identified: The portion of emissions over the certification standard detected by the short test.

As indicated above, the results in Table 2 are for the 1975 to 1977 vehicles tested in the Portland study. Since 1981 and later passenger cars will be certified to lower emission levels they should be "cleaner" on the short test. Therefore, the figures given in Table 2 are numerically larger than those anticipated for 1981 and later passenger cars. On the other hand, light trucks in the 1981 model year will have similar emission control systems to the vehicles used to generate Table 2; therefore results should be similar.

A full development of the rationale behind these standards is contained in the report "Light Duty Vehicle and Light Duty Truck Emission Performance Warranty; Short Tests and Standards" which is in the Public Docket. Single copies are available from the address above.

An investigation was made of the suitability of the short tests for light trucks and of geographic variability of the tests for light duty vehicles. For this purpose, EPA's emission factor data for 1975 through 1979 cars and light trucks was used. (This data is routinely collected to quantify mobile source emissions.) No major differences from the analysis presented above were noted. Light trucks had lower failure and error of commission rates than passenger cars. Slight differences between the various cities existed; however, the basic functioning of the idle test was verified. The results of applying the idle standards resulted in a failure rate which ranged from 31% in Los Angeles to 52% in Phoenix compared to an average of 39% for all cities surveyed. Similarly the idle test errors of commission ranged from 2% in Denver to 7.3% in Phoenix compared to a 5.6% average for all cities surveyed. These differences can be attributed, in part, to the smaller sample sizes (which enhance variability) and differences in owner maintenance habits. California vehicles have stricter exhaust standards so Los Angeles had fewer short test failures. Conversely, at high altitudes vehicle emissions increase and more cars will exceed their emission standards.

Therefore, errors of commission will decrease because there are fewer cars for the short test to incorrectly fail. (For the same reasons, similar variations would occur if this analysis were performed for the other short tests.) This acceptable level of geographic variability confirms the general applicability of the short tests. A more detailed evaluation can be found in the report cited above.

No altitude limit has been set for the short test. The same factors affecting short test emissions at high altitudes also impact results on the full FTP procedure. Results from an examination of Denver data bear this out: an overall 50% failure rate with only 2% errors of commission. This performance meets the criteria for short tests. However, Congress debated requirements for high altitude emissions certification, and has established a 4000 foot limit for low altitude standards. Since there is presently no certification test conducted at high altitude, the emission performance warranty will not be available initially at elevations over 4000 feet. Once EPA has adopted new high altitude emission standards (projected for 1982) the warranty can then be made available.

The Agency has recently proposed high altitude emission standards for light duty vehicles (LDVs) and light duty trucks (LDTs), 45 FR 5988, January 24, 1980. The following limits have been published for comment:

Proposed High Altitude Standards (g/mile)

	Year	HC	CO
LDV	1982/83	0.57	7.8
LDT	1982	2.0	26.0
	1983	1.0	14.0

Except for 1982 light trucks, all these standards are below the LDV certification standards for 1975 through 1977, which are 1.5 g/mile HC and 15.0 g/mile CO. As stated above, an analysis of high altitude test results (in Denver) on 1975 through 1977 passenger cars shows that correlation exists between the certification procedure and the short tests. When more stringent certification standards are promulgated this correlation will still exist; such vehicles will be "cleaner", and their short test results will be lower. By similar reasoning, errors of commission will be reduced because of the increased stringency of the certification standards. So, except for the proposed 1982 LDT standards, the Section 207(b) criteria for a high altitude emission performance warranty have been satisfied. When such high altitude standards are promulgated the warranty will be available, except for 1982 light trucks.

The proposed 1982 LDT high altitude standards represent an 18% increase in HC (1.7 to 2.0 g/mile) and a 44% increase in CO (18 to 26 g/mile) from the applicable low altitude standards. The 1982 low altitude LDT standards were developed to be of equal stringency to the 1975 through 1977 LDV standards. (Increases in the standards were needed to compensate for the higher weight and larger frontal areas of light duty trucks.) To estimate how such 1982 high altitude trucks will respond to the short test, data from 1975 through 1977 passenger cars tested in Denver have been reviewed. But, instead of using the passenger car certification standards (1.5 HC, 15.0 CO), standards equivalent in stringency to the proposed 1982 light

truck limits have been substituted. This calculation results in standards of 1.76 g/mile HC, an 18% increase, and 21.8 g/mile CO, a 44% increase. (These percentage increases are the same as for 1982 light trucks from low to high altitudes.) Evaluating the high altitude data against these derived limits yields the following: 50% idle test failures and 3.9% Ecs.

This analysis was performed using idle test results and the short test standards adopted herein. Based on the relationship between short test and FTP emissions, similar results can be expected for the other short tests.

These short test regulations will take effect for 1982 LDTs at high altitude when high altitude certification standards are promulgated for that model year. However, if the light truck high altitude standards for 1982 are less stringent than those proposed, this matter will be re-examined in a subsequent rulemaking.

Diesel vehicles are covered by the adopted short tests. EPA believes that there are no failure modes peculiar to diesels which would result in a loss of correlation. No specific comments were made on this issue. Moreover, diesels operate with very lean fuel/air mixtures resulting in very low hydrocarbon and carbon monoxide emissions under short test conditions. Only in the case of a major fault in the fuel system could emissions increase dramatically such that the vehicle would fail the short test. Thus, the percentage of Ec's should be less than that for gasoline-powered vehicles.

The standards set forth in this regulation are the minimums at which the Section 207(b) warranty may be invoked. States and local jurisdictions are free to set less stringent standards for their I/M programs; in such cases, a warranty remedy will also be available, but only for those vehicles which fail the state inspection. (Section 207(b) requires that a penalty or sanction be imposed before the warranty can be invoked.) While it is not anticipated that any I/M programs will have more stringent standards, under those circumstances the warranty would be available only to those vehicles which failed both sets of standards. (I/M programs will not generally need to use as stringent standards to meet their air quality requirements.) It would not be available if the vehicle fails inspection but not the standards adopted herein. For example, a vehicle with 0.7% CO at idle would fail an I/M standard of 0.5%; it would not qualify for warranty because the standard is 1.2% which the vehicle would meet.

Public Participation

Slightly less than 100 written comments were received in response to the NPRM and testimony at three public "workshops". Private citizens, the service industry, local governments, civic organizations, parts and automotive manufacturers were all represented. Most comments were general; a few went into great detail on the technical aspects. Of the general comments, many were concerned with the overall desirability of I/M programs. EPA's position on the major statutory issues has been outlined in the previous sections. A complete response to the comments has been prepared and is attached as an appendix.

In December 1979, the Motor Vehicle Manufacturers Association (MVMA) filed a petition with EPA requesting that a new Notice of Proposed Rulemaking be issued on Section 207(b) short tests. MVMA cited the passage of time, new developments and changed circumstances as reasons for a reproposal. This Agency believes that the rules promulgated today are within the scope of the original NPRM. Nevertheless, the comment period was reopened to give MVMA and the public an opportunity to comment on data generated since the close of the original comment period and on EPA's current approach to short tests and standards. Twelve parties responded during the reopened comment period, and their comments have been considered in developing the final regulations.

MVMA also filed a supplement to its original petition asserting that the additional time allotted for comments was inadequate. MVMA's submissions have been reviewed, and EPA's response is being published today in the **Federal Register**. The Agency's response to MVMA's petition and supplement to its petition has also been made part of the record of this rulemaking.

Copies of all comments, rulemaking support documents and other materials relevant to this rulemaking are contained in Docket A–79–57. The docket may be reviewed at the U.S. Environmental Protection Agency, Central Docket Section, Room 2903 B (EPA Library), Waterside Mall, 401 M Street S.W., Washington D.C. 20460. Copies of all items in the docket may be obtained. As provided in 40 CFR Part 2, the Agency may charge a reasonable fee for copying services.

Proprietary Rights

Users of the processes required under the regulations below should be aware that any of them may be subject to claims that all or portions of the processes involve proprietary rights. For example, the Clayton Manufacturing Company alleges that the process covered by Clayton's U.S. Patent 3,998,095 may be involved in the Federal Two-Mode Test (see § 85.2214(b)(4)). Except as EPA specifically otherwise informs potential users, EPA takes no position on the validity of allegations of infringement of proprietary rights. Whenever EPA becomes aware of such claims, however, EPA will try to inform potential users. We request that users inform us of such claims made against them, so that we can in turn pass that information on to other potential users.

Evaluation Plan

EPA intends to review the effectiveness and need for continuation of the provisions contained in this action no more than five years after initial implementation of the final regulations. In particular, EPA will solicit comments from affected parties with regard to cost and other burdens associated with compliance and will also review data on the gaseous emissions from vehicles built before and after implementation of the regulations to determine how effective this measure has been.

Reporting and Record-Keeping Requirements

This rulemaking will not impose additional reporting or record-keeping requirements. Under EPA's recently established "sunset" policy, the reporting requirements of a regulation normally expire after five years unless action is taken to extend them.

Note.—The Environmental Protection Agency has determined that this document is not a significant major regulation requiring the preparation of a regulatory analysis under Executive Order 12044.

Dated: May 12, 1980.

Douglas M. Costle,

Administrator.

Part 85 of Chapter I, Title 40 of the Code of Federal Regulations is revised as follows:

1. The title of Part 85 is amended to read:

PART 85—CONTROL OF AIR POLLUTION FROM MOTOR VEHICLES AND MOTOR VEHICLE ENGINES

2. A new Subpart W is added:

Subpart W—Emission Control System Performance Warranty Short Tests

Sec.

85.2201 Applicability.
85.2202 General provisions.
85.2203–81 Short test standards for 1981 and later model year light-duty vehicles.
85.2204–81 Short test standards for 1981 and later model year light-duty trucks.

85.2205 to 85.2210 [Reserved]
85.2211 Alternative standards and procedures.
85.2212 Idle test.
85.2213 Two-speed idle test.
85.2214 Loaded test.
85.2215 Exhaust sampling system.
85.2216 Dynamometer.
85.2217 Calibrations, adjustments.
85.2218 Test report.

Authority: Sec. 207, 301(a), Clean Air Act as amended (42 U.S.C. 7545 and 7601(a))

§ 85.2201 Applicability.

This subpart contains the short test and standards to be employed in conjunction with the Emission Performance Warranty, Subpart V.

§ 85.2202 General provisions.

The definitions and abbreviations in Subpart A of Part 86 of this chapter apply to this subpart.

§ 85.2203-81 Short test standards for 1981 and later model year light-duty vehicles.

(a) For 1981 and later model year light duty vehicles at low altitude, and for 1982 and later model year light duty vehicles at high altitude to which high altitude certification standards of 1.5 g/mile HC and 15 g/mile or less apply, short test emissions shall not exceed.

(1) Idle test.

(i) *Hydrocarbons:* 220 ppm as hexane.

(ii) *Carbon monoxide:* 1.2%.

(2) Two speed idle test, idle mode. The lowest readings from the two idle modes shall be used to determine compliance.

(i) *Hydrocarbons:* 200 ppm as hexane.

(ii) *Carbon monoxide:* 1.0%.

(3) Two speed idle test, high speed mode.

(i) *Hydrocarbons:* 200 ppm as hexane.

(ii) *Carbon monoxide:* 1.0%.

(4) Loaded test, idle mode.

(i) *Hydrocarbons:* 220 ppm as hexane.

(ii) *Carbon monoxide:* 1.2%.

(5) Loaded test, low speed mode.

(i) *Hydrocarbons:* 220 ppm as hexane.

(ii) *Carbon monoxide:* 1.2%.

§ 85.2204-81 Short test standards for 1981 and later model year light-duty trucks.

(a) For 1981 and later model year light duty trucks at low altitude, and for 1982 and later model year light duty trucks at high altitude to which high altitude certification standards of 2.0 g/mile HC and 26. g/mile CO or less apply, short test emissions shall not exceed:

(1) Idle test.

(i) *Hydrocarbons:* 220 ppm as hexane.

(ii) *Carbon monoxide:* 1.2%.

(2) Two speed idle test, idle mode. The lowest readings from the two idle modes shall be used to determine compliance.

(i) *Hydrocarbons:* 200 ppm as hexane.

(ii) *Carbon monoxide:* 1.0%.

(3) Two speed idle test, high speed mode.

(i) *Hydrocarbons:* 200 ppm as hexane.

(ii) *Carbon monoxide:* 1.0%.

(4) Loaded test, idle mode.

(i) *Hydrocarbons:* 220 ppm as hexane.

(ii) *Carbon monoxide:* 1.2%.

(5) Loaded test, low speed mode.

(i) *Hydrocarbons:* 220 ppm as hexane.

(ii) *Carbon monoxide:* 1.2%.

§§ 85.2204 to 85.2210 [Reserved]

§ 85.2211 Alternative standards and procedures.

(a) As a part of the certification process, as set forth in § 86.078 et seq., a manufacturer may request an alternative short test standard or short test procedure for any vehicle or engine for which the standards or procedures specified in this subpart are not appropriate. The manufacturer shall supply relevant test data and technical support to substantiate his claim and shall also recommend alternative test procedures and/or standards for the Administrator's consideration. Upon an acceptable showing that the general standards or procedures are not appropriate, the Administrator shall set through rulemaking procedures alternative standards or procedures. The administrative provisions of the certification process (see § 86.078 et seq.), apply to such a request for alternative standards or procedures.

(b) Any such alternative standard or test procedure must be specified on the emission control information label to be effective for that particular vehicle or engine.

§ 85.2212 Idle test.

(a) *General requirements:* Vehicles shall be tested in as-received condition. Engines shall be at normal operating temperature and not overheating (as indicated by gauge warning light or boiling radiator) with all accessories off.

(b) *Test Sequence.* (1) Analyzers shall be warmed-up, in stabilized operating conditions and adjusted as required in § 85.2217.

(2) Optional: The engine may be preconditioned by operating it at 2500± 300 rpm for up to 30 seconds.

(3) With engine idling and transmission in neutral, the sample probe shall be inserted into the tailpipe. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes. However, multiple readings are not necessary for exhaust originating from a common point.

(4) Results from multiple exhaust pipes shall be numerically averaged.

§ 85.2213 Two speed idle test.

(a) *General requirements:* Vehicles shall be tested in as-received condition. Engines shall be at normal operating temperature and not overheating (as indicated by gauge warning light or boiling radiator) with all accessories off.

(b) *Test Sequence.* (1) Analyzers shall be warmed-up, in stabilized operating conditions and adjusted as required in § 85.2217.

(2) Attach tachometer pick up.

(3) With engine idling and transmission in neutral, the sample probe shall be inserted into the tailpipe. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes. However, multiple readings are not necessary for exhaust pipes originating from a common point.

(4) The engine speed shall be increased to 2500 ± 300 rpm, with transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. Repeat as in subparagraph (3) for multiple exhaust pipes, if necessary.

(5) The engine speed shall be reduced to free idle with transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. Repeat as specified in subparagraph (3) for multiple exhaust pipes, if necessary.

(6) For vehicles with multiple exhaust pipes, the separate results from each pipe for each mode (subparagraphs (3), (4), and (5) above) shall be numerically averaged for each pollutant.

(7) The idle mode final results shall be the lowest HC and lowest CO readings from steps (3) and (5).

(c) Exhaust concentration measurements from both the idle mode and the high speed mode are not required. The short test may be used to evaluate emissions from either mode alone or from both modes, the choice being made by the jurisdiction implementing the inspection program. If exhaust concentrations are not measured on a given mode, the vehicle shall be operated at the specified test condition for 15 to 30 seconds. The final idle mode, paragraph (b)(5) of this section, may be omitted if only high speed mode exhaust concentrations are to be measured or if the vehicle is below idle standards on the first measurement, paragraph (b)(3) of this section. The high speed mode and final idle mode may be

omitted if only idle mode exhaust concentrations are to be measured and if the vehicle is below idle standards on the first measurement.

§ 85.2214 Loaded test.

(a) *General requirements.* Vehicles shall be tested in as-received condition. Engines shall be at normal operating temperature and not overheating (as indicated by gauge, warning light or boiling radiator) with all accessories off. An auxiliary cooling fan is optional.

(b) *Test Sequence.* (1) The dynamometer and analyzers shall be warmed-up, in stabilized operating conditions and adjusted as required in §§ 85.2216 and 85.2217.

(2) The vehicle shall be placed on the dynamometer.

(3) The sample probe shall be inserted into the tailpipe.

(4) Optional: A high speed mode, maximum 50 mph and 30 seconds duration, is permitted if vehicle overheating does not occur.

(5) Drive for automatic or 3rd gear for manual transmissions shall be used. The vehicle shall be operated at 30 ± 1 mph roll speed while measuring exhaust HC and CO. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes. However, multiple readings are not necessary for exhaust pipes originating from a common point.

(6) The vehicle shall be idled in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. Repeat as specified in subparagraph (5) of this paragraph for multiple exhaust pipes, if necessary.

(7) For vehicles with multiple exhaust pipes, the separate results from each pipe for each mode (subparagraphs (5) and (6) of this paragraph) shall be numerically averaged for each pollutant.

(c) Exhaust concentration measurements from both the loaded mode and the idle mode are not required. The short test may be used to evaluate emissions from either mode alone or from both modes, the choice being made by the jurisdiction implementing the inspection program. If exhaust concentrations are not measured on the loaded mode the vehicle shall be operated at the specified test condition for 15 to 30 seconds. If idle exhaust concentrations are not measured, the idle mode may be omitted.

§ 85.2215 Exhaust sampling system.

(a) The exhaust sampling system shall consist of a sample probe, moisture separator and analyzers for HC and CO.

(b)(1) The HC analyzer shall have an accuracy of ± 15 ppm at 200 to 220 ppm concentration HC (as hexane); the CO analyzer shall have an accuracy of ± 0.10% CO from 1.0% to 1.2% concentration.

(2) Response time of the analyzers shall be 15 seconds to 95% of the final reading.

(3) Analyzer drift (up-scale and down-scale zero and span wander) shall not exceed ± 0.1% CO and ± 15 ppm HC (as hexane) on the lowest range capable of reading 1.0% CO or 200 ppm HC (as hexane) during a one-hour period.

§ 85.2216 Dynamometer.

(a) The loaded test dynamometer shall be adjusted to produce a load of 9.0 ± 1.0 hp at 30 mph.

(b) Speed shall be measured from the dynamometer roll(s) with an accuracy of ± 1.5 mph at 30 mph true roll speed.

§ 85.2217 Calibrations, adjustments.

(a) Equipment shall be calibrated in accordance with the manufacturers' instructions.

(b) Within one hour prior to a test, the analyzers shall be zeroed and spanned. Ambient air is acceptable as a zero gas; an electrical span check is acceptable. Zero and span checks shall be made on the lowest range capable of reading the short test standard.

(c) Within eight hours prior to a loaded test, the dynamometer shall be checked for proper power absorber settings.

(d)(1) The analyzers shall have been spanned and adjusted, if necessary, using gas traceable to NBS standards ± 2% within one week of the test. These span gases shall have concentrations either:

(i) Between the standards specified in this subpart and the jurisdictions inspection standards for 1981 model year light duty vehicles, or

(ii) Be within −50% to +100% of the standards in this subpart.

(2) For analyzers with a separate calibration or span port, CO readings using calibration gas through the probe and through the calibration port shall be made; discrepancies of over 3% shall require repair of leaks. No analyzer adjustments shall be permitted during this check.

§ 85.2218 Test report.

(a) Upon failure of a short test, the vehicle's operator or owner shall be furnished with a test report containing:

(1) Vehicle description, including either license plate or manufacturer's identification number, and odometer reading.

(2) Date of test.

(3) Name of individual or organization performing the test and location thereof.

(4) Type of short test performed.

(5) Test results, exhaust concentrations for each mode measured.

(b) The test report shall certify that the short test was performed in accordance with these regulations and it shall be signed by an individual who either performed the test or has actual knowledge of the performance of the test.

(c) For purposes of this section, "failure of a short test" means that the vehicle exceeded the standards in this subpart or the Inspection/Maintenance standards of the jurisdiction, whichever is less stringent.

(Sec. 207, 301(a) of the Clean Air Act, as amended (42 V.S.C. 7545 and 7601(a)))

Appendix—Analysis of Comments

Emission Performance Warranty Short Test and Standards

Note.—This Appendix will not appear in the Code of Federal Regulations.

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I. Introduction

On May 25, 1977, the Environmental Protection Agency proposed regulations to establish a short test and standards for an emission performance warranty (42 FR 26742). The emission performance warranty is intended to complement state inspection/maintenance programs. Under these "I/M" programs, a vehicle owner is required to submit his car for inspection on a periodic basis. If, as determined by the "short test," the vehicle has excessive emissions, some type of repair is mandated. Pursuant to Section 207(b) of the Clean Air Act, the vehicle manufacturer, under certain circumstances, is liable for the cost of repairs. This document addresses only the short test and its associated emission standards. The actual emission performance warranty regulations are the subject of a separate rulemaking and were proposed for comment on April 20, 1979, 44 FR 23784.

The comment period was reopened on January 31, 1980, for thirty days. Comments were solicited on EPA's current positions and data not available at the time of the original NPRM.

The short test notice of proposed rulemaking (NPRM) contained five recommended short tests and an equal number of standard setting methods. These multiple proposals were designed to generate comments encompassing the entire field of possible solutions. Since that NPRM, the area of consideration has been reduced substantially. In this regard, the diverse views and information presented by the commenters have been most helpful.

II. Statutory Requirements

In order to understand the public comments discussed below, it is necessary to be familiar with the requirements of the Clean Air Act, Section 207(b).

If the Administrator determines that

(i) There are available testing methods and procedures to ascertain whether, when in actual use * * * each vehicle * * * complies with emission standards,

(ii) Such methods and procedures are in accordance with good engineering practices, and

(iii) Such methods and procedures are reasonably capable of being correlated with (certification tests) then * * *

He shall establish such methods and procedures by regulation * * * (emphasis added).

It should be noted that the Administrator has no discretion whether to establish the short test once the requisite three findings have been made. In addition to the short test and standards, the Administrator is required to promulgate the actual warranty regulations requiring no-cost repairs by the manufacturer. (These no-cost repairs are conditioned upon certain time and mileage limitations as well as maintenance requirements.) It is certain that the Congress felt very strongly about enforcing the manufacturers' obligation to produce vehicles which conform to the emission standards while in actual use. Unlike some other provisions of the Clean Air Act, under Section 207(b) the Agency is not required to make determinations concerning the cost or effectiveness of the emission performance warranty.

III. General

In all, slightly less than 100 comments were recieved in response to the original Notice of Proposed Rulemaking; twelve comments were made during the reopened comment period. Included were individuals, small businesses, civic organizations, government agencies and the automotive industry. All five major domestic manufacturers commented, as well as many of the larger foreign vehicle manufacturers. The small businesses which commented were in the automotive repair industry. Those state and local governments which commented either had or were considering adopting their own inspection/maintenance programs. The commenters represented a cross section of those individuals and organizations most likely to be affected by the adoption of short tests and standards.

A majority of the comments were opposed to the proposed regulations. A few individuals, the civic organizations and local governments supported the proposal.

Comments submitted by the manufacturers dealt primarily with the three statutory requirements. Their comments raised rather detailed, technical matters which are addressed below. The small businesses, mostly automotive repair shops, complained that the proposal would have anti-competitive and monopoly aspects. This allegedly would result from the owner having more incentive to use the manufacturer's dealers for repair purposes. Citizens who objected to the NPRM were opposed for both philosophical and other reasons. Some citizens objected to further regulation by the Federal government, and assumed that the regulations would force adoption of Inspection/Maintenance programs. They also complained that the costs of the program would be passed on in the form of higher vehicle prices. Several suggested that Inspection/Maintenance programs be combined with existing safety checks. Many comments are not germane to the three statutory requirements, and will not be addressed here. It should be pointed out that the short test regulations will not impose I/M programs; they will merely establish an approved short test and associated standards. Implementation of I/M programs will be done by state and local governments.

Commenters in support of the regulations felt that the emission performance warranty would be an incentive for vehicle owners to get repairs and thus result in an air quality improvement. Also, the manufacturers would have an incentive to reduce warranty costs and thus make their emission control systems more reliable. Again, this would result in an air quality improvement. One vehicle manufacturer supported the I/M concept when used to detect gross emitting vehicles, but not when it was aimed at those marginally above emission standards.

All comments submitted in response to the original NPRM and during the recently reopened comment period have been carefully reviewed. Those comments which are relevant to the statutory requirements have been combined and summarized. The final rulemaking has been modified to incorporate many of the suggestions. Comments have been divided into six broad categories (Legal, Availability, Good Engineering Practice, Correlation, Standards, Short Test), with particular items addressed as subtopics. Where appropriate, comments during the reopened comment period have been so identified.

IV. Summary and Analysis of Comments

A. Legal

1. Procedure. Comment: The proposed regulations should be considered to be an advanced Notice of Proposed Rulemaking. The supporting data set was incomplete; proposed rulemaking should have been deferred until the Portland study was finished. This will allow all parties time to review the basis for the proposed rules and permit evaluation of the data before the final rules were promulgated.

Response: The course of action suggested would have delayed the entire program by several years. Adequate data existed at the time of the NPRM to satisfy the statutory criteria. Basic relationships between short test and FTP emissions were established; subsequent data from Portland (and other programs) merely refined these relationships.

Comment: The reopened comment period was too short. Thirty days is entirely inadequate to sufficiently analyze all the new data and information which has only recently been made available. (The Portland report contains over 500 pages of data; it is impossible to analyze all this data in the time available). Further, it is impossible to thoroughly examine the interaction of the short test regulations with the aftermarket parts certification regulations, and the emission performance warranty regulations both of which have been recently proposed.

Response: The agency disagrees that the comment period was too short. In its comment, the Motor Vehicle Manufacturers Association stated that they reproduced EPA's calculations, performed additional calculations and data analysis, and were able to submit 130 pages of analysis and data presentations. While it may be true that further data analysis could have been performed had additional time been available, only two firm suggestions for additional analysis were made. The first suggestion for further analysis was that the Portland data be examined to see if particular engine families were treated unfairly by the proposed tests. As stated in the technical report, EPA sorted the data by engine displacement and catalyst usage. Minor differences in failure and error of commission rates were noted. The report recommended that special short test standards be established for those vehicles for which the general short test standards are not appropriate. Procedures to accomplish this have been incorporated into the regulations. The second suggestion was that additional data be analyzed to estimate the actual reduction in air pollution, rather than the potential reduction. Such an analysis is not required to support promulgation of the short tests; it would be more appropriately directed at determining the overall effectiveness of I/M programs. A short test can only identify vehicles needing repairs. The repairs made determine the actual benefit. (It is difficult to imagine what would be shown by such an analysis that would indicate the short tests should not be adopted. If repairs are effective the short tests would be supported. But, even if current repairs are not effective that would not establish the effectiveness of warranty repairs.)

While it is true that the Portland report contains extensive listings of data, this information, in the form of a computer tape, was available upon request, and was, in fact, supplied to MVMA. Further, not all of the Portland data was relevant to this rulemaking. MVMA was able to check EPA's calculations using this data and was able to supply analysis from different data sets. It seems rather unlikely that any significant new revelations would have occurred had a substantially longer comment period been granted.

The aftermarket parts and warranty regulations have no impact upon the short test regulations. The 207(b) short test regulations have been established in accordance with the statutory criteria in the Clean Air Act. Those criteria do not include an analysis of the warranty and aftermarket parts certification regulation. Although the short test regulations are prerequisites to implementing the warranty regulations, they could have been promulgated before the warranty and aftermarket parts regulations were proposed. Indeed, some commenters felt this is the course EPA should have followed. The only "impact" the short test has on the other regulations is that, depending on the short test standards, it may affect the number of vehicles failing I/M. The end result may be that a manufacturer has more warranty claims, but this fact does not require an extensive new comment period. The obligation to build vehicles which comply with emission standards for their useful life is already imposed by the Clean Air Act. Nevertheless, EPA granted an opportunity to comment on the impact which any change in the short test proposal or new data would have on the other two proposed regulations. No comments were received. The 207(b) short test regulations are only concerned with the statutory criteria in the Clean Air Act. The emission performance warranty rules and aftermarket parts certification regulations are independent.

The comment period was reopened in part to solicit comments on data or analysis not available previously. In addition, the Agency's current thinking on the substance of the regulations was set forth in the notice. Interested parties were invited to submit their views on those short tests and standards.

It should also be noted that the Motor Vehicle Manufacturers Association was given an advance notice that the comment period would be reopened. So, instead of the thirty days, the manufacturers in effect had over forty days to prepare comments. And, in the same vein, the data and analysis which prompted the reopening of the comment period had been made available to MVMA over two months prior to the closing of the comment period. (One MVMA member had the data for more than 6 months from the start of the comment period.)

2. Proposed Alternatives. Comment: It is impossible to comment on all possible combinations of short test and cutpoint selection methodologies.

Response: Comments on each combination were certainly not required or expected. Many manufacturers commented on each short test as well as on each cutpoint method; there was no logical reason to comment on each combination.

3. De Facto Standards. Comment: Congress did not intend to authorize any emission standards other than those already established. Therefore, the emission performance warranty requirements should not establish a new set of de facto requirements to which the manufacturers must design.

Response: It is required by statute that short tests and standards must reasonably correlate with the existing certification test. Since the two procedures must be correlated, the manufacturer will face no additional burden in certifying his vehicles. The final regulations recognize this concern and are structured so that the possibility that vehicles complying with the certification standards will fail the short test is very small.

Comment: Correlation was required by Congress so that the manufacturer will only have one engineering goal to attain. Otherwise, it would be possible to have to design to both the certification and to the short tests, and these goals might conflict.

Response: The short test standards adopted eliminate this concern. The correlation requirement is satisfied in that the short tests do not fail, in significant numbers, vehicles which comply with the certification standards. The number of incorrect failures (errors of commission) will be about the same as if the certification test itself had been used. A manufacturer who designs vehicles to comply with the certification standards over the vehicle's useful life (as required by law) will not be subject to unnecessary warranty claims.

4. NO_x Measurement Required. Comment: Congress intended that any short test adopted must measure and evaluate NO_x emissions.

Response: The Agency rejects this viewpoint. Section 207(b) does not specifically require measurement of all

three pollutants. It is unreasonable to attribute such a desire on the part of Congress where the net result would be to frustrate the very intent of Congress in adopting Section 207(b), i.e., that once a reasonable means of determining vehicle noncompliance is developed that can be used in state I/M programs, then manufacturers under the circumstances described in Section 207(b)(2) (A) through (C) should pay for repairs necessary to bring into compliance a vehicle that has failed an I/M test. Further, the vehicle manufacturers who made this comment will certainly not be prejudiced by exclusion of NO_x emissions from the short test. Any test procedure which would fail vehicles for excessive NO_x emissions would potentially result in their having to pay a larger number of warranty claims. EPA is continuing to work on a short test and standards for NO_x. There is no reason to delay the entire program until the NO_x effort is complete.

The approach taken by the Agency established correlation as the ability to identify failing vehicles. A vehicle which fails only one pollutant (on the FTP) does not comply with the emission standards. Once a vehicle fails for HC or CO, testing for NO_x is not necessary. EPA recognizes that this approach will fail to detect some vehicles with excessive NO_x emissions. This course is necessary because inclusion of NO_x measurement would dictate a more expensive loaded test with additional instrumentation; this procedure may not be as "available" to private garages in decentralized I/M programs as an HC and CO only test.

5. *Lead Time.* Comment: The Agency must allow for eighteen months (prior to production) between promulgation and the effective date of the regulations. This allows the manufacturer time to design for the short test. Otherwise, it is possible that a manufacturer will design a system which will subsequently not be able to pass the short test when it is sold. This would result in an unconstitutional lack of due process; penalties would be imposed without the ability to avoid them.

Response: The question of lead time is addressed in the Clean Air Act. The only requirement is that the subject vehicles be manufactured "in a model year beginning after the Administrator first prescribes warranty regulations under this paragraph." There is no requirement for any additional lead time. Further, lead time is not necessary since the Act requires that the short test be "reasonably capable of being correlated" with the certification test. A class of vehicles designed to meet the certification requirements will, in fact, pass the short test and its standards. If new technology is developed which has different characteristics, specific optional standards will be applied to such vehicles. No additional design burden will be created by the regulations.

Comment: If promulgated for the 1981 model year, there will be inadequate lead time for the manufacturers to react to the emission performance warranty regulations. Since designs have been fixed and commitments have been made to purchase the necessary emission control hardware, these regulations will have a retroactive effect.

Response: Section 207(b) of the Clean Air Act requires that the regulations be promulgated prior to the model year for which they apply. The requirement that the approved short test be "reasonably capable of being correlated" with the certification test ensures that there will be no increased burden placed upon the manufacturer by these regulations. Therefore, concerns about inadequate lead time are not justified. Further, Section 207(a) of the Clean Air Act requires that manufacturers build vehicles that are capable of meeting emission standards for their useful life. The regulations being promulgated will only aid in enforcing an obligation that already exists.

6. Production Test. Comment: The Congress intended that the Section 207(b) short test must correlate with any production line short test. (Reference—Clean Air Act Conference Report, page 171, HR 6161).

Response: To date, no production line short test has been adapted. This concern will be addressed in the future.

7. Light Duty Truck Coverage. Comment: Inclusion of light duty trucks in the NPRM was improper. The data base for proposed rulemaking considered only passenger cars and not light trucks. Since light trucks perform an entirely different function than passenger cars, any regulation of them must be supported by a separate light truck data base.

Response: Light-duty trucks are tested for emissions certification by the same procedure as passenger cars. As concluded in the previous light duty truck rulemaking (41 FR 55345; December 20, 1976), the majority of light trucks are personal use vehicles performing the same function as passenger cars. Many of the mechanical and emission control components used on these vehicles are very similar (or even identical) to the components used on passenger cars. Finally, standards for 1979 and later light trucks were established to be of the same stringency as 1977 passenger car limits. (The car standards were adjusted to account for the slightly heavier weights and larger frontal areas.) With all of these common points, the Agency believes use of the same short tests is both logical and justified.

Comment: It is inconsistent for EPA to state that the short tests and standards are appropriate for both light duty vehicles and light duty trucks beginning in the 1981 model year. There are significant differences in emission control technology that should result in different responses to the short test. Light duty trucks will experience an error of commission rate greater than 5%; there were no light duty trucks tested in Portland and EPA has not done enough testing to justify their inclusion in this rulemaking.

Response: It is acknowledged that light duty trucks will be treated somewhat more severely than will the passenger cars. (Passenger cars will have more advanced emission control systems to meet the more stringent certification standards. These emission controls should also give an advantage in passing the short test standards.) However, 1981 and later trucks will have the same types of emission control systems as were found on vehicles forming the basis for the Technical Report and therefore should experience a 5% Ec rate. One hundred seventy five trucks tested in EPA's emissions factors program substantiate that the short test standards are appropriate for this class of vehicle. (See Technical Report Figure 8.) As data is gathered on advanced technology vehicles, EPA will evaluate the feasibility of revising short test standards for passenger cars. No substantiation has been offered for the assertion that the standards are not appropriate for light trucks.

Short test standards for 1981 light trucks (and passenger cars) were derived from EPA's Portland program. Data from 1975 through 1977 model year cars were used to establish short test levels which will yield acceptable correlation. Since 1981 light trucks will employ similar emission control systems (and many other components as well) as the passenger cars in the data base, the short test standards thus developed will be appropriate.

EPA evaluated data on 1975 through 1978 model trucks tested in various cities under the emission factors program. Results on the idle test and FTP were compared for short test and certification standards. Results compared closely to that observed for passenger cars in the same test program. (See Technical Report Figure 8.)

	In percentage	
	Failures	Ec's
Cars	39	5.4
Trucks	31	3.6

This data supports incorporating light trucks.

8. Manufacturer Testing. Comment: EPA does not have authority to require manufacturer testing to establish emission performance warranty standards.

Response: The requirement for manufacturer testing has been deleted.

9. Regulatory Language. Comment: In order to fully comment it is necessary that the specific regulatory language be disclosed. This was not done.

Response: In the original NPRM, the specific text of the proposed short test regulations was provided. Refinements reflected in the final rule were derived from the proposal and comments received thereon. Accordingly, reproposal was unnecessary. Moreover, as part of the notice extending the comment period (45 FR 6960), EPA provided a summary of the short tests then under consideration. This summary was consistent with Administrative Procedure Act rulemaking provisions that require only the "substance" or "a description of the subjects and issues involved" in the rule be provided. 5 U.S.C. Section 553(b). Accordingly, EPA rejects this comment.

B. Availability

1. Ability to Ascertain Compliance. Comment: The five proposed tests are available, but the statute requires that they be available to ascertain compliance with the Federal Certification standards. This has not been demonstrated.

Response: The Agency does not agree with this viewpoint. The Clean Air Act specifies in Section 207(b) that the emission performance warranty can take effect only after it is established that "* * * there are available testing methods and procedures to ascertain whether * * * each vehicle * * * complies with the emission standards * * *" While this language could be read as sanctioning only those methods that establish a vehicle's capability (as opposed to inability) to pass the Federal Test Procedure, this clearly was not the intent of Congress. When the above-quoted language is read in conjunction with the correlation requirement, 207(b)(iii), it is clear that Congress intended that the short test identify with reasonable accuracy vehicles which failed to meet the Federal Test Procedure so that the manufacturers could be required to repair them. Indeed, the committee report accompanying the Senate proposal to establish the Section 207(b) warranty, which was adopted by Congress, indicated that the purpose of the short tests was "to determine *whether or not* those [production and in-use] vehicles comply or continued to comply with standards for which they were certified". S. Rep. No. 91–1196, 91st Cong., 2nd Sess. 29. This result has been accomplished in the final regulations. However, it would be totally unreasonable to expect that a short test would be developed which would predict compliance with the emission standards. For one thing, no short test can measure cold start emissions, an important component of FTP results. A vehicle could be very clean when warm (on the short test) but still have excessive FTP emissions. The Agency believes that a short test which predicts failure of the FTP with a high level of confidence is adequate and complies with the statute. This issue is addressed more completely under the heading "Correlation".

2. Real World Demonstration. Comment: Many of the proposed short tests have not been tried in actual use. The Portland program will not evaluate either the Clayton or New York/New Jersey composite test. Without such real world experience it cannot be stated that the short tests are "available". Even the idle test has not been adequately demonstrated in the Portland program because of EPA's supervision. A prototype I/M lane is not sufficient to establish real world availability.

Response: The idle test is being used by Oregon and New Jersey for vehicle inspection programs. Arizona employs a steady state loaded mode procedure, using only the idle mode for compliance. (Data collected under the loaded modes is used for vehicle diagnostics.) Since these tests are actually in use, there is no question concerning their availability. EPA's Portland program utilized data collected by Oregon's Department of Environmental Quality as well as that gathered by EPA's contractor. EPA hired a separate contractor to perform more detailed tests and evaluate the effectiveness of the Portland I/M program. The Agency agrees with the comments of another manufacturer that stated the availability requirement is satisfied when the necessary equipment can be obtained and effectively used for its intended purpose. These conditions have been met.

3. Idle Test Recommended. Comment: In order to be fully effective, a short test must be available to garages in performing their repair work. This requirement is satisfied by the idle test only. Required equipment is available, reliable, and relatively inexpensive. This test is also the most informative to the service industry. All of the other short tests are both too sophisticated and expensive.

Response: Both the idle test (two versions) and a simplified loaded mode test are being adopted at this time. The states will be free to choose among them or even elect to use only one mode from a test. While the loaded test does require more equipment, its additional cost is not beyond the reach of many repair facilities. Further, a simple dynamometer for this testing will cost about $5,000; this is only slightly greater than the price of exhaust and ignition analyzers. Even in jurisdictions which adopt the loaded mode test, a dynamometer will not be required of every repair garage. The emission results from the I/M test, when combined with the mechanics knowledge and other tools, will enable proper repairs to be made. (Of course, with a dynamometer the mechanic would be able to verify that the vehicle was fixed.)

C. Good Engineering Practice

1. Performance in Actual Use. Comment: It has not been demonstrated that the proposed short test can be done with reasonable demands on the inspection personnel. A practical demonstration of the short test is required to establish that they are in accordance with good engineering practice. Further, the accuracy of any short test will decrease (from laboratory conditions) when put in actual use.

Response: As discussed above, both the idle and loaded mode tests have been used in actual inspection lanes. The ability of the personnel and equipment to perform these tests has been demonstrated. Idle test standards have been developed using data collected at the Portland I/M lane; loaded-mode standards were derived from tests by EPA's contractor; they were verified by checking against a limited number of loaded tests run at the I/M lane. In any event, the short test standards are conservative, espeically when applied to later model year vehicles with lower emissions. The conservative nature of the short tests will mitigate any problems arising from their implementation.

2. Variability. Comment: The variability of the short test is too great (approximately 15%) for purposes of warranty enforcement. This results from many uncontrolled variables such as preconditioning, idle RPM, fuel, altitude,

and ambient temperatures. All of these are controlled under the Federal Test Procedure.

Response: The short test standards were established by evaluating test data from EPA's Portland program. This data inherently includes test variability. The impact of these uncontrolled variables is not so great as to defeat the basic value of the short tests as evidenced by the high capture rate and low errors of commission. Since the standards established are not very stringent, the impact of any variability is reduced. Results from other test programs confirm this conclusion. See Technical Report, Light Duty Vehicle and Light Duty Truck Emission Performance Warranty; Short Tests and Standards, November 1979.

3. Short Test Structure. Comment: Good engineering practice requires that high emitting FTP modes be included in the short test. This includes the cold start portion as well as loaded operating modes. It is essential that any short test operate the emission control system as it would be operated during the FTP. Without these qualities, any short test cannot consistently predict FTP results and is not in accordance with good engineering practice.

Response: Any test meeting the requested requirements would not be "short". The practical considerations of running an I/M lane must be addressed. Taken literally, the commenter would require that the short test be very similar to the FTP and thus would not be at all suitable for inspection lane use. It is not believed that this is what Congress intended. A short test complies with the requirements of "good engineering practice" if it can detect high emitting vehicles. It is not required that the short test be equivalent to the FTP.

D. Correlation

1. Classical Correlation Required. Comment: "Correlation" implies that either test can be used as a measure of the effectiveness of the complete emission control system. One relationship must exist between the two tests such that the results of one will be capable of consistently and reliably predicting results of the other. Correlation is a function of the tests and not of the sample used to evaluate correlation.

The Clean Air Act requires that classical correlation exist between the short test and Federal Test Procedure. In interpreting Section 207(b), one must use the common meaning of the language. Further, it is improper to assume that one part of the paragraph is superfluous to another. Specifically, the third requirement "reasonably capable of being correlated" should not be construed to be redundant with the first requirement "availability to ascertain compliance." Both provisions must be given interpretations that will not make them redundant. To do otherwise is improper statutory construction. Finally, it is incorrect to assume that "correlation" is satisfied by identifying failed vehicles only.

Response: The Agency disagrees that Congress intended the short test to correlate in the classical statistical sense. For reasons addressed below, this is not possible. Certainly, Congress did not intend to draft legislation which could not be put into effect; some type of short test was intended. Section 207(b)(i) requires that a short test be available that can determine whether or not a vehicle complies with emission standards. Section 207(b)(iii), and not Section 207(b)(i), establishes the correlation requirements for the short test. If the language in 207(b)(i) were read to require strict, classical correlation, as some manufacturers have suggested, it would be inconsistent with Section 207(b)(iii) which requires only that the short test reasonably correlate to the certification test. The requirement for reasonable correlation was to insure that vehicle manufacturers would not be forced to repair significant numbers of conforming vehicles. A short test satisfies the requirements of Section 207(b) if it can identify a large part of the excess emission with a low error of commission. (That is, it does not incorrectly select conforming vehicles as failing.)

Due to the inherent shortcomings of any short test, it is only possible to identify failing vehicles with a high degree of certainty. None of the short tests investigated by the Agency can reliably predict compliance with emission standards. This results partially because short test cannot measure cold start emissions. There is no practical way to eliminate this deficiency. As has been addressed above, the Agency feels the adopted approach is reasonable.

Comment: No classical or contingency correlation exists for the proposed short tests and standards. It is impossible to extrapolate or project results from several data sets to get such correlation. (Several data sets were cited to illustrate this point.)

Response: The Agency agrees that classical and contingency table correlation are not possible in the traditional sense. The approach taken sets short test standards so that a vehicle failing those standards has a high probability of failing the certification test. More emphasis is placed on reducing errors of commission than on identifying vehicles which marginally exceed the certification standards. This approach was supported by the Ford Motor Company in its comments, during the reopened comment period. The data sets cited by this commenter show that short tests identify a substantial amount of the excess emissions for older vehicles. Vehicles tested at the end of the assembly line, and newer vehicles in general, do not have high emissions. It is not appropriate to use such data to evaluate the short tests. None of the data cited refutes the fact that a 1981 vehicle which exceeds the short test standards will have a high probability of exceeding its certification standard. As is discussed elsewhere, the Agency's approach regarding correlation is consistent with the language, legislative history and purpose of the Clean Air Act.

2. Reasonable Correlation. Comment: "Ideal" correlation would imply back-to-back Federal Test Procedures. Reasonable correlation would be less than ideal but considerably better than chance.

Response: The short tests and standards adopted comply with this comment.

Comment: Reasonable correlation does not exist as indicated by the California audit data on 1980 model light duty vehicles.

Response: Test results from vehicles just off the assembly line are not representative. With age and mileage one can expect components to fail and cause excessive emissions. It is this type of in-use failure which the short tests are designed to detect. Brand new vehicles would have very low failure rates and very few defects as compared to in-use vehicles that will be subject to short tests. Many NPRM commenters objected to the use of anything other than "real world" data to establish correlation; assembly line tests are not "real world."

3. Fundamental Relationship. Comment: A physical, technical relationship between the short test and FTP is required. Otherwise, any correlation obtained is fictitious. In order to comply with this requirement, the short test must incorporate modes with high correlation to the FTP. Of necessity, this would have to include a cold start and warm up. (Higher technology vehicles are expected to have increasingly larger proportions of their emissions come from these modes.) The idle test does not correlate because it misses many of the high emitting modes.

Response: The Agency rejects this interpretation. As with the previous assertions that classical correlation is required, this comment would make adoption of the short test impossible. It is sufficient that a vehicle which fails the short test have high probability of failing the FTP. To that extent, there is "a fundamental relationship" between the two tests. High short test emissions are a symptom of malperformance.

Comment: It is impossible to obtain classical correlation without a cold start test which in itself is impossible for inspection purposes.

Response: The Agency agrees with this comment and has adopted a functional definition of correlation; vehicles failing the short test will have a high probability of failing the full certification test.

4. FTP Problems. Comment: The Federal Test Procedure is extremely variable and does not correlate well with itself. In recognition of this fact, EPA allows retests on certification vehicles. Even a hot start FTP will not correlate with itself. Under these circumstances, it can be stated that no short test will ever correlate with the FTP.

Response: The limitations of FTP to FTP correlation establish a limit on the correlation that a short test can obtain. The ability of the short tests to identify high emitting vehicles satisfies the requirement of "reasonable correlation".

5. Short Test for Certification. Comment: If the short test works, then it should be used for certification to save expense.

Response: The short test is not equivalent to the FTP and serves an entirely different function. As adopted in the final rules, it is a diagnostic tool for accurately predicting the occurrence of high emissions. It will not, and need not, predict with certainty the precise FTP emission levels.

6. Future Technology Vehicles. Comment: Two significant changes in future passenger cars can be foreseen. First, under the parameter adjustment regulations, cars will be "tamperproof." Second, with increasingly stringent emission standards, more sophisticated electronic control systems will be installed. Also, these lower emitting vehicles will have a larger proportion of their total emissions coming from the cold start phase of the Federal Test Procedure. Most of these changes should make the establishment of correlation between the short test and FTP more difficult. Further, it is required that this correlation be established with vehicles to which the emission performance warranty will apply.

Response: This concern has been addressed in development of the short test emission standards. These standards were developed from the highest technology production vehicles for which adequate data was available, specifically 1975–77 passenger cars tested in EPA's Portland Program. Analysis of this data yields short test standards appropriate for 1981 light trucks and cars. Light trucks for 1981 and later will have similar emission controls to 1975–77 passenger cars. Future cars will be certified to lower emission levels with an expected decrease in short test emissions; consequently, the short test standards established in this rulemaking will be less stringent. As experience is gained, revised standards will be promulgated in future rulemaking actions. If it were required that short test standards be developed using the class of vehicles to which such standards would apply, the time required to do the requisite testing would significantly reduce the period of warranty coverage.

In the unlikely event that a manufacturer uses technology which has increased short test emissions, a specific alternate standard can be applied to such vehicles.

7. Contingency Tables. Comment: The contingency table approach is not acceptable because of the higher sensitivity of the correlation index to the emission standard. Further, the contingency table approach is not appropriate for correlating measurements. Finally, it is incapable of accurately predicting compliance with the FTP standards.

Response: The use of contingency table correlation indices has been deleted. In its place an absolute standard has been adopted. While this approach gives up some possible increase in correlation, it compensates by being very simple and by having an acceptable error of commission rate.

8. Data Base. Comment: Tampered vehicles with rich idle mixtures should be deleted from the data base. Such vehicles will not qualify for 207(b) emission performance warranty work, and should not be used to establish correlation. Inclusion of such a vehicle distorts the short test to FTP relationship, and makes the correlation appear better than it really is.

Response: The adopted standards have been developed to identify all types of malfunctioning vehicles, not just those which would qualify for 207(b) warranty repairs. This approach does not prejudice the manufacturers, since under the terms of the statute they will not normally be liable for repairs to tampered or maladjusted vehicles. Short tests and standards were developed in a manner as close to their actual use as possible—this required "real world" cars. Practical considerations would prohibit EPA from running an experiment using 2200 vehicles whose maintenance and operation would meet warranty requirements without any deviation.

9. FTP Errors of Commission. Comment: The FTP error of commission rate would be lower than the three to six percent claimed by EPA.

Response: No data or basis for this statement are cited. While for a very clean group of vehicles, such as certification test fleet, the error of commission rate may be lower, EPA still feels that, based on the analysis in the Technical Report, a three to six percent Ec rate for in-use vehicles is correct.

10. Errors of Omission. Comment: Vehicles which marginally fail the certification test are part of a distribution which would pass on the average. It is appropriate that the short test not fail them.

Response: The Agency does not share this view that it is only average emissions which are important. The Clean Air Act specifies that *each* vehicle shall comply with the emission standards for its useful life. It is only due to short test limitations that more errors of omission are not detected. Congress intended that vehicles exceeding their emission standard have a warranty remedy; no mention is made of average emissions.

11. Tampered Vehicles. Comment: The proposed short tests were successful in identifying a large portion of the excess emissions but only because tampered vehicles were included in the sample. These tampered vehicles will not qualify for warranty repairs. Also, in the future, cars will be less susceptible to tampering due to the parameter adjustment regulations.

Response: Of course tampered vehicles may not qualify for the emission performance warranty. Manufacturers are protected by the requirements of section 207(b) concerning the maintenance and operation of a vehicle in order for consumers to qualify for warranty repairs. The Act requires that the *tests*, and not vehicles be reasonably capable of being correlated, that they be available and be in accordance with good engineering practice. The fact that a vehicle is tampered does not destroy the relationship between the tests, whereas it may affect the manufacturer's liability. Inclusion of tampered vehicles reflects the real world. The only time that the presence of tampering shall be considered is in

determining whether a manufacturer is liable for the vehicle non-conformity.

E. Standards

1. Criteria. Comment: Short test standards should be optimized for cost-effectiveness or public acceptance.

Response: These criteria are not contained in the statute. Standards have been established to maximize the number of high emitting vehicles identified while keeping the errors of commission (false failures) low enough to satisfy the requirement of "reasonable correlation." However, the Agency has made revisions to simplify the standard setting process which should make them more acceptable and cost efficient.

2. Timing. Comment: It is not desirable to have new vehicles on the road and exempt from the emission performance warranty while standards for these vehicles are being established.

Response: Unlike the proposal, standards are being established prior to the new vehicles going on sale. These standards would be based on previous technology vehicles and may not be as stringent as ultimately possible. However, they will be available for the entire period of the warranty.

3. Standard Setting Procedure. Comment: It is desirable to establish standards by testing a large sample with the same distribution as the "real world". The use of prototype, assembly line or induced fault vehicles is not typical and should not be permitted. Any use of certification vehicles would result in disruption of the certification process and can not be tolerated. it is impossible to reproduce the real world situation by other than in-use motor vehicles. The standard setting process is expensive if 50 vehicles per group are required and with groups based on engine family criteria.

Response: Standards have been developed from the latest technology in-use vehicles for which data are available—1975–77 model year passenger cars tested in EPA's Portland program. These standards will apply to 1981 and later model year Fedeal vehicles which will be certified to slightly lower (i.e., more stringent) emission levels. This approach reduces the expense and complexity of setting standards and makes them available at the start of the model year for which they are effective. Revised standards will be promulgated based on later model year (higher technology) vehicles if needed. Any such standards will be proposed as a separate notice of proposed rulemaking with full opportunity for public comment.

4. Errors of Commission. Comment: Errors of commission are not desirable since they penalize the manufacturer unjustly and result in the inspection lane personnel being in the position of settling disputes. Further, any fixed level of errors of commission would be arbitrary and illegal.

Response: The Agency desagrees with the position that no errors of commission can be tolerated. The Congress clearly specified "reasonable" and not "absolute" correlation. Every effort has been made ins setting the standards to keep the error of commission rate as low as possible.

Comment: Setting short test standards with an average error of commission rate at 5% may have a serious adverse impact for some engine families.

Response: Optional short tests and short test standards are possible in instances where excessive errors of commission will occur. These situations will be handled on a case-by-case basis upon a manufacturer's request since such occurrences will depend on the type of emission control technology used.

Comment: A 5% error of commission rate is unacceptable. Even if the FTP gives such an error of commission rate it is still too high to be used for short tests. The standard should be raised to make the errors of commission almost nil.

Response: Short test standards have been selected to yield approximately the same level of errors of commission as if the certification test itself had been used. The Agency feels this is a reasonable approach and complies with the statutory requirements. It is totally unreasonable to expect that no errors of commission will occur. To achieve that result would require short test standards so high that they would not be effective, because many defective vehicles would pass the short test standard (including even some gross emitters), so that the short test would identify a very small portion of excess emissions. The Agency feels that the approach taken is a reasonable compromise between protecting the manufacturer from unnecessary warranty claims and giving the consumer protection for defective vehicles.

5. Vehicle Grouping. Comment: If the desired result is to identify "gross emitters" then a general vehicle grouping is possible, but a higher level of correlation is required. The NPRM was aimed at identifying marginal emission failures. Of course, any broad grouping tends to be biased. A limited number of groupings would aid in the operation of state inspection/maintenance programs. (Several manufacturers expressed a preference for engine/vehicle/technology groupings.)

Response: The Agency has adopted one broad group to cover all light duty vehicles; light trucks are categorized into a separate group. This eliminates the expense of establishing initial standards, and, as pointed out by the commenters, aids in the operation of inspection/maintenance programs. The increase in air quality resulting from a more complicated approach would have been marginal and would have involved significant added expense and administrative burden.

6. High Altitude. Comment: The short tests and standards should be voluntary for the 1981 model year at high altitude. The 1982 and 1983 short test standards should be somewhat more lenient at high altitude than for low altitude areas.

Response: There will be no approved short test for high altitude for the 1981 model year. Beginning in 1982, the same short tests and standards will apply both at low and high altitudes. EPA has analyzed data indicating that vehicles tested at high altitude using the approved short tests respond in approximately the same manner as those tested at the low altitude. (See Technical Report figure 8 for data collected in Denver.) Therefore the same standards can be applied. However, these high altitude standards will not take effect until high altitude certification standards are promulgated. (This is expected for the 1982 model year.) For light duty trucks the situation is somewhat more complicated. The short tests and standards will not take effect unless the high altitude standards (also expected for the 1982 model year) are below certain specified limits. These limits were established so that the high altitude light duty truck standards are of equivalent stringency to the 1975 through 1977 light duty vehicle standards at low altitude, upon which the short test standards were developed. (See Technical Report.)

7. Optional Standards. Comment: Short test standards with an average error of commission rate of 5% may prove to be too stringent for some particular models. For example, a small displacement non-catalyst light duty truck can be certified with an idle specification higher than that proposed for the emission performance warranty short test. Also, some types of emission control equipment are more effective at high speeds and vehicles equipped with those systems will be unfairly discriminated against by the short test. For example, pulse air systems are not as effective at idle as at higher speeds.

Response: The final regulations provide for such occurrences by

permitting a manufacturer to apply for optional short tests and standards. In such cases, the Administrator will set separate short tests and/or standards of equivalent stringency for appropriate vehicles.

F. Short Test

1. Recommendations. Comment: The adopted short test must have a high probability of passing conforming vehicles, identifying vehicles with broken emission components, and correctly determining maintenance and use histories. (Functional checks may be the best approach.) In order to minimize expense, there should be only one approved short test, otherwise aftermarket part manufacturers would have to design to each separately, passing the additional cost to purchasers. In order to be totally effective, the short test should be available to the service industry.

Response: Both versions of the idle test are totally available to the service industry and meet the concerns raised by the comment. While the loaded test requires a dynamometer, the expense should be within the capabilities of dealerships and larger repair garages. Even a mechanic without a dynamometer will be able to use information from the inspection test report to make proper repairs. Having multiple short tests will not burden the aftermarket part manufacturers. Designs will not have to be changed to accommodate the short tests; replacement parts should conform to the originals as at present. A vehicle operating as it was designed to (and as demonstrated during its emission certification) will pass the short tests.

Comment: The idle test is preferred for two main reasons. First, vehicles failed by additional modes (other than idle) tend to have higher error of commission rates. Second, the idle test would not require that automobile dealers purchase a chassis dynamometer to verify that warranty repairs have been done properly.

Response: The idle test has been adopted. The loaded two mode and two speed idle have also been approved because those procedures (or variations of them) are currently in use and those tests meet the statutory requirements. And, while the loaded mode and two speed idle procedures may not be necessary for 1980 and earlier passenger cars, these tests will be more effective with future vehicles as pointed out in the General Motors comment. A chassis dynamometer will not be necessary in order to perform or verify warranty repairs when the loaded two mode test is adopted by the jurisdiction. The test results can be used in conjunction with other diagnostic tools by the warranty outlet to make necessary corrections. Furthermore, chassis dynamometers are in the same general cost range ($5–10,000) as other pieces of sophisticated test equipment (exhaust gas analyzers, $3–4,000, and electronic engine analyzers, up to $20,000) used by some repair garages and dealerships.

Comment: Only one short test should be approved to prevent possible conflicts between short tests. For example, a vehicle could fail the two speed idle test and yet pass the two mode loaded procedure. Also, it is recommended that the two mode loaded test be approved since it is the most similar to the certification test procedure.

Response: Conflicts between the three approved short test procedures will not occur since a jurisdiction will select a single short test and vehicles will be tested accordingly.

Comment: The three proposed short tests will not be able to detect many malfunctions with 1981 and later light duty vehicles. This is especially true of the idle test. Under the circumstances the statutory requirements of Section 207(b) have not been met.

Response: The data cited by General Motors (during the reopened comment period) was generated on a prototype vehicle with induced malfunctions. These results indicate that the idle test will not be as effective on future vehicles as it is at present. However, the Agency does not share the view that the limited test data provided is conclusive in showing that the idle procedure is of no use. It should be noted that the test results were on a prototype vehicle with induced malfunctions. First, it is far from certain that all vehicles will employ the same control systems or even the same control technology. As manufacturers gain experience with the more stringent emission standards, changes will be made in the control systems. These changes will probably be in the direction of less sophisticated and less expensive systems which may be more susceptible to both malfunction and to detection by the idle test. Second, induced failures are not the same as real world experience. The components which will fail in actual use and their mode of failure cannot be predicted with absolute certainty. In any event, it can be safely stated that any future vehicle which fails the idle short test will be exceeding its certification emission standards so that the manufacturers' warranty liability is not increased by the inability of a given test procedure to detect all failure conditions. Finally, if the short tests adopted appear to be ineffective on future technology vehicles, EPA may consider revising such tests in a future rulemaking.

Comment: Instead of the emission short tests proposed, it is recommended that a procedure be developed to inspect critical emission control components.

Response: Such an approach would not meet the statutory requirements for an emission performance warranty short test. Also, this would be equating the 207(b) performance warranty with the 207(a) defect warranty, contrary to the intent of Congress in adopting two warranty provisions with distinct criteria.

2. Preconditioning. Comment: There is no data to substantiate the need for preconditioning on the idle test. It is essential that waiting time be minimized to reduce expense of the I/M programs. Further, the action of minimizing a waiting time would be more effective than preconditioning and obtaining accurate idle readings.

Response: No preconditioning is required for the straight idle test. A 2500 rpm mode can be elected by the implementing jurisdiction. The idle tests, and their associated standards, were developed from actual I/M lane data. As such, the variability attributed to preconditioning and waiting time have been reflected in the standards. Similar efforts were made on the loaded-mode test using the EPA emission testing contractor. Results of this work were verified by using a smaller number of loaded tests at the I/M lane.

3. Idle Test Procedures. Comment: The idle test should be run with all accessories off and with the engine fully warmed up. Engine condition can be evaluated by water temperature and open choke.

Response: These comments have been incorporated into the final regulations.

4. Idle RPM. Comment: Idle speed has some effect upon idle emissions. However, catalyst vehicles are not affected as much as prior technology and idle speed measurement takes time in an inspection lane.

Response: Except for specifying the high speed idle test condition, engine speed is not addressed in the final short test regulation. The States are free to adopt whatever requirements they wish.

5. Data Submissions. Comment: The extensive data submission requirements in the NPRM should be minimized.

Response: The entire data submission portion of the regulation has been deleted.

6. Variability. Comment: Altitude, ambient temperature, and fuel composition can affect the short test results.

Response: Availability of the emission performance warranty has been limited to low altitude areas until high altitude emission standards are promulgated. The effects of ambient temperature and fuel are less pronounced and are not deemed to be significant at the level of standards adopted.

Comment: Test conditions should be adequately defined to eliminate the possible influence on emission test results. Specifically, the vehicle should be warmed up, but not overheated, the ambient conditions should be specified, and the test procedures should be specified in more detail.

Response: Appropriate additions have been made to the final regulations. The suggestion concerning vehicle temperature has been incorporated in the regulations. Also, test conditions have been adequately defined to reduce, or eliminate, some of the sources of test variability mentioned in the comment. The restriction on ambient test condition has not been incorporated. When a warmed up and non-overheating vehicle is tested, ambient temperature is not a critical factor in determining short test emissions.

Comment: Differences observed between the I/M lane and the EPA's contractor when employing the same short test indicate that there is excessive variability. This excessive variability is an indication that the short tests do not comply with good engineering practice. Furthermore, EPA did not consider this variability in developing the short test standards.

Response: EPA acknowledges that some (short test) variability was noticed in the test reports from the two test stations. However, this variability could not be attributed solely to the short test. Vehicle variability undoubtedly contributed a great deal to the total, and there was no way to separate these components. Furthermore, this variability was considered in developing a short test standard by the fact that a large number of vehicles were analyzed. Results from over 2200 vehicles tested at the I/M lane were compared with scores from the official certification test at the contractor laboratory. This number of cars tested will eliminate the effect of test variability on the final results. Conclusions derived from the Portland data were tested against other EPA test results to verify their correctness. (This verification is found in Figure 8 of the Technical Report). As noted, the other data sets supported the original conclusions. In all, approximately 6,000 vehicles were analyzed to compare short test and certification test results. These results support the position taken in this rulemaking.

7. Garage Instruments. Comment: Garage instruments are not accurate enough to be used for purposes of the emission performance warranty.

Response: As revealed in the Technical Report, garage analyzers are accurate enough to be used for emission performance warranty short tests. High emitting vehicles are accurately identified with acceptable errors of commission. This is illustrated in Figure 8 of the Technical Report while idle test results from various programs (using garage analyzers) are compared.

8. Miscellaneous Comments. Comment: From reanalyzing the Portland data a lower percentage of excess emissions identified was observed than stated in EPA's short test report. There was no time to resolve this discrepancy.

Response: Similar calculations were rerun with essentially the same results. In any case, the difference in excess emissions identified is not significant (about 10%), so that the conclusions reached remain valid under both calculations of excess emissions.

Comment: EPA did not report results of its analysis of the California Air Resources Board data.

Response: This data was not used in development of the short test standards. Some preliminary calculations were made which would support much lower short test standards. However, due to the limited number of vehicles and the fact that the tests were performed under "laboratory" conditions, no final calculations employing this data were made. The fact that these results support lower standards does not mean that the current standards are invalid.

Comment: There is no requirement that states adopt the same short test standards as applied for 207(b) warranty work. In order to gain additional credit in their state implementation plan, states have an incentive to adopt more stringent standards. This would place the automobile dealer in a difficult position between only having to repair the car back to the 207(b) standards with a subsequently unhappy owner. EPA should take steps to insure that inappropriate state short tests and standards are not adopted.

Response: States are free to adopt whatever short tests and standards they deem appropriate. EPA reviews State Implementation Plans to see that certain performance criteria are met; the Agency has no authority to interfere with their decisions. However, it is extremely unlikely that states will adopt short test standards more stringent than those now adopted for the 207(b) emission performance warranty. The 207(b) standards are quite effective in identifying excess emissions, and more stringent standards would gain very little. Also, high failure rates without warranty protection would result in significant citizen dissatisfaction.

Comment: The proposed short test regulations would require local jurisdictions to have sophisticated and expensive test equipment. Also, the local jurisdiction would be put in the middle of disputes between the manufacturer and the vehicle owner.

Response: This comment came from a jurisdiction considering adoption of an I/M program. It is contrasted with comments submitted by vehicle manufacturers, both parties wanting to avoid being in the middle of disputes over warranty coverage. EPA does not expect that such three-way disputes will occur.

The emission performance warranty does not require action on the part of the state or local government in order to be effective. The State's responsibility will be only to pass or fail vehicles and to impose penalties or sanctions. The consumer is responsible for meeting the requirements. Since the manufacturer is liable to consumers under the warranty provisions, disputes over warranty claims will not involve local or state jurisdictions.

Environmental Protection Agency

May 12, 1980.

Theodore Souris, Esq.,
Bodman, Longley and Dahling, 35th Floor, 100 Renaissance Center, Detroit, Michigan.

Dear Mr. Souris: On December 21, 1979, you submitted a petition on behalf of the Motor Vehicle Manufacturers Association of the United States, Inc. (MVMA), requesting that the Environmental Protection Agency (EPA) repropose the Emission Performance Warranty Short Test regulations which were proposed initially on May 25, 1977 (42 FR 26742). The basis for your request was that several events had occurred during the two and one-half years since EPA first published the proposed short test regulations, all of which allegedly are significant to the proper establishment of an emissions short test program. You also claimed in a subsequent letter dated January 16, 1980, that EPA's technical report on the short test standards [1] that were to be developed from new data supported your previous contention that the regulations should be reproposed.

We do not believe we were legally required to reopen the comment period, since the Agency's then current thinking on the approach that should be taken in the final rules was a direct outgrowth of the comments received on the various approaches proposed in the May 1977 Notice of Proposed Rulemaking (NPRM). Nevertheless, EPA

[1] "Light Duty Vehicle and Light Duty Truck Emission Performance Warranty: Short Tests and Standards," December 1979 (IMS-009/ST-1) [hereinafter "Technical Report"].

reopened the comment period for 30 days to allow interested persons to consider and to submit comments on any new information not previously available for comment, in order to allow the public to participate to the maximum extent feasible and to address the concerns raised in MVMA's petition. The **Federal Register** notice announcing the reopening of the comment period until March 3, 1980 (45 FR 6980 (January 31, 1980)), included a summary of the approaches proposed in the NPRM and a summary of EPA's current thinking on how the regulations should be finalized. The summaries were intended to enable interested persons to focus their comments on any impacts from the specific information not previously available for comment, and to provide a regulatory framework to which the comments could be directed.

Prior to publication of the **Federal Register** notice on January 31, 1980, EPA notified by mailgram several manufacturers' representatives, including MVMA and yourself, that the comment period was being reopened for submission of comments on new data, EPA analyses and conclusions from the data, and that all new information would be placed in the appropriate public docket. On January 24, 1980, you sent a reply mailgram objecting to the adequacy of the 30 day comment period, and alleging that much of the background information essential to making informed comment was not publicly available. Our February 13, 1980, mailgram to you pointed out that all information essential to informed evaluation and comment on data, analyses and conclusions generated since the close of the original comment period had been placed in the public docket prior to the start of the comment period. In addition, we reminded you that EPA previously had sent copies of this essential information to MVMA and/or individual member companies upon request throughout 1979, and that additional background information and assistance on clarifying information had been or would be provided by EPA's technical staff.

On February 11, 1980, you submitted a Supplement to the MVMA Petition for Reproposal, alleging the inadequacy of the 30 day extension to the original five and one-half month comment period for consideration of the "substantial changes" you claimed EPA has made in the proposed data base, short test standards, and correlation methodology. In the Supplement, you cited 54 pieces of information that you claimed were essential to making informed comment. On March 3, 1980, Mr. Harry B. Weaver of MVMA submitted extensive written comments and supplementary computer analyses critiquing the data and analyses EPA had used as a basis for emphasizing the particular regulatory approach then being considered.

Upon consideration of the objections you raised in support of your request for reproposal of the proposed short test regulations, and upon examination of the comments MVMA and others submitted to the public docket, I have decided that reproposal is totally unwarranted at this time, and, therefore, I am issuing the final regulations concurrently with this letter.

All interested persons have been provided with ample opportunity to consider and comment on all aspects of the proposed short test regulations. The entire field of possible solutions was set out in the NPRM, with all subjects and issues before the Agency described. Comments were requested on a broad base of issues involved in establishing the short tests and short test standards, including the appropriateness of the proposed short tests, the data base for setting standards and methods for determining standards. All aspects of the rule being adopted were the subject of detailed and exhaustive comment during the five and one-half month comment period initially provided.[2] The views expressed in those comments were the primary force in EPA's decision to eliminate the complex regulatory approach discussed in the NPRM and to adopt a far simpler and less costly approach for the 1981 model year. In fact, that the Agency chose a simpler approach in response to concerns raised in comments indicates that the public participation process has functioned properly and effectively.

Since the final rules were developed in such a way as to address the concerns raised in the initial comments, and because the final rules present no new subjects or issues, reproposal was unnecessary. Moreover, to the extent that information recently made available and EPA's analysis of that information would change any comments previously submitted, the recent 30 day extension for additional comment provided an adequate opportunity for submission of those views in the context of the regulatory approach outlined in the **Federal Register** notice announcing the reopening of the comment period.

I am convinced of the adequacy of the 30 day extension for MVMA, its member companies and other interested parties to address any new data, information or analyses, and the impact of these items on the NPRM. MVMA raised in its petition several issues that auto manufacturers and others had addressed in previous comments on the NPRM. Indeed, many of MVMA's current objections apply to the more conservative and less burdensome approach adopted by EPA as a result of previous comments submitted by MVMA member companies and others. It is apparent from the extensive analyses which MVMA performed on several sets of data and the issues addressed in its recently submitted comments, that a reasonable opportunity for presentation of MVMA's views on the final plan has been afforded. Moreover, MVMA has not specified what would be accomplished by additional analyses of the data EPA has relied on, or how reproposing the regulations would allow MVMA to raise new or different criticisms. Therefore, I believe that further provision for notice and comment is not required and would merely delay implementation of the short test regulations, and ultimately, the performance warranty regulations.

I also question the reasons for MVMA's persistence in requesting reproposal, since many of the objections raised are with regard to modifications designed to reduce the burden of these regulations on auto manufacturers by limiting their potential exposure to warranty claims. Ample protection for manufacturers has been built into the statute and the regulations. As discussed in the attached memorandum,[3] I do not deem the issues raised in the MVMA Petition and Supplement sufficient to prevent me from making the statutory findings necessary to establish the short tests for application to 1981 and later model year vehicles. Therefore, MVMA's contention that I must delay establishing the short tests is unwarranted and contrary to Congress' intention to provide a mechanism for implementation of the vehicle performance warranty.

The enclosed memorandum contains responses to each of the issues raised in support of MVMA's request for reproposal, and sets out in more detail the basis for my denial.

Sincerely yours,

Douglas M. Costle.

[2] Three workshops also were sponsored by EPA during the original comment period for discussion of short test and warranty issues with affected parties. MVMA member companies participated in these workshops.

Memorandum in Support of Denial by the U.S. Environmental Protection Agency of Petition for Reproposal Submitted on Behalf of the Motor Vehicle Manufacturers Association re: Notice of Proposed Rulemaking on Short Test Establishment

On May 25, 1977, the Environmental Protection Agency (EPA) published a Notice of Proposed Rulemaking (NPRM) pursuant to section 207(b) of the Clean Air Act, as amended ("Act"), 42 U.S.C. 7541(b), to establish testing methods and procedures for ascertaining whether vehicles in actual use comply with emissions standards. [1] As explained in the NPRM, establishing such "short tests" is necessary for implementation of the section 207(b) vehicle performance warranty, which is the subject of a separate rulemaking.

On December 21, 1979, the Motor Vehicle Manufacturers Association (MVMA) submitted a petition for reproposal [2] of the proposed short test regulations. After EPA reopened the comment period for an additional 30 days to allow interested parties to comment on the impact of new information EPA has relied on to develop the final rules, MVMA submitted a Supplement to the Petition.[3]

[3] Memorandum in Support of Denial by the United States Environmental Protection Agency of Petition for Reproposal Submitted on Behalf of The Motor Vehicle Manufacturers Association Re: Notice of Proposed Rulemaking on Short Test Establishment."

[1] 42 FR 26742 (May 25, 1977).

[2] Letter from Theodore Souris to Douglas M. Costle, December 21, 1979, and attached *Motor Vehicle Manufacturers Association's* (MVMA's) *Petition for Reproposal* (hereinafter "Petition").

[3] Letter from Theodore Souris to Douglas M. Costle, February 11, 1980, and attached *Motor Vehicle Manufacturers Association's Supplement to Petition for Reproposal* (hereinafter "Supplement").

in which MVMA claimed that the extension to the comment period was inadequate to allow informed comment on the changes to the NPRM contemplated by EPA.

This memorandum sets out the basis for the Administrator's denial of MVMA's request for reproposal of the short test regulations. Part I of this memorandum explains why reproposal is not necessary and addresses the arguments raised in MVMA's Petition. Part II addresses the arguments raised in the Supplement, and explains why the recent extension to the comment period for the proposed rules provided adequate opportunity for interested parties to comment on any new data or information which EPA has used in developing the final rules and which was unavailable during the initial comment period.

I. Reproposal Is Not Necessary Since Adequate Notice Was Provided in NPRM

MVMA alleges in its petition that significant changes have occurred since the conclusion of the public comment period for the NPRM published in May 1977, which, individually and collectively, warrant reproposal of the regulations. MVMA contends that, although EPA presumably has considered changes in emission control equipment and new information, its analyses and conclusions have not been publicly disclosed and interested parties neither know what change may be contemplated in the NPRM nor have they been accorded an opportunity to comment on EPA's analyses and conclusions. MVMA cites as the most important of the events warranting reproposal the following: (1) The generation of new data and EPA analyses of the data; (2) significant improvements in emission control system technology; (3) EPA's failure to gather or publish any data on the applicability of the short test regulations to light duty trucks or diesel powered light duty vehicles; (4) EPA's failure to consider recent test data from current model year production of motor vehicles built for use in California; (5) EPA's change in the number and character of short tests being considered; and (6) EPA's adoption or proposal of other regulations.[4]

MVMA also contends that the changes EPA has made in the proposed short test regulations were not in response to public comment, but apparently were the result of EPA analysis of data not previously available for comment and of decisions within EPA to modify the methodology to be used in establishing "reasonable correlation."[5] MVMA alleges that, for these reasons, the changes do not follow logically from the NPRM, nor are they of the type intended to occur through the public participation process under the Administration Procedure Act. MVMA concludes that they require and deserve the complete study and analysis that can only be assured by complete reproposal of the regulations.[6]

MVMA's conclusion that it is essential for EPA to repropose the regulations in order to fulfill the purpose of the statutorily mandated notice and comment procedure lacks any factual or legal support. The "new developments" which MVMA claims to warrant reproposal involve issues or information that the Agency presented in the NPRM, that were considered as a result of public participation in the rulemaking process, or that are not relevant to this rulemaking. It is apparent from the following comparison of the subjects and issues presented in the NPRM with those addressed in the final rule that the final rule is well within the scope of the notice provided in the NPRM. All interested parties were fairly apprised of the subjects and issues before the Agency. Therefore, even if the final rules differ substantially from the proposal, the Agency was not required to subject the proposal to further public scrutiny, i.e., additional notice and opportunity for comment, before taking final action. *See Int'l Harvester Corp. v. Ruckelshaus*, 478 F.2d 615, 632 n.51 (D.C. Cir. 1973); *South Terminal Corp. v. EPA*, 504 F.2d 646, 659 (1st Cir. 1974).

The changes to the NPRM also were the logical outgrowth of the notice and comment process because they were made primarily to address concerns raised during the original 5½ month comment period, while remaining within the framework of the NPRM. Criticisms of the proposed test methods and procedures, including the sophisticated and expensive nature of several of the proposed tests, the failure of most of the proposed data sources to reflect real world conditions and the lack of a sufficiently large vehicle test group for selecting short test standards, had a major impact on the development of the final rule. The Administrative Procedure Act, 5 U.S.C. 553(b) ("APA"), does not require precise notice of each aspect of regulations eventually adopted, since this would result in repeated and essentially unlimited rounds of notice and opportunity for comment as the Agency modified the regulation to address public comments received. *See, e.g., Cal. Citizens Band Ass'n v. U.S.*, 375 F.2d 43 (9th Cir. 1967). Since the final rule is the "logical outgrowth" of the NPRM and public comments considered, additional notice and comment was unnecessary. *See, e.g., Nat'l Constructors Ass'n v. Marshall*, 581 F.2d 960, 970–71 (D.C. Cir. 1978). (The "logical outgrowth" test was developed under the APA to determine to what extent proposals on which public comments have been received may be altered without allowing further public comment. *Id.* at 971.)

One factor to be considered in whether to repropose is whether the regulated parties would suffer substantial detriment as a result of the alleged failure to give adequate notice. *See National Helium Corp. v. EPA*, 569 F.2d 1137 (3rd Cir. 1977). Here, EPA's modifications worked to reduce the potential burden upon the vehicle manufacturers subject to the Act's warranty provisions. In contrast, courts have upheld final regulations which embody more severe requirements upon the regulated parties than specifically provided for in the proposed rules. *See, e.g., American Iron and Steel Institute v. EPA*, 568 F.2d 284 (3rd Cir. 1977) (where the court found that persons should have been aware from the discussion in EPA's proposal that the Agency might adopt more stringent treatment technologies than embodied in the proposal).

Even assuming that the notice contained in the NPRM was inadequate to apprise interested parties of the subjects and issues before the Agency, the recent extension to the comment period afforded interested parties a reasonable opportunity to participate in the rulemaking process. *See South Terminal Corp. v. EPA*, 504 F.2d at 656–59; *Foster v. Consumer Product Safety Commission*, 559 F.2d 774, 787–88 (D.C. Cir. 1977). The notice of extension not only specified the new data and analyses for which comments were being invited; it also provided an explanation of the ways in which EPA was planning to incorporate the results of that information into the final rule. This notice, along with the 30 days provided for submission of comments, provided interested parties with a "fair opportunity to present their views on the contents of the final plan." *BASF Wyandotte Corp. v. Costle*, 598 F.2d 636, 642 (1st Cir. 1979).

As discussed below, the adequacy of the 30 day extension was made apparent by MVMA's ability to repeat EPA's analysis of the new data it has relied on and to conduct analyses of

[4] MVMA Petition, 5–19.

[5] MVMA Supplement, 35.

[6] *Id.*, 38.

several other sets of data not relied on by EPA.[7] Although MVMA claimed that it did not have sufficient time within which to submit complete and informed comments on the new information, it was unable to specify the nature of the comments or criticisms it would raise. In addition, EPA had provided MVMA and several of its member companies with information and assistance well in advance of the reopening of the comment period, so that they were familiar with both the data and the methods EPA used to formulate a final rule. Since MVMA had, in effect, much more than 30 days in which to consider the new information, as well as 5½ months in which to commment on the underlying issues presented by the NPRM, EPA believes that it has provided more than adequate opportunity for comment in this rulemaking.

A. Regulatory and Statutory Scheme

On May 25, 1977, EPA published an NPRM dealing with the establishment of test methods and procedures for ascertaining whether a vehicle complies with emission standards under section 207(b) of the Act. As explained in the NPRM, establishing such methods and procedures ("short tests"), to be used in conjunction with state or local Inspection/Maintenance (I/M) programs, is just one aspect of the section 207(b) warranty scheme. A separate rulemaking is required to establish a warranty under which vehicle owners whose vehicles fail to demonstrate compliance with emission standards in such a short test (and, as a result, are subject to sanctions) may have their vehicles repaired free of charge by the manufacturer, provided the owners properly operated and maintained the vehicles. The warranty regulations were proposed on May 25, 1977,[8] and reproposed on April 20, 1979.[9]

Section 207(b)(1) requires the Administrator to establish the short test "methods and procedures" by regulation if he determines that: (1) Such testing methods are available, (2) such methods are in accordance with good engineering practice and (3) they are reasonably capable of being correlated with the Federal Test Procedure (FTP). Section 207(b)(2) requires the performance warranty regulations to be prescribed at such time as the Administrator determines that inspection facilities or equipment are available to carry out the testing methods established by the short test regulations. The NRPM described the basic scheme for determining whether a vehicle complies with emission standards for purposes of section 207(b) warranty coverage: short tests determined to meet the statutory criteria could be adopted through I/M programs, and compliance with short test standards ("cutpoints"), which would be established either annually or on an as-needed basis, would determine whether a vehicle passes or fails the short test. Failure of the short test would trigger a manufacturer's warranty liability if the vehicle owner were subject to penalties or sanctions under the I/M program. Thus, the short test regulations merely provide the foundation for state or local I/M programs to determine whether a vehicle complies with emission standards. Whether a vehicle manufacturer is liable for repair of a noncomplying vehicle is the subject of separate criteria under the warranty regulations.

The basic scheme for determining whether a vehicle complies with emission standards for purposes of section 207(b) coverage has remained intact, i.e., vehicle non-compliance with short test standards (cutpoints), as administered through I/M programs, triggers the coverage of the warranty regulations. What remains at issue, and what MVMA has objected to, are the components of the three statutory determinations to be made by the Administrator in establishing the short tests and standards. These components, as set out below, were described in the NPRM, subjected to comments and criticism, and modified accordingly.

B. Subjects and Issues Treated in the Notice of Proposed Rulemaking

1. Short Tests. EPA proposed three categories of short tests as being suitable for use, either in total or in part, in inspection programs, and which were deemed to meet the statutory criteria of availability, reasonable correlatability with the FTP and reflecting good engineering practice. The idle test, with several procedural variations thereof, was described as one proposed test method. Although the test's inability to measure NO_x emissions was noted, it was pointed out that the idle test was the predominant procedure used in existing and planned state I/M programs. The second category of test methods, the steady state modal tests, was described as measuring HC, CO and NO_x emissions while a vehicle is driven on a dynamometer at two different speeds and idle. Two specific loaded tests were cited as being within this category—the Federal 3 Mode and Clayton Key Mode—and the procedural variation between them was attributed to the severity of the load simulated. The third category, transient tests, was cited as being the only category for which no field data was available (no state was using or planning to use such a test), and requiring greater investment in resources than the idle or steady state modal tests. The idle and steady state tests had been used in state I/M programs, although use of the steady state tests demanded more equipment, manpower and time than the idle tests.

2. Data Sources. The NPRM set out five sources of data to be used in making the statutorily prescribed determinations. Four sets of data from a total of approximately 500 1973–1975 model year vehicles, tested under laboratory conditions, were described as forming the basis for EPA's proposal that each of the five proposed short tests met the statutory requirements of availability, correlation and good engineering practice. The fifth source of data was a program planned to generate additional data on correlatability. Approximately 2400 vehicles (1975/76 model year) would be tested in Portland, Oregon's I/M program. The vehicles tested in this "Portland Study" (Element I) would be drawn from an in-use fleet rather than from assembly-line or certification vehicle fleets, making the test data more representative of real world conditions. Each vehicle was tested under the FTP and under each of the five proposed short tests to determine the extent of correlatability between the two at various cutpoint levels. The test program, which ultimately derived data from 2207 1975–77 model year vehicles, was completed in April 1979.[10]

3. Methods of Treating Data To Determine Correlatability. Although the NPRM described three techniques for determining whether the short tests and procedures could be "reasonably correlated" to the FTP, the Agency proposed adoption of the approach using a "contingency table". This

[7] *See* discussion in Part II of this memorandum: MVMA's Response to the Extension of the Comment Period for the Emission Control Systems Performance Warranty Regulations—Short Test Establishment, February 29, 1980 (hereinafter "MVMA Comments").

[8] 42 FR 26742 (1977).

[9] 44 FR 23784 (1979). The warranty regulations were reproposed because the 1977 amendments to the Act changed the length and character of the section 207(b) warranty; however, the short test provision was not affected by the amendments, and EPA notified the public in 1977 that reproposal of the short test NRPM was not anticipated. *See* Notice of Public Workshops, 42 FR 43412 (August 29, 1977).

[10] Element 1 of the EPA Portland Study, contained in computer files along with other in-use data EPA used to support the results of the Portland data, is located in EPA's Ann Arbor, MI, laboratory. Element 1 is the first of three elements comprising the Portland Study, and is the only element used in developing the short test regulations.

method was deemed sufficient for determining correlatability because it could be used to determine if the short tests were capable of reliably and consistently predicting whether a vehicle would pass or fail the FTP. How reasonable the correlation would be was described as being dependent upon the ratio of incorrect to correct predictions. The number of incorrect predictions would in turn be determined by the extent of errors of commission (short test incorrectly predicts FTP failure) and errors of omission (short test incorrectly predicting FTP passed). It was pointed out that errors of commission (Ec) could be reduced to any desired level by reducing the severity of the cutpoints, thereby reducing the cost incurred by the manufacturer in repairing those vehicles that comply with emission standards. Since doing so would necessarily increase the errors of omission, the incremental air quality improvement from fine tuning such vehicles would be foregone.

4. Development of Short Test Standards. The three major aspects to be addressed in setting cutpoints to be applied in conjunction with the short tests were: (i) The methodology to be applied to the test data for selecting the cutpoint levels; (ii) the numbers and types of vehicles to be tested (groups) to generate test data; and (iii) how often to test vehicles and set new cutpoints.

The Agency proposed that cutpoints be established each year by testing privately owned production vehicles and/or assembly line vehicles during the first nine months of each model year and applying the prescribed methodology to the test data. A vehicle group would be selected on the basis of significant differences in production vehicles' engine/size/emission control technology combinations, and the number tested in each group would be large enough to satisfy statistical requirements for sample size. The methodology to be applied to this test data was to be derived from one of five approaches. The simplest approach described was to set the short test cutpoints at a level corresponding to a 5 percent Ec commission rate within each group. This "easy to implement" approach was ultimately chosen.

The NPRM noted that the Agency might provide short test cutpoints only on an as-needed basis, since further testing might show that setting cutpoints annually for as many groups of vehicles as anticipated might not be necessary. Also, the NPRM indicated that the effects of real world variables shown by the Portland data would be incorporated into the cutpoints.

5. Scope of Regulations. The Agency proposed that light-duty trucks (LDT's) be subject to the light-duty vehicle (LDV) short tests and methodology for setting cutpoints, although the actual cutpoints for LDT's might differ. The basis for this proposed approach was the similarity in engineering design and usage between LDT's and LDV's.

Although the proposed short tests were expected to function effectively as predictors of the FTP emissions of all future technology vehicles, the NPRM proposed that in the event the emissions of a new technology vehicle could not be measured effectively by the proposed tests, one or more new short tests would be implemented to apply to those vehicles.

C. Development of the Final Rule. A majority of the approximately 100 comments submitted in response to the NPRM were opposed to the proposed regulations.[11] A recurring criticism of the NPRM was the cost and complexity of the proposed tests and standard setting scheme. Many of the proposed short tests were criticized as being too sophisticated and expensive and were claimed to be unavailable since they had not been tried in-use (only the idle and loaded mode tests actually have been used in inspection lanes). The automotive industry raised arguments similar to MVMA's recent comments on the extent of correlation required between the short tests and the FTP and the method of determining correlation. Objections to the annual standard-setting scheme covered all aspects of the scheme of testing/analyzing data/cutpoint selection for various vehicle groups.

The proposed testing of numerous vehicle groups for establishing different cutpoints was criticized as being expensive if sufficiently large samples were to be tested. Whereas the NPRM was aimed at identifying marginal FTP failures, it was pointed out by one auto manufacturer that a more general vehicle grouping would be possible (and would aid the operation of state I/M programs) if identification of "gross emitters" rather than marginal failures was the desired goal.[12] The use of data from assembly line or prototype vehicles was criticized as being unrepresentative of real world conditions; it was urged that only in-use vehicles be used as the data source. Also, the timing of the testing (during each model year) was claimed to be undesirable since new vehicles exempt from the performance warranty would be on the road. The use of errors of commission in determining short test correlation and in setting cutpoint levels was criticized as unjustly penalizing manufacturers.

Upon considering these and other objections, the Agency modified the proposed rule to emphasize detection of high emitting vehicles rather than marginally noncomplying vehicles. By doing so, much of the expense involved in detecting those incremental emissions through complex tests and standard-setting procedures could be eliminated. Each revision to the NPRM is discussed below, along with the reasons for rejection of MVMA's arguments for reproposal.

1. Data sources. MVMA claimed in its petition that reproposal is warranted because, among other items, EPA had not yet published for public comment the data developed during the study it had conducted in Portland [13] or other data that "may be relevant to short tests".[14] MVMA also claimed that recent test data from current model year production of motor vehicles built for use in California should be considered by EPA before its final regulations are promulgated.[15] These arguments do not warrant reproposal of the regulations.

EPA recognized the importance of real world effects on the appropriateness of the selected short tests and cutpoints, and pointed out in the NPRM that the effects shown by the Portland Study, the only test program that would generate data from in-use vehicles in an actual I/M lane, would be factored into the final rules. Commenters, including members of the MVMA, still objected to the failure of the proposal to reflect real world variables. Manufacturers insisted that data derived from "real world" conditions serve as the basis for setting short tests and establishing correlation, rather than the laboratory data cited in the NPRM.[16]

As a result of these comments, the Agency decided that rather than relying at the outset on the very limited laboratory data from approximately 500 autos and factoring in the results of the

[11] A summary and analysis of all comments submitted on the proposed rule is published concurrently with the final rule.

[12] "Comments submitted by General Motors Corporation on the Notice of Proposed Rulemaking on section 207(b) Emission Control System Warranty Regulations—Short Test Establishment", November 7, 1977, (hereinafter "GM 1977 Comments"), at 78–80.

[13] MVMA Petition, 6.

[14] *Id.*, 7.

[15] *Id.*, 12.

[16] For example, General Motors commented that the short tests used to evaluate "reasonable correlation" must be conducted under "real world" conditions, since real world influences would result in correlation less than that obtained under laboratory conditions. GM 1977 Comments, 6.

2400 vehicle Portland study to determine the correlation of the short tests, as proposed, it made more sense in view of the objections to use the Portland data as a base for determining correlation and short test standards.

Since all relevant aspects of the Portland Study had been described in the NPRM (i.e., testing of 2400 1975/76 model year vehicles under FTP and all proposed short tests) and an opportunity to comment was provided, the Agency felt it unnecessary to present for further comment the actual results obtained. Nevertheless, in view of MVMA's objection that EPA had not made available for public comment all data from the Portland Study and other relevant test data, EPA provided 30 additional days[17] for submission of comments on EPA's reliance on the Portland data in making the statutory determinations. Other data, used only to support the conclusions drawn from the Portland data, also was made available for comment.[18]

MVMA claims that EPA must consider all data that may be relevant to short tests, such as the test results of other states' I/M programs and the experimental I/M test investigations soon to be commenced by several states.[19] However, EPA did analyze in-use vehicle data from eight cities, and this data supported the conclusions reached from the results of the Portland Study. MVMA has given no indication why EPA analysis of additional in-use data is necessary, in light of the volume of in-use data already analyzed; nor has it shown why the particular data cited would be anything more than cumulative.

EPA also need not analyze California new vehicle data and conduct further correlation studies on current model year motor vehicles, as asserted by MVMA.[20] EPA has found that the statutory criteria have been met by its analysis of in-use data, used primarily as a means to address concerns raised previously by MVMA member companies and others that the data used by EPA in making the statutory determinations would not reflect real world influences. The California data cited by MVMA is derived from new vehicles with no, or very little, accumulated mileage, and therefore would not be representative of the in-use vehicles which would be tested in I/M programs, nor would the results reflect real world effects.[21]

2. Short Tests. MVMA asserted in its petition that if EPA has reduced the number or changed the character, of tests being considered, affected parties should be accorded an opportunity to submit more thorough and comprehensive analysis in light of intervening events which have occurred since the 1977 NPRM.[22] However, further analysis of the short tests is unnecessary in view of the fact that, in responding to criticisms of several of the more complex tests, EPA traded off some of the accuracy inherent in those tests for the additional availability of the simpler tests being adopted.

Commenters had objected to the complexity and expense involved in several of the proposed short tests, as well as to the lack of in-use experience with these tests. As a result, EPA considered establishing only those tests that would meet both the requirements of the Act and the needs of parties that would be administering the tests. Those tests given further consideration, and ultimately adopted, all fell within the descriptions outlined in the NPRM. The idle tests, one meeting the "classical" idle test description (measuring HC and CO emissions while engine idles) and the other, a two-speed idle test, meeting the description of the procedural variations of the idle test, were pursued due to their widespread availability. A simpler steady state modal test using two modes, replaced the three-mode tests proposed. The transient tests were eliminated altogether largely because their complexity and expense would discourage States from adopting them, and because their lack of in-use demonstration prevented adequate evaluation.

Although the original 5½ month comment period should have been sufficient time for affected parties to consider and comment on the benefits and disadvantages of idle, steady state and transient tests, the recent extension to the comment period provided additional opportunity for comment on the specific tests being considered by the Agency.

3. Methods of Treating Data. MVMA claimed in its Supplement that EPA's correlation methodology does not resemble that proposed in the NPRM because: (1) The contingency table analysis is replaced by an estimate of the errors of commission in the FTP and short tests with approximately the same Ec rate would be acceptable; (2) the NPRM focused on comparisons of results on the FTP and short tests for individual vehicles, whereas now the comparison is over a fleet of vehicles; (3) the calculation of errors of omission has been abandoned; and (4) NO_x emissions are not being considered in the determination of reasonable correlation. Therefore, MVMA asserts, reproposal is necessary for adequate analysis and comment.[23] MVMA has overstated the modifications made to the methodology. EPA has introduced no new factors into its methodology, and has merely given greater weight to those factors that would reduce manufacturers' exposure to unnecessary warranty liability.

In line with EPA's efforts to reduce the cost and complexity of the proposed rules by concentrating only on detection of vehicles with excessively high emissions, EPA developed a final approach to correlation that would trade off some incremental air quality benefits in exchange for a reduction in potential repair costs to manufacturers and consumers. The methodology described in the NPRM for determining "reasonable correlation" was in fact used. EPA balanced the potential consequences of incorrect predictions and correct predictions, and the costs incurred by errors of commissions and omission. Greater weight was given to the potential costs to manufacturers if short tests and standards designed to detect marginally failing (FTP) vehicles incorrectly failed substantial numbers of vehicles. Less weight was accorded to the incremental emissions not detected by short tests and standards designed to fail only gross emitters.

The resulting methodology was one which would require a short test to: (1) Identify a substantial portion of excess emissions (emissions above the Federal standards) and (2) have low errors of commission, i.e., incorrectly fail vehicles actually in compliance in a low percentage of tests conducted. This would allow detection of gross emitters, thereby retaining most of the air quality benefits, while preventing most unnecessary repairs. EPA accomplished this goal by reducing the severity of the short test cutpoints to a level corresponding to a 5 percent error of commission rate, which was one of the options set out in the NPRM. By monitoring the short test's ability to identify with reasonable accuracy vehicles which would fail the FTP, the extent of incorrect failures (errors of commission) which would affect

[17] As discussed in Part II of this memorandum, MVMA had much more than 30 days in which to examine the data and analyses generated since the close of the original comment period, since EPA had provided copies of the information to MVMA and/or its member companies during 1979.

[18] Eight city composite study (data from 3700 vehicles), restorative maintenance data, and emission factors data.

[19] MVMA Petition, 7.

[20] *Id.*, 12.

[21] *See infra* note 40.

[22] MVMA Petition, 13.

[23] MVMA Supplement, 22–26.

warranty liability by requiring unnecessary repairs, could be limited to the desired level. Therefore, EPA's calculation of the errors of commission of the FTP (approximately 5 percent) and positing that short tests with a similar rate of incorrect failures are reasonably correlated, is totally consistent with the purpose of the proposed methodology, i.e., to require manufacturers to repair noncomplying vehicles.

Moreover, EPA's selecting the level of Ec demonstrated by the FTP (approximately 5% as stated in the NPRM's Option 1) as a basis for correlating the short tests and standards is the direct result of comments submitted by MVMA member companies. For example, General Motors had suggested that "ideal" correlation is the degree of correlation between back-to-back FTP tests.[24] Therefore, the Agency has applied an Ec rate corresponding to the FTP's Ec rate in defining correlation and selecting short test standards.

MVMA claimed that EPA's classifying all vehicles as a single group is the opposite of what was proposed in the NPRM, and that this possibility was not discussed in the NPRM.[25] This is not true, since the NPRM explicity anticipated vehicle grouping on a different basis than that proposed. The NPRM did not focus on comparing FTP and short test results for individual vehicles, as asserted by MVMA,[26] but rather for vehicle "groups" which, as indicated in the NPRM, possibly would be made broader than the proposed engine/size/technology categories. EPA's evaluation of fleet data is a result of its establishing the vehicle test group on the basis of "latest available in-use data", i.e., the Portland test fleet. In fact, this use of the broader grouping of vehicles in a "gross emitter" scheme also was suggested by one MVMA member company in its comments on the NPRM.[27]

MVMA's conclusion that EPA's interpretation of "reasonable correlation" has changed since it is now based on a comparison of test results over a fleet of vehicles rather than individual vehicles, also is erroneous.[28] "Reasonable correlation" must be established between the FTP and the short tests, not between vehicles. Regardless of the specificity of vehicle grouping, reasonable correlation may be established between the tests to fulfill EPA's interpretation that the short test must be capable of reliably and consistently predicting whether the vehicle would pass or fail the FTP. Although testing individual vehicles with similar technologies would obtain the maximum correlation possible, and in turn, would allow selection of the most stringent short test standards possible, this would require complex calculation of individualized standards for numerous vehicle groups, which was criticized by commenters. Therefore, the procedure was simplifed by comparing test results from a broader group, i.e., one vehicle fleet, in order to reduce the burden on manufacturers and administrators of the short tests.

MVMA's claim that the NPRM did not meet minimal procedural requirements if the final determination on correlation is to be based largely on data from the Portland study[29] ignores two facts: that the NPRM listed the Portland study as a source of data to be used in establishing correlatability, and that using in-use fleet data to determine "reasonable correlation" was suggested in comments submitted by manufacturers. One MVMA member company stated that because real world influences would reduce correlation, the short tests evaluated must be conducted under real world conditions.[30]

MVMA asserted that nothing in the NPRM warned interested parties that EPA did not consider measurement of NO_x emissions or correlation between the short test and the FTP as to NO_x to be part of the statutory requirements of available technology and reasonable correlation.[31] This argument is frivolous. The lack of short tests and cutpoints for NO_x works to the manufacturer's advantage in that there will be no detection of high NO_x emitters, and as a result, no warranty liability in this circumstance. In any event, EPA's decision not to consider NO_x emissions in establishing correlation certainly should have been foreseen since the NPRM pointed out that the proposed idle short test would measure HC and CO emissions only, and the manufacturers are aware that in order to measure NO_x one of the proposed tests capable of measuring NO_x would have to be adopted by the states.

Since a short test standard for NO_x is not being established at this time, measurement of NO_x emissions is not relevant to the correlatability of the short tests being adopted. Furthermore, there is no legal requirement that NO_x emissions be considered in establishing correlation between the FTP and short tests adopted to measure only HC and CO.

Therefore, contrary to MVMA's assertion that the methodology contained in EPA's Technical Report does not resemble that in the NPRM, the methodology chosen for determining correlation of the short tests with the FTP is drawn from the NPRM and comments submitted on the alternatives proposed. In any event, MVMA and others were given an opportunity to submit comments and criticisms on EPA's conclusions, as stated in the Technical Report (see discussion in Part II below).

4. Development of Short Test Standards. MVMA claimed in its Petition that unless the regulations are reproposed, affected parties would not be accorded an opportunity to coment on the short tests and cutpoints or cutpoint methodology as they may apply to the emissions control system technology developed since the 1977 NPRM and which will be used on 1981 and later model vehicles.[32] In its Supplement, MVMA claimed that the NPRM did not discuss the possibility that EPA would consider classifying all vehicles as one group with uniform short test standards, and that adequate opportunity must be given for review of pertinent data and for comment on this allegedly startling development.[33] However, this approach was chosen to address comments on the NPRM.

Establishing short test standards to apply to all future model year vehicles was suggested by an MVMA member company in its comments on the NPRM. General Motors suggested the following: beginning with a model year in which emission standards and control system hardware have stabilized, EPA should attempt to establish reasonable correlation between the FTP and selected short test, conducted under real world conditions, determine the cutpoints from the current model year vehicles in actual use, and then carry over the selected short test and cutpoints to subsequent model year vehicles which are in all material respects the same as the model year vehicles tested.[34] As mentioned previously, General Motors also espoused use of a more general vehicle grouping than that proposed if a "gross emitter" concept were adopted,[35] as well

[24] General Motors 1977 Comments, 13.
[25] MVMA Supplement, 26.
[26] MVMA Supplement, 23.
[27] General Motors stated that a general vehicle grouping is possible if the desired result is to identify gross emitters rather than marginal failures. GM 1977 Comments, 19.
[28] MVMA Supplement, 23.
[29] MVMA Supplement, 27.
[30] GM 1977 Comments, 6.
[31] MVMA Supplement, 26.
[32] MVMA Petition, 9.
[33] MVMA Supplement, 26.
[34] GM 1977 Comments, 9.
[35] *Id.*, 78–80.

as conducting the evaluation of the short tests under real world conditions.[36]

Other commenters had objected to the proposed development of cutpoints during the course of the subject model year because vehicles not subject to the warranty requirements would be on the road while cutpoints for the same model year were being developed.

Since it would be highly impracticable to evaluate a short test for correlatability and to establish cutpoints for different vehicle groups by testing sufficiently large samples of in-use vehicles during the same model year in which the short test and standards were to apply, EPA chose to establish cutpoints (and reasonable correlation) in such a way as to address the concerns on timing and use of real world data. By deriving cutpoints from the Portland data, drawn from a large sample of current technology vehicles, the cutpoints could be established well in advance of the beginning of the applicable model year. In addition, because the standards would be based on the emissions from previous model year vehicles (1975–1977) and would not be fine-tuned to each vehicle type, they necessarily would be less stringent as applied to cleaner future model year vehicles. However, as pointed out in EPA's Technical Report, a substantial percentage of excess emissions will still be identified, retaining most of the air quality benefits of the short test when used in conjunction with I/M programs.

MVMA's reference to the recent improvements in emission control system technology and the major shift in technology that will occur in the 1981 model year (i.e., the almost universal adoption of 3-way catalytic converters and electronic engine controls) that should be considered by EPA and subjected to comment [37] already had been addressed in comments on the NPRM, and already had been considered by EPA, as described in the Technical Report. EPA concluded that short test standards developed from 1975–77 model year Federal vehicles could be applied to 1981 and later model year vehicles without prejudicing manufacturers' rights because with the lower emission standards in the future, lower short test emissions could be expected.[38]

EPA's conclusions on the impact of future technologies in adopting the uniform cutpoint/broad vehicle grouping approach have been drawn, again, from manufacturers' initial comments on the NPRM. For instance, General Motors stated that the disproportionate amount of HC and CO emitted during the first few minutes of the FTP test after a 12-hour cool-down period is especially true for present systems employing catalytic converters and will probably be more pronounced for advanced catalytic systems meeting future stringent standards. GM also stated that catalytic systems are more effective in controlling emissions after they have reached normal operating temperature.[39] Since short tests and cutpoints are applied only to warmed-up vehicles, the obvious conclusion is that a vehicle's HC and CO emissions would be at the lowest levels during application of the short test, and that future catalyst technology vehicles designed to meet lower standards would emit even less HC and CO than current technology vehicles.[40] Thus, future model year vehicles would most certainly meet short test standards derived from the earlier model year Portland vehicles, with their higher tailpipe emissions. Conversely, if a future technology vehicle, with supposedly very low emissions, exceeds short test standards developed from current model year vehicles, it would have very high probability of failing the FTP.[41]

EPA also anticipated in the NPRM the possibility that particular future technologies might not conform to the emissions pattern exhibited by most vehicles. EPA stated in the NPRM that different short tests and/or cutpoints would be developed for these vehicles. EPA also stated in the Technical Report that if unforeseen technology is developed for which the standards are not appropriate, the manufacturer could be allowed to apply for a separate short test standard for those vehicles.[42] Therefore, there is no basis for MVMA's assertion that the public record did not reveal that EPA had considered the impact of future technology changes on the proposed short tests.[43]

5. Scope of Regulations. MVMA has objected to EPA's failure to include LDT's or diesel-powered passenger cars and LDT's among any of the test fleets on which the proposed short tests were tested, even though the NPRM explictly applies to these vehicles.[44] It claims that the existing volume of LDT's and accelerating proliferation of diesel-powered cars and trucks require EPA to repropose the regulations after considering their utility when applied to such vehicles. MVMA also claimed in its Supplement that EPA did not support with any data its assumption that it could derive the LDT cutpoints by adjusting LDV data and that EPA should disclose its supportive data.[45]

The basis for EPA's approach to setting all cutpoints is set out in the Technical Report. EPA does not believe it is essential to the rule's applicability to all LDV's and LDT's that diesels or LDT's be included in the test vehicle data base. This is because the vehicles tested are adequately representative of all vehicles to be covered by the rule.

There is a sound technical basis for EPA's deriving LDT cutpoints in this way. LDT's produced in 1981 and later model years will employ the technologies used to meet 1977 model year passenger car standards, since 1979 and later model LDT emission standards were derived from the 1977 LDV standards. The 1975–1977 model year Portland LDV data adequately represents the LDT vehicle group because similar emission control technologies are used, so that 1981 LDT's would respond to short tests in the same way that those earlier model year LDV's would.[46] EPA's supporting data in this rulemaking, the testing of 1975 LDT's under the short tests to

[36] *Id.*, 6.

[37] MVMA Supplement, 11–13.

[38] Technical Report, 5.

[39] GM 1977 Comments, 19–20.

[40] GM made the general statement that emissions during warm vehicle operation are very low. GM 1977 Comment, 9–20.

[41] MVMA contends that current model year vehicles produced for use in California are more representative of the future technologies that will be used in 1981 and later models, so that current model year Califonia vehicle data should be considered by EPA. *See* MVMA Petition, 10; MVMA Comments. In support of this argument, MVMA submitted in its recent comments its testing and analysis of 82 Ford California-equipped 1975–78 model year passenger cars under the FTP and idle test, and its analysis of California 1979–80 Ford model assembly-line test data, as well as California surveillance data on 1975–77 model vehicles. *See* MVMA Comments, 11–21, Appendices A, B, C. Although MVMA's analyses and conclusions from these data are addressed more fully in EPA's Summary and Analysis of Comments, it should be noted here that MVMA's statement regarding the "* * * one drawback to the data * * * it is new vehicle data * * *" (MVMA Comments, 17) is deemed by EPA to be a significant reason for not including such data in the short test scheme chosen for 1981. MVMA concedes that "both idle and FTP emission levels may be lower than would be expected from in-use vehicles, particularly from ones which may have been misused, improperly maintained, or maladjusted." *Id.* This tends to support EPA's use of the Portland in-use data, since establishing correlation or selecting cutpoints from the cleaner, unused California vehicles would necessarily require more testing of larger vehicle samples, and application of factors to account for real world effects. In addition, EPA does not believe that MVMA's analyses demonstrate serious shortcomings of the idle test as a predictor of FTP failures of new technology vehicles, since the selected short tests and cutpoints are designed to identify only gross emitters.

[42] Technical Report, 5.

[43] MVMA Supplement, 13.

[44] MVMA Petition, 10.

[45] *See* MVMA Supplement, 32.

[46] Technical Report, 6. The Technical Report referenced the rulemaking for light duty truck emission standards, which discussed in detail the technologies expected to be used for compliance with the new emission standards.

ascertain whether the conclusions made for LDV's would apply to LDT's, also was set out in the Technical Report (Figure 8). MVMA and others were provided with an opportunity to present data or information to show that EPA's affirmative conclusion from this testing was erroneous; however, the only information presented was the reproduction of the applicable Federal 1981 emission standards and MVMA's "belief" that errors of commission for LDT's would be much higher than 5 percent.[47] This statement, by itself, is insufficient to overcome EPA's conclusion and supporting data base.

As set out in the Technical Report, diesel-powered vehicles are adequately represented because diesels generally emit lower levels of HC and CO, the only two pollutants measured by the short tests being adopted in the final rule. Therefore, a diesel-powered LDV or LDT would be less likely to fail the short tests and standards than comparable gasoline-powered vehicles. This also supports the Ec rate chosen by EPA to protect manufacturers from excessive exposure to warranty liability.

D. MVMA's Additional Reasons for Reproposal Are Without Merit

Several "new developments" which MVMA claims that EPA must consider in developing the final rule, and which it claims require reproposal of the NPRM, are EPA's proposal or adoption of a number of regulations and new information on the air quality benefits which might accrue from use of the short tests in Inspection/Maintenance programs.[48] None of these factors justify reproposal.

1. Warranty and Aftermarket Part Certification Regulations. MVMA asserted in its petition that EPA should repropose the short test regulations upon consideration and analysis of comments made by interested parties on the recently reproposed section 207(b) warranty regulations and the recently proposed section 207(a) aftermarket part certification regulations,[49] so that interested parties may comment upon the interrelationship between the three sets of regulations.[50] This contradicts previous assertions by MVMA member companies in their comments on the proposed warranty regulations, in which they claimed that EPA should promulgate the short tests prior to proposing warranty regulations, so that they and other interested parties could meaningfully comment on the warranty regulations.[51] In particular, they claimed that prior to being able to comment on the warranty regulations, it is necessary for them to know the details of the short test regulation and recommended cutpoints so that information can be developed on projected rates of vehicle failures, projected cost consequences, and whether any different calibrations to new vehicles will be required to assure that vehicles can pass the short tests.

Although EPA does not agree that EPA must promulgate final short test regulations prior to proposing warranty regulations, the suggested scheme does support EPA's view that upon the Administrator's determining that a correlatable short test exists and that the necessary equipment is available, the final warranty regulations would be promulgated. If EPA followed MVMA's logic on the need to repropose the short test regulations due to the "intricate relationship" among the various section 207 regulations, each rule would undergo numerous reproposals, and no rule would every be finalized.

In any case, interested parties were afforded an opportunity to comment both on the effect of the recent warranty and dealer certification proposals upon the short tests, and on the effect of the short test strategy outlined in the Notice of Extension upon the other two proposed rules.[52]

2. Parameter Adjustment Regulations and Changes in FTP. Other regulatory actions cited by MVMA in its Petition which allegedly "have complicated the effort to establish proper short tests" [53] are EPA's changes in the FTP [54] and the recently promulgated parameter adjustment regulations.[55] However, any impact on the short tests from these events would not destroy the correlation established between the FTP and the short tests.

MVMA asserted that EPA must consider the impact of the recently adopted parameter adjustment (PA) regulations upon the data relied on in its preliminary finding that the section 207(b) criteria have been met. [56] MVMA alleges that EPA's preliminary finding was principally based on data derived from vehicles whose failure to meet the applicable standard was largely the consequence of maladjustment or misadjustment, and that the PA regulations, which are designed to prevent such maladjustment or to require vehicles to meet standards even when maladjusted, may significantly affect the capacity of the proposed short tests to meet the statutory criteria. [57]

While the PA regulations might have affected the "reasonable correlation" determination under the NPRM, EPA's current approach, i.e., using the Portland data and a more progmatic defintion of correlation, disposes of any concerns regarding misadjusted, or tampered, vehicles. The data base for EPA's preliminary finding of reasonable correlation was based on laboratory data and a statistical method for deriving classical correlation. As mentioned previously, EPA's current approach to correlation is the short test's ability to detect vehicles with high levels of excess emissions, with an Ec rate equal to that of the FTP. This relationship between the FTP and the short tests, i.e., high short test emissions reflect high FTP emissions, is not affected by either the use of misadjusted vehicles in the data base,[58] or the prevention of misadjustment on future vehicles. This is because the reason for the high emission levels is not significant with respect to a short test's ability to identify high emitters, whereas it is significant with respect to manufacturer liability under the warranty regulations. Therefore, any impact of the PA regulations is relevant only to whether a manufacturer must repair a vehicle that fails a short test, and not to the ability of the short tests to meet the statutory criteria.

MVMA also claims that there have been numerous and potentially significant changes in the FTP since the close of the short test rulemaking, and that EPA should state its views on the impact of those changes, and should allow comment on those matters.[59] The approach adopted in the final rule, short test detection of gross emitters, disposes of any concern that incremental changes to the FTP would impact the correlatability of the short tests. All

[47] MVMA Comments, 24.

[48] MVMA Petition, 14–19.

[49] 44 FR 23784 (April 20, 1979); 44 FR 46686 (August 8, 1979).

[50] MVMA Petition, 14.

[51] See Comments Submitted by General Motors and Ford to the Public Docket on the Emission Performance Warranty Regulations (No. EN–79–6).

[52] The Notice of Extension announced that the comment period for the proposed warranty and aftermarket parts regulations would be reopened for the same 30-day period. 45 FR 6960, 6962 (January 31, 1980).

[53] MVMA Supplement, 11.

[54] MVMA Petition, 16.

[55] MVMA Supplement, 10–12.

[56] MVMA Petition, 15.

[57] MVMA Petition, 15–16.

[58] MVMA objected to EPA's failure to exlcude tampered vehicle from the Portland data. Although the Summary and Analysis of Comments addresses this objection, it should be mentioned here that correlation is to be established between tests so that the short test will predict FTP failure for both tampered and non-tampered vehicles. In addition, excluding tampered vehicles would result in an artificially clean vehicle fleet, thereby failing to account for a potentially significant real world effect.

[59] MVMA Petition, 16.

emission-related changes to the FTP made since publication of the 1977 NPRM have been designed to increase accuracy and reduce variability in the test.[60] Such refinement of the FTP would have virtually no effect on the short tests, because the changes are of insignificant magnitude when compared to the rough predictions made by the short tests.

In addition, MVMA has not identified any potential impact on the ability of the short tests to meet the statutory critieria as a result of these changes to the FTP. Although MVMA stated that a description of the FTP changes and an identification of some of their potential impact have been submitted previously by some of MVMA's member companies, MVMA's reference to General Motors and Ford petitions on FTP changes [61] provides no insight into the nature of any impact on the correlatability of the short tests, since those petitions dealt only with the impact on measurement of fuel economy. Arguably, any change which affects fuel economy results would affect measurement of emissions; however, just as EPA was unable to discern from those petitions the basis for the claimed 3 percent difference in average fuel economies from the FTP changes, there is no information from which EPA could assess the potential for any impact on the ability of the short tests to detect high HC and CO emissions which would also be detected by the FTP. MVMA also did not attempt to specify the reasons for its concern in the comments recently submitted.

C. Air Quality Benefits

MVMA asserted in its petition that EPA should publish all data being considered on the air quality benefits expected from I/M programs, and all interested parties then should be given an opportunity to comment on the validity of the analyses and judgments made by EPA in determining the benefits to air quality it expects to result from use of a short test in I/M programs.[62] Although MVMA is correct in its statement that the ultimate justification for section 207(b) short tests is air quality improvement,[63] section 207(b) does not require EPA to justify establishment of particular short tests by predicting the air quality benefits expected to accrue from their implementation, and specifically requires EPA to promulgate short test regulations upon making the statutorily-prescribed determinations. For that reason, EPA did not conduct or rely upon any air quality analyses in conjunction with its development of the final rules.

The data cited by MVMA, such as the Mobile 1 computer program, [64] were prepared for an entirely separate purpose, i.e., for States' use in preparation of their Implementation Plans under section 110 of the Clean Air Act, as amended. Therefore, there is no reason for EPA to publish data on air quality benefits from I/M programs, or to make such data the subject of public comment with regard to establishment of the section 207(b) short tests.

II. Extension to Comment Period Provided Adequate Notice and Opportunity for Comment on Relevant New Information

Although EPA has not deemed the modifications in the final rule sufficient to require additional notice and opportunity for comment on the NPRM, an additional 30 days was provided and all data relied on by the Agency, as well as analyses and conclusions from the data, were placed or referenced in the Public Docket for consideration and submission of comments by interested persons.[65] Nevertheless, MVMA has claimed the 30 day extension to be totally inadequate to assure effective public participation in the rulemaking process.[66] MVMA bases its claim on the following assertions: (1) The very limited period for comment granted by EPA is insufficient to assemble, analyze and comment upon the Portland study data;[67] (2) the issues relevant to the development of short tests are extremely complex and involve much more than the Portland study and the new information placed in the Public Docket by EPA;[68] (3) even if the necessary analysis could be performed within a 30 day period, logistic difficulties prevented effective use of that entire period of time;[69] and (4) EPA's limitation on the public comments it will consider to only those which address the impact upon the proposal of the new information it has placed in the Public Docket constitutes a refusal to consider many other issues raised by MVMA's petition that deserve public comment.[70] MVMA's allegations are without merit for the reasons set out below:

A. Information Necessary for Informed Comment.

The Portland data used to formulate the final rule, generated over a 2½ year period, was delivered to EPA in April 1979 in the form of a data tape (Element I data tape). EPA added to the data tape other in-use data obtained from eight different cities. This eight-city data was used only to support conclusions drawn from an analysis of the Portland data.

EPA's analysis of the Portland data, and incorporation of the results of the analyses in a coherent approach to develop the short test regulations, took place between April 1979 and December 1979, the date of publication of the Technical Report. This document reflected EPA's analysis and conclusions drawn from the data. Several assumptions made in the Technical Report were drawn from a second document, the Berg Report.[71] The data tape, Technical Report and Berg Report, the only information generated since the close of the original comment period which EPA has relied on in developing the final rule, were placed in the Public Docket upon the reopening of the comment period.

At the same time EPA was assessing the results of the Portland study, it was supplying data to and responding to requests for assistance in using the data from requesting parties. In this regard, EPA provided the Portland study data tape as early as July 1979 to one MVMA member at its request.[72] On December 27, 1979, the Technical Report, which contained all the information on EPA's evaluation of the data, was sent directly to MVMA. Therefore, MVMA had access to the data in July 1979 and was made aware of the extent of reliance and type of analysis applied by the Agency to the data well in advance of publication of the notice of extension.

[60] For a description of all changes EPA has made to the FTP, see "Memorandum in Support of EPA Denial of Petitions submitted by Ford and General Motors Re: Fuel Economy Test Procedure Changes", February 1979.

[61] MVMA Petition, 16 (citing Ford submission of July 6, 1979, and General Motors submission of July 27, 1979).

[62] MVMA Petition, 17–19.

[63] MVMA Petition, 17.

[64] MVMA Petition, 18–19.

[65] *See* 45 FR 6960 (January 31, 1980).

[66] MVMA Supplement, 1.

[67] *Id.*, 6.

[68] *Id.*, 8.

[69] *Id.*, 8.

[70] *Id.*, 6. MVMA added in a footnote that critical to informed comment on a rulemaking proposal is the text of the proposed rules, but that EPA has not published proposed rules to substitute for the repudiated proposed rules published in the NPRM. *Id.*, 5. However, the text of the rules proposed in the 1977 NPRM would be changed only to bring them into conformity with the short test and cutpoints adopted in the final rule. In addition, there is no requirement that agencies publish new language to be commented on if the proposed language has been changed to address, in part, comments received. *Cf. Appalachian Power Co.* v. *EPA*, 579 F. 2d 546, 851 n. 6 (4th Cir. 1978).

[71] Berg, D., "Survey of Sources of Test Variability in the 1975 Federal Test Procedure," August 1978.

[72] Ford Motor Company requested, and was sent, a copy of the data tape.

MVMA's claim that its receipt of an advance copy of the Notice of Extension was the first intimation that the Technical Report contained the basis for changes in EPA's approach in establishing the short tests [73] is totally unfounded. The Technical Report itself states that:

> In response to comments reviewed, new data, a revision to the Clean Air Act which shortened the warranty, and internal policy decisions, EPA's position (on the proposed data base, cutpoints and correlation methodology) has been revised.[74]

Moreover, in a January 16, 1980, letter to the Administrator, counsel for MVMA referred to the Technical Report as verification of MVMA's previous assumption that EPA was considering changes in its original proposal.[75]

Since MVMA apparently was aware of the revisions contemplated by the Agency in December 1979, and the data relied on previously was made available to member companies, there is no basis for MVMA's claim that "interested parties could not actually review these documents until some time after January 31, 1980, the date of publication of the Notice." [76] Nor is it true, as claimed, that "MVMA was not aware until it received a copy of the Notice (advance copy sent by EPA on January 24, 1980) that EPA intended to use, as the data source of its proposal, only the Portland study and, for a limited purpose, data from the eight city tests." [77] EPA's efforts to provide MVMA and/or its member companies with advance notice, materials and assistance in evaluating the new materials resulted in their being provided with effectively more than 60 days within which to consider and comment on any impact of those materials on previous comments to the NPRM.[78]

The extensive analyses and comments submitted by MVMA before the official close of the 30 day comment period on March 3, 1980, show that, despite its complaints to the contrary, MVMA was indeed able to perform the analyses necessary for it to comment effectively. MVMA apparently reproduced EPA's analyses and calculations and performed additional analyses on several other sets of data, resulting in its submission of over 130 pages of analysis and data presentation.

In this case, a full 30 days period was provided for comment on new data generated since the initial proposal. Considering that the Portland data and Technical Report were provided to MVMA and/or member companies well in advance of the extension, the period provided for comment by MVMA was effectively much longer. The original 5½ month comment period [79] should not be ignored, since all issues directly related to use of the Portland data and modified methodologies were raised previously. Therefore, even if the new information were sufficient to require additional notice and opportunity for comment, the 30 day extension fulfilled such a requirement, with regard to both the intent of the law [80] and the realistic capabilities of interested parties.

B. Additional Information and Issues Need Not Be Considered in this Rulemaking.

MVMA claimed that a substantial amount of additional background information must be analyzed by MVMA in order to perform the reasoned analysis which the law requires and this issue deserves. In support of this claim MVMA identified several allegedly unsubstantiated assumptions made in EPA's Technical Report, as well as 54 "unrevealed" items of information that it claims are needed to adequately assess those assumptions and other "new issues" raised by the Technical Report.[81]

EPA has considered each of the 54 requests for information which MVMA claims to require for informed assessment of the approach set out in the Technical Report. The requested documentation already has been made available for consideration and comment, or need not be made available because it is generally available or irrelevant to this rulemaking. The methodologies, assumptions and data sources relied on in formulating the conclusions set out in the Technical Report are contained in the Technical Report itself, the Berg Report, or the supportive data, which were made available to MVMA and/or its members prior to the reopening of the comment period, and which are contained in the public docket. Many of the "assumptions" MVMA raised which it claimed EPA must support with data or analyses (e.g., that the Portland FTP data is representative of the general population [82]) are based upon well known analytical methods and assumptions, and supportive information would be drawn from generally available sources such as elementary statistics textbooks. Other "assumptions" claimed to be unsupported (e.g., that measurement of NO_x is not required) are legal conclusions based upon EPA's interpretation of the statutory requirements contained in section 207(b) of the Act, and do not require supporting data and analyses.

EPA has considered each of the 54 requests for information which MVMA claims to require for informed assessment of the approach set out in the Technical Report. The requested documentation already has been made available for consideration and comment, or need not be made available because it is generally available or irrelevant to this rulemaking. The methodologies, assumptions and data sources relied on in formulating the conclusions set out in the Technical Report are contained in the Technical Report itself, the Berg Report, or the supportive data, which were made available to MVMA and/or its members prior to the reopening of the comment period, and which are contained in the public docket. Many of the "assumptions" MVMA raised which it claimed EPA must support with data or analyses (e.g., that the Portland FTP data is representative of the general population [82]) are based upon well known analytical methods and assumptions, and supportive information would be drawn from generally available sources such as elementary statistics textbooks. Other "assumptions" claimed to be unsupported (e.g., that measurement of NO_x is not required) are legal conclusions based upon EPA's

[73] MVMA Supplement, 3.

[74] Technical Report, 3.

[75] Letter from Theodore Souris, Bodman, Longley & Dahling, to Douglas M. Costle, Administrator, EPA, January 16, 1980, and attached Technical Report.

[76] MVMA Supplement, 35.

[77] *Id.*, 36.

[78] MVMA also alleges that, although EPA stated at the November 1979 EPA-Industry meeting that it would make available a copy of the computer tape, this data was not effectively available to MVMA until January 2, 1980, due to the industry shutdown for the Christmas holidays. MVMA Supplement, 36. Such an excuse certainly does not justify extending the comment period so that MVMA may perform unspecified analyses at its leisure, thereby possibly causing so much delay in the rulemaking process that the 207(b) warranty is postponed for another model year.

[79] The original comment period included three EPA public workshops held during September 1977, which provided a forum for informal discussion and submission of comments on the proposed short test and warranty regulations by parties potentially affected by the performance warranty. See 42 FR 43412 (August 29, 1977). A number of MVMA members companies participated in the workshops. See "Registrants At The September 30th Emission Performance Warranty Workshop Held in Portland, Oregon," EPA Public Docket No. MSAPC–A–79–57.

[80] The applicable procedural requirements on notice and opportunity for comment are derived from the Administrative Procedure Act, 5 U.S.C. § 553(b), rather than from the Clean Air Act, as amended in 1977, because the NPRM was issued prior to enactment of the procedural requirements in section 307 of the Act.

[81] MVMA Supplement, 29–32 and Appendix A; Mailgram from Theodore Souris to David G. Hawkins, EPA, February 4, 1980.

[82] MVMA Supplement, 30.

interpretation of the statutory requirements contained in section 207(b) of the Act, and do not require supporting data and analyses.

Finally, EPA's conclusions with regard to many issues have been based on its consideration of comments on the NPRM (e.g., previously discussed GM comments on vehicle grouping). In short, all new information and analyses relied on by EPA in promulgating the final rule were made available in the public docket. In addition, EPA did provide MVMA and others with additional background materials and assistance when requested. [83]

Since EPA had disclosed the bases for the conclusions contained in the Technical Report, it was incumbent upon commenting parties to submit information to show that these conclusions were improper, and, therefore, that the statutory criteria for establishing the short tests could not be met. MVMA apparently had sufficient information available to it to critique EPA's selection of data sources, short tests, correlation methodology, short test standards, as well as other issues.

Although MVMA makes the general assertion that it could not perform an adequate analysis of the new information without additional background materials and additional time, it does not indicate what the nature of those additional analyses would be. The only firm suggestion of potential additional analyses that it was unable to perform within the time limitation was an examination of individual engine families' errors of commission, as compared to the average. [84] However, there was no indication of what such an analysis would accomplish, i.e., how it would affect the validity of EPA's approach in treating a broad group of vehicles as the data base. Moreover, EPA has provided for exemption of particular engine families in the final rule, as discussed previously.

In short, MVMA has submitted no information to show why EPA's approach in selecting the short tests and related cutpoints for broad vehicle groups does not fulfill the statutory criteria.

MVMA argued in support of its attack on the adequacy of the extended comment period that EPA's "limitation" on the comments it will consider to only those which address the impact on the proposal of the new information it has placed in the Public Docket, "constitutes a refusal by EPA to consider any other new information, however relevant it might be, and ignore *[sic]* the many other issues raised by MVMA's petition that deserve public comment." [85] EPA's Notice of Extension invited comment on the impact which the data or analyses not previously available for comment would have on the proposed regulations and on previously submitted comments. The opportunity for comment was far reaching. The "limitation", if any, in the Notice of Extension was designed only to preclude submission of comments that had been made or could have been made during the original comment period. Even so, no party was prevented from commenting on any issue raised in the NPRM, and all comments received have been considered, placed in the public docket, and made part of the record of the rulemaking. MVMA has not specified in its Supplement or its recently submitted comments how the scope of the subject matter covered by the Notice of Extension adversely impacted on its ability to submit informed comment on all relevant issues.

MVMA also has failed to provide any specifics on why the 30 day extension was inadequate to allow submission of informed comment. MVMA made the general allegation that the complexity of issues involved in the short test rulemaking requires much more than 30 days within which to develop considered, specific comments on these issues [86]. In support of its conclusion, MVMA cited the interrelationship between the short tests and other regulations affected parties must satisfy, as well as several rulemaking actions initiated or implemented since the NPRM was published (e.g., the reproposed warranty regulations, the parameter adjustment regulations). According to MVMA, EPA's assessment of these interrelationships, and the background information supporting those assessments, must be provided to the public. [87]

As discussed previously, other warranty-related rulemaking activities would not affect the determinations to be made in establishing the short tests. Moreover, MVMA's own members have argued that, in order to assess the impact of the warranty and aftermarket part certification regulations, they must know the content of the final short test regulations. [88] Since there is some merit to this argument, EPA announced in the Notice of Extension on the short test proposal that the comment period for both the warranty and aftermarket part certification proposals was extended for an additional 30 days in order to allow interested parties to comment on the impact which the modifications to the short test proposal might have on those proposals. No comments from any party were submitted to the appropriate public dockets; nor were any comments submitted to the docket on the short test proposal on the interrelationship among the three proposals. MVMA has provided no insight at all on the effect of the refined short test proposal on those proposals, or vice versa, or the issues it would raise had a longer comment period been provided.

MVMA also cited several rules establishing emission standards for future model year vehicles (new light duty truck and high altitude emission standards), claiming that "these actions will affect the types of emission control systems utilized on future model year vehicles." [89] However, as mentioned previously, it is the emissions levels from the tailpipe that are measured by the short test, and future technology vehicles will be less likely to fail the short tests because they will be designed to meet lower HC and CO federal emission standards. Although the type of emission control system used should not cause a vehicle to fail the short test if it would not fail the FTP, again, the possibility that an unforeseen technology would cause short test failure has been taken into account, as stated in the NPRM.

MVMA and others did not raise any arguments in their recent comments to support their general claim that the emission standards regulations cited would affect the ability of the short tests to identify gross emitters with an Ec rate approximately equal to that of the FTP, despite the fact that over 60 days had lapsed from the time MVMA first raised this argument until the close of the comment period. [90]

III. Conclusion

EPA has provided interested persons with the opportunity for effective participation in the development of the section 207(b) short test regulations, and has in fact, benefitted from comments and criticisms on the proposal submitted during both the original 5½ month comment period and the recent 30 day extension. In view of the extent to which interested parties have participated in

[83] *See* mailgram from David G. Hawkins, EPA, to Theodore Souris, Bodman, Longley, & Dahling, February 13, 1980.

[84] MVMA Comments, 22–23. MVMA stated that particular engine families, with special settings, could have a much higher error of commission.

[85] MVMA Supplement, 6.

[86] MVMA Supplement, 10–11.

[87] *Id.*, 10.

[88] *Id.*, 11.

[89] MVMA Supplement, 10.

[90] MVMA submitted its Petition on December 21, 1979, and the comment period for the short test proposal closed on March 3, 1980.

the rulemaking process, reproposal of the regulations is unnecessary, and would introduce unwarranted delay into the Agency's efforts to establish correlatable short tests. Although MVMA has objected to EPA's "inexplicable haste to promulgate its final regulations for use on 1981 model year vehicles," this Agency deems the establishment of the short tests, and in turn, the warranty regulations, essential to the success of the I/M programs, which must be adopted by many States in order to attain and/or maintain the National Ambient Air Quality Standards. However, a factor that must be considered in establishing the short tests for 1981 is the lead time required by manufacturers to comply with the warranty regulations, which must be promulgated one model year prior to the applicable model year. Therefore, the Agency has attempted to satisfy the demands of timeliness by the manufacturers while providing the States with the mechanism required for implementation of the section 207(b) performance warranty requirements.

[FR Doc. 80-15718 Filed 5-21-80; 8:45 am]

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40 CFR Part 85

[FRL 1488-4]

Emission Control System Performance; Warranty Regulations

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: These regulations implement the emission performance warranty of section 207(b)(2) of the Clean Air Act, 42 U.S.C. 7541(b)(2) (hereinafter "Act"). In general, the emission performance warranty will require a vehicle manufacturer to repair, at no charge to the owner, any emission control device or system which causes a vehicle to fail an EPA approved emission short test during its useful life if the owner is subject to a penalty or sanction under state or Federal law because of the short test failure, and if the owner has maintained and operated the vehicle in accordance with the manufacturer's written instructions.

DATES: These regulations shall become effective July 21, 1980.

FOR FURTHER INFORMATION CONTACT: Mr. David M. Feldman, Field Operations and Support Division (EN-397) Environmental Protection Agency, 401 "M" Street, SW., Washington, D.C. 20460 (202) 472-9350.

Public Docket

Copies of materials relevant to this rule are contained in Public Dockets EN-79-6 and EN-79-8 at the Central Docket Section of the U.S. Environmental Protection Agency, Room 2902B, Waterside Mall, 401 "M" Street, SW., Washington, D.C. 20460, and are available for review between the hours of 8:00 a.m. and 4:00 p.m. As provided in 40 CFR Part 2, a reasonable fee may be charged for copying services.

SUPPLEMENTARY INFORMATION: EPA first proposed emission performance warranty regulations on May 25, 1977, at 42 FR 26742 (hereinafter "Proposal"). However, the August 7, 1977, amendments to the Act, Pub. L. No. 95-95 (hereinafter "Amendments"), altered some of the basic provisions of the law such that the Agency decided to repropose the regulations. The Agency reproposed the regulations on April 20, 1979, at 44 FR 23784 (hereinafter "Reproposal"). In addition to the Amendments, the Agency considered comments received in response to the Proposal and at three emission performance warranty workshops in developing the Reproposal.

The Agency held two public hearings on the Reproposal. The first was held on May 22, 1979, in Washington, D.C., and the second on May 31, 1979, in Chicago, Illinois. In addition to the comments received at these public hearings, the Agency received 69 written comments on the Reproposal. These comments were summarized by EPA and may be found at IX-2 Public Docket EN-79-6.

The Agency also received a number of comments on the Reproposal in comments on the Voluntary Aftermarket Part Certification Program regulations which were proposed on August 8, 1979 at 44 FR 46686. Those comments that related to the effect that certified parts should have on the emission performance warranty were considered in drafting this Rule.

The major comments are discussed in appropriate sections of this Preamble.

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I. Basis for the Regulations

A number of the provisions of the Act are relevant to the Emission Performance Warranty. These were set out in the Reproposal and will not, with the exception of section 207(b), be reproduced here.

Section 207(b) of the Act is the principal authority for the emission performance warranty regulations. This section provides as follows:

> "(b) If the Administrator determines that (i) there are available testing methods and procedures to ascertain whether, when in actual use throughout its useful life (as determined under section 202 (d)), each vehicle and engine to which regulations under section 202 apply complies with the emission standards of such regulations, (ii) such methods and procedures are in accordance with good engineering practices, and (iii) such methods and procedures are reasonably capable of being correlated with tests conducted under section 206(a)(1), then—
>
> (1) he shall establish such methods and procedures by regulation, and
>
> (2) at such time as he determines that inspection facilities or equipment are available for purposes of carrying out testing methods and procedures established under paragraph (1), he shall prescribe regulations which shall require manufacturers to warrant the emission control device or system of each new motor vehicle or new motor vehicle engine to which a regulation under section 202 applies and which is manufactured in a model year beginning after the Administrator first prescribes warranty regulations under this paragraph. The warranty under such regulations shall run to the ultimate purchaser and each subsequent purchaser and shall provide that if—
>
> (A) the vehicle or engine is maintained and operated in accordance with instructions under subsection (c)(3),
>
> (B) it fails to conform at any time during its useful life (as determined under section 202(d)) to the regulations prescribed under section 202, and
>
> (C) such nonconformity results in the ultimate purchaser (or any subsequent purchaser) of such vehicle or engine having to bear any penalty or other sanction (including the denial of the right to use such vehicle or engine) under State or Federal law,
>
> then such manufacturer shall remedy such nonconformity under such warranty with the cost thereof to be borne by the manufacturer. No such warranty shall be invalid on the basis of any part used in the maintenance or repair of a vehicle or engine if such part was certified as provided under subsection (a)(2). For purposes of the warranty under this subsection, for the period after twenty-four months or twenty-four thousand miles (whichever first occurs) the term "emission control device or system" means a catalytic converter, thermal reactor, or other

component installed on or in a vehicle for the sole or primary purpose of reducing vehicle emissions. Such terms shall not include those vehicle components which were in general use prior to model year 1968."

Full implementation of section 207(b) requires a number of findings by the Administrator leading to emission short test regulations under subsection 207(b)(1), and also a separate finding leading to warranty regulations under subsection 207(b)(2). The Administrator has made all of the findings necessary for the short test regulations, including the finding that there are identifiable short tests reasonably capable of being correlated with the Federal Test Procedure. The Federal Test Procedure is set out at 40 CFR Part 86, Subpart B. Consequently, the Agency proposed short test regulations at 42 FR 26742 (May 25, 1977) and has published final regulations.

Under subsection (b)(2) the Administrator must "determine that inspection facilities or equipment are available for purposes of carrying out (the identified short test)." The Administrator has made this determination. Since this determination has been made, the Agency is required under the Act to promulgate emission performance warranty regulations.

II. General Comments

The vehicle manufacturers, in their comments to the Reproposal, asserted that the Act set forth a strict sequence for the promulgation of the section 207(b) regulations and that the Agency did not properly follow this sequence. According to the manufacturers, the Agency "put the cart before the horse" by proposing the warranty regulations prior to final promulgation of the short test regulations.

The manufacturers claimed that Congress intended the short test to be established by final rules prior to proposing warranty regulations, so that they and other interested parties could meaningfully comment on the warranty regulations. In particular, they claimed that Congress believed it was necessary to know the details of the short test regulation and the recommended cut points before estimates could be made as to projected rates of short test failures which in turn were necessary to project the cost of the warranty.

Ford, in support of this position, cited the legislative history of section 207(b) for the proposition that Congress believed that it would make little sense to require manufacturers to make the emission performance warranty before the shorts tests necessary to trigger their warranty liability are in existence. (See the Senate Comm. on Public Works, 93rd Cong., 2nd Sess., *A Legislative History of the Clean Air Amendments of 1970*, (Comm. Print 1974) at 337.)]

EPA agrees that it would make little sense to require vehicle manufacturers to provide a section 207(b) warranty statement with vehicles before the short test is promulgated. However, EPA does not agree that Congress intended, or that the Act requires, the Agency to follow the rulemaking sequence proposed by the vehicle manufacturers. Rather, the Agency believes that the legislative history, including the parts cited by Ford, demonstrates that Congress anticipated that EPA would promulgate the warranty regulations at the time that the Administrator determined that (1) a correlatable short test exists, and (2) that the necessary equipment to conduct the short test is available, provided that the warranty regulations are not put into effect prior to the effective date of the short test regulations. Moreover, the Agency believes that once the Administrator of EPA has made the necessary findings with respect to the availability of the short test, the Agency is required to promulgate the warranty regulations.

The Agency believes that to be able to comment on the warranty proposal it was unnecessary for parties to know more than that a "correlatable" short test is available for use in I/M programs that will trigger the warranty. The number of vehicles that would fail a "correlatable" short test that would not also fail a test utilizing the full Federal Test Procedure would be insignificant. Therefore, vehicle manufacturers should not have to make any modifications to vehicles, including calibration changes, to allow them to pass any of the short tests. In addition, the notice reopening the comment period on the short test proposal invited further comments on any aspect of the warranty affected by the short tests (45 FR 6960 January 31, 1980). This notice provided interested parties with an update of the Agency's present thinking on the short tests. No comments were submitted to the Agency during this additional comment period on how the short tests might impact on the warranty. EPA believes that if the details of the short test would affect the warranty provisions then the vehicle manufacturers would have taken advantage of this opportunity to provide additional comments on the warranty.

III. Specific Provisions

The major sections of the regulations are discussed below. Included in these discussions are the significant comments made on each section as well as the changes brought about by these comments. A more extensive summary of comments is contained in a separate document which may be found at IX-3 Public Docket EN-79-6. A more detailed discussion of the basic provisions was contained in the preamble to the Reproposal. That discussion will not be repeated here.

A. Section 85.2101 General Applicability

As proposed, the warranty would have applied to all classes of vehicles and engines beginning with the model year after short tests for the applicable classes of vehicles had been promulgated. Since short tests have only been developed for light-duty passenger cars and trucks, the regulations would have applied at first only to these vehicles. However, the regulations as proposed would have been applicable for other types of vehicles the model year after short tests for those vehicles were established.

Representatives of the heavy duty engine and motorcycle industries commented that EPA had drafted the warranty proposal with only light duty vehicles in mind. These parties stated that differences in their vehicles, as well as practices used in their industries that differed from the light-duty vehicle industries, make application of the proposed warranty regulations to their industries impractical.

Since some of these arguments may have merit, and since applicable short tests do not presently exist for other than light duty passenger cars and light duty trucks, EPA has limited the applicability of these regulations to light-duty passenger cars and light-duty trucks. EPA is reexamining the matter of extending the warranty provisions to other vehicles and engines.

The Act states that the warranty will be effective beginning in the model year after the promulgation of this regulation. The Reproposal specified that this would be the 1980 model year. However, since the 1980 model year has already begun, the warranty will be applicable beginning with 1981 model year vehicles.

The Agency determined in the course of promulgating the final short test regulations that the short tests correlate with the emission standards and test procedures proposed for use at high altitudes. However since high altitude standards are expected to become mandatory with the 1982 model year rather than 1981, the warranty remedy will not be mandatory at high altitude locations until the 1982 model year (unless a vehicle manufacturer voluntarily certifies a 1981 model year vehicle to meet high altitude standards). Beginning in 1982, vehicles equipped to meet high altitude emission standards

will be eligible for section 207(b) warranty repairs at high altitude.

B. Section 85.2102 Definitions

Relatively few comments were raised regarding the Definitions section of the Reproposal. As a result, most of the definitions have remained unchanged.

Many of the vehicle manufacturers objected to the proposed definition of "Original Equipment Part," which included all parts installed on a vehicle prior to sale to the ultimate purchaser. These commenters pointed out that dealers often install components in or on vehicles prior to the sale of the vehicle to the ultimate purchaser without the direction of the manufacturer. Because vehicle manufacturers have little control over these parts or their installation, they objected to these parts being included in the definition of "Original Equipment Part", for which they would automatically be responsible under the warranty. These manufacturers, therefore, stated that the definition should be modified to exclude these parts. EPA agrees and has adopted this modification.

Many vehicle manufacturers also requested a change in the definition of "Written Instructions for Proper Maintenance and Use." As defined in the Reproposal, the maintenance and use instructions were required to be in compliance with certain existing and future EPA regulations and were limited to the instructions performed during vehicle certification. Some vehicle manufacturers questioned the Agency's authority to restrict "in-use" maintenance instructions. In particular, they asserted that EPA could not limit these instructions to maintenance performed during vehicle certification. Ford recommended that EPA, therefore, amend the definition of "Written Instructions for Proper Maintenance and Use" to read those specified in the owner's manual "as may be reasonable and necessary to assure the proper functioning of the emission control system."

The Agency did not adopt this change. Prior to the Amendments, section 207(c) of the Act contained language similar to that suggested by Ford. However, the amendments clearly altered the maintenance and use instruction requirements such that maintenance and use instructions provided with new motor vehicles and motor vehicle engines must correspond to regulations which the Administrator "shall promulgate." Thus, the Agency believes that Congress intended that EPA have greater control over maintenance and use instructions than existed prior to the Amendments. The full extent of that control will be determined through a future rulemaking under section 207(c)(3) of the Act. Until then, the maintenance and use instructions shall be required to be reasonable and necessary to assure vehicle compliance with emission standards, and also not to be more burdensome than those performed during vehicle certification.

General Motors requested that the definition of "Written Instruction for Proper Maintenance and Use" be expanded to include not only those instructions specified by the vehicle manufacturer as being "necessary" to assure compliance of a vehicle with applicable emission standards for the useful life of the vehicle, but also to include those instructions that are "recommended" for that purpose. If the Agency adopted this definition, vehicle owners could have emission performance warranty claims denied for the failure to follow a mere recommendation. The Agency believes that it is important that vehicle owners not be faced with unnecessary obstacles to recovery under the warranty. The Agency feels that limiting the maintenance necessary to assure continued warranty coverage to that which is actually necessary to assure that the vehicle meets emission standards accomplishes this goal. However, the Agency does not intend for this provision to prevent vehicle manufacturers from recommending additional maintenance. Rather, it only prevents vehicle manufacturers from denying warranty claims because of an owner's failure to perform such additional maintenance.

The Agency also received comments from vehicle manufacturers that there are some special circumstances, such as constant use at low temperatures or through deserts, where extra or different maintenance is necessary to assure vehicle compliance. However, the Agency received no technical support for these allegations. The Agency realizes that there may be special conditions where additional maintenance is necessary. Therefore, the Agency has amended the definition of "Written Instructions for Proper Maintenance and Use" to include instructions for additional maintenance under special circumstances where necessary. However, any such instruction must be specified to EPA at the time of vehicle certification, or as may be required under future maintenance and use instruction regulations.

C. Section 85.2103 Warranty Statement

The warranty statement in the Reproposal did not exactly follow the language of section 207(b) of the Act. This was because section 207(b) provides that the warranty cover the performance of a vehicle's "emission control devices and systems". However, section 207(b) defines "emission control devices and systems" differently before and after the first 24 months or 24,000 miles of a vehicle's useful life. To avoid possible confusion over the double meaning of "emission control devices or systems" the Reproposal did not specifically define these devices. Instead, the Reproposal referred to the vehicle as the object warranted and limited the remedy under the warranty to the appropriate components for the periods before and after 24 months or 24,000 miles.

The Agency has made a number of changes in this section of the Reproposal. These changes, however, are not intended to have a substantive effect. Rather they are intended to clarify the requirements of the provision.

First, the provision no longer refers to "the vehicle" as the warranted object. This change was made in response to comments asserting that this reference is misleading as it will lead vehicle owners to believe that the warranty coverage is broader than it really is.

Second, the warranty period is described as the vehicle's "useful life" as it reads in the Act, rather than for "a period of 5 years or 50,000 miles (whichever first occurs)," as it read in the Reproposal. Although all light-duty vehicles, including light-duty trucks, are presently certified to have a useful life of 5 years or 50,000 miles (whichever first occurs), some light-duty vehicle classes may eventually have longer useful life periods. If any such vehicles do have a longer useful life, they will be expected to be warranted for that full period.

The third change made in this section is in the description of the required remedy for vehicles that fail a short test after 24 months or 24,000 miles. Under the Reproposal, a manufacturer would have been required to remedy a nonconformity caused by those "components or modifications to components" installed in or on a vehicle for the sole or primary purpose of reducing vehicle emissions and that were not in general use prior to model year 1968.

The words "modifications to components" raised considerable objection from many commenters. These commenters asserted that the Act requires vehicle manufacturers to

warrant components, not "modifications to components." This additional coverage, they asserted, was an illegal attempt to expand the scope of the warranty in direct contradiction to the intent of Congress that the warranty be narrowed to limit the potential anticompetitive effect which accompanies broad warranties.

The Agency's intent was to clarify the warranty through the use of the above language, not expand it. The comments received showed that the Agency is in agreement with most of the commenters as to what should be covered by the warranty during this period. For instance, Ford explicitly agreed that an electric choke and a dual diaphragm vacuum advance unit, the two examples of "modifications" cited by the Agency in the preamble to the Reproposal, should be covered items. However, Ford believed that these items could be covered because they are themselves components installed primarily for emissions purposes. The Agency, therefore, had deleted the words "modifications to components" from this section as it has apparently caused, rather than limited, potential confusion.

Many parties requested that EPA promulgate a list of parts covered after the initial 24 month or 24,000 mile period. Because of the amount of time it takes to promulgate a rule, the Agency does not believe that it is possible to comply with this request in a timely manner such that all new parts installed on vehicles for emissions purposes would be specified at the beginning of the model year. EPA believes that Congress desired that all new parts installed for emissions purposes be included. Therefore, EPA will not develop lists through the rulemaking process, but rather will, from time to time, publish in the **Federal Register** a generic list of parts that it believes should be warranted under the emission performance warranty for the vehicle's full useful life. Such a list, reflecting EPA's current views in this regard is included as an appendix to the regulations promulgated today. These lists are not intended to be all inclusive. The Agency expects vehicle manufacturers that use different emission control technologies to warrant all "emission control devices and systems" even if they are not included in the EPA list. However, the Agency believes that, at a minimum, the components listed in the Appendix to these regulations should be covered by the emission performance warranty for the full useful life of a vehicle for present technology vehicles. This list is consistent with a list suggested by Ford Motor Company, the only party that offered such a list in commenting on this point.

Commenters also disagreed as to what should be a covered "emission control device or system" for the initial 24 month or 24,000 mile period. Although many, including Chrysler Corporation, agreed with EPA's determination that all vehicle components are covered during that period, others thought that EPA's interpretation was overbroad and, as a result, anticompetitive. Of those that thought that EPA's determination was overbroad, some suggested that the coverage during this initial period be limited to the same components that Congress specified for the remainder of the vehicle's useful life. Most of these commenters suggested that the list be broader than the post-24 month or 24,000 mile list, but still be limited to certain parts which have a demonstrable effect on vehicle emissions.

The Agency believes that Congress intended that any vehicle components necessary to remedy a nonconformity pursuant to the requirements of section 207(b) be covered by the warranty for the first 24 month or 24,000 mile period. As a result of the Proposal, Congress was aware of EPA's interpretation of the phrase "emission control devices and systems," as well as any potential anticompetitive consequences, at the time it amended the Act in 1977. However, Congress chose to alter EPA's interpretation only for the period after 24 months or 24,000 miles. The Agency, therefore, believes that Congress supported EPA's interpretation for the initial period and meant for it to remain unchanged.

D. Section 85.2104 Owner's Compliance With Instructions for Proper Maintenance and Use.

The overall scheme for demonstrating an owner's compliance with the instructions for proper maintenance or use has been slightly modified in the Final Rule as a result of the comments received on this provision.

The Reproposal set forth a scheme for demonstrating compliance with the written instructions for proper maintenance and use. This scheme was primarily based on an effort to balance the interests of the vehicle manufacturers, vehicle owners, and the various segments of the automotive aftermarket parts industry. Under the scheme, the vehicle manufacturer would bear the initial burden of finding evidence of improper vehicle maintenance that relates to the particular nonconformity. Only upon such a finding would the vehicle manufacturer be allowed to ask the vehicle owner to present evidence that a particular maintenance instruction was performed. If the manufacturer found no objective reason to believe that an instruction was not followed, or if such an objective reason existed and the owner presented evidence to the contrary, the owner would be considered to have complied with the written instructions for proper maintenance and use unless the manufacturer could show that the vehicle failed the short test because (1) the maintenance was performed on the vehicle in a manner resulting in a component being substantially misadjusted, (2) the vehicle was tampered with, or (3) the vehicle was abused.

Some commenters believed that too great a burden would be placed on vehicle manufacturers under the scheme described in the Reproposal, while others believed that the scheme would make it too easy for vehicle manufacturers to avoid their warranty obligations. Some commenters believed that the scheme represented a proper balance between the competing concerns of consumer protection and a vehicle manufacturer's right to avoid paying for improper claims. The Federal Trade Commission stated that the scheme would be "procompetitive" as it would make it difficult for vehicle manufacturers to deny emission performance warranty claims arbitrarily on the basis of work performed by independent repair facilities.

EPA remains convinced that the procedure for demonstrating owner non-compliance with the maintenance and use instructions is not overly burdensome for vehicle manufacturers. Normal diagnostic procedures would require that the cause of the nonconformity be identified under any condition. Once these procedures are performed, reasonably informed mechanics and service personnel can then readily evaluate whether the identified problem is related to any required maintenance. Further, EPA believes that the scheme set forth in the Reproposal is consistent with the Congressional intent that the warranty be invalidated only upon a showing "by the manufacturer," that the owner abused or did not maintain his or her vehicle. (See H.R. Rep. No. 95–564, 95th Cong., 1st. Sess. 168 (1977).) The Agency does not believe that this scheme relieves vehicle owners of their responsibility to maintain their vehicles in accordance with manufacturers' instructions. It merely sets forth how determination of compliance with this obligation are to be made.

The Reproposal specifically requested examples of what could constitute "objective evidence" of noncompliance with an instruction. Only one vehicle manufacturer chose to provide a possible list. However, the examples contained in that list, although likely acceptable under the objective evidence criterion, were also very vague. Therefore, the Agency doubts that it is possible to provide a specific list now. However, if the vehicle manufacturers have difficulty with this standard the Agency will work with them to establish a list of specific examples.

The Agency does not intend for this "objective evidence" finding to present vehicle manufacturers with an insurmountable barrier from denying improper warranty claims. In some cases, for example, objective evidence could mean that the performance of a particular maintenance instruction is so integral to an identified part failure that the fact that the failure occurred is objective evidence that the maintenance was not performed. The Agency will not bring actions for civil penalties based upon vehicle manufacturers' requests for evidence of compliance with instructions for maintenance and use made in good faith even if based on somewhat questionable "objective evidence."

Under § 85.2104(c) of the Reproposal, it was unclear what type of evidence a person who performs his or her own vehicle maintenance would have to show in order to prevent having a warranty claim denied under paragraph (d)(1). Many commenters questioned this uncertainty and stated that they believed that this might force such persons to needlessly bring their vehicles to repair facilities to protect their warranty coverage.

The Agency believes that any competent individual should be able to perform vehicle maintenance and maintain emission warranty coverage. Further, section 207(c)(3)(A) of the Act specifically states that maintenance may be performed by individuals. Therefore, the Agency has redrafted paragraph (c) to specify how a person who performs his or her own maintenance may demonstrate compliance with the maintenance instructions. First, the owner (or any party acting on behalf of the owner) may present evidence that he or she purchased the proper parts for carrying out the maintenance instruction in question. Second, for maintenance requiring special knowledge or tools to perform, the owner should be prepared to inform the vehicle manufacturer, upon request, of the procedures used to perform the maintenance, as well as to state where he or she obtained access to any necessary specialized equipment.

Although the rule does not require vehicle manufacturers to supply a maintenace logbook with each new motor vehicle, the Agency encourages manufacturers to do so. If a vehicle manufacturer does supply a maintenance logbook, or if a vehicle owner obtains an appropriate logbook for a vehicle, then the completion of the logbook may constitute evidence of compliance with the instructions for proper maintenance and use under this final rule. For all service not performed by the owner, a completed logbook by itself will qualify as evidence of compliance with a maintenance instruction if it has been validated by someone who regularly engages in the business of servicing automobiles. For basic maintenance items that do not require special knowledge or tools, a maintenance logbook completed by any party, including the vehicle owner, could qualify as evidence.

Perhaps the most heavily commented upon segment of this section of the Reproposal was the set of limitations upon a vehicle manufacturer's ability to deny warranty claims set forth in paragraph (e). Although a few parties were in favor of one or more of these limitations, the majority of those commenting on this aspect were opposed to them. In light of the objections to these limitations, the Agency has re-evaluated each of them, making changes where appropriate.

The first limitation was that no emission performance warranty claim could be denied on the basis of maintenance or service performed by a dealer or other authorized service agent of the manufacturer. EPA based this limitation on an "agency" theory. Parties objected to this limitation for two reasons. Some of the vehicle manufacturers argued that dealers are not their agents, but are independent businessmen. Other commenters, including the Federal Trade Commission, feared that this limitation could be anticompetitive as it would drive cautious vehicle owners to dealers for routine servicing so as to be assured of continued emission performance warranty coverage. Further, these parties pointed out that this provision distinguishes between service performed by franchised dealers and other commercial repair establishments. Such a distinction they argued is prohibited by sections 207(c)(3)(B) and 203(a)(4)(C) of the Act.

The Agency remains unconvinced that franchised dealers are not agents of vehicle manufacturers for the purpose of performing emission related maintenance and repair. However, to prevent the possible anticompetitive impacts that could result from this limitation, this section has been amended to provide that vehicle manufacturers cannot deny warranty claims on the basis of any predelivery service or warranty work, both of which are performed by a repair outlet at the direction and expense of a vehicle manufacturer. This would include non-franchised warranty outlets as well as franchised repair facilities. The Agency believes that vehicle manufacturers can and will retain sufficient control over the performance of these types of services to justify this provision. Both types of services traditionally have been provided only by facilities authorized by vehicle manufacturers. As is discussed more fully below, in designating such facilities, the manufacturer is subject to appropriate antitrust laws. Therefore the adoption of this provision should not cause any anticompetitive effects.

The Agency is still concerned that vehicle owners will be misled by vehicle manufacturers' endorsements of their franchised dealerships in owners' manuals and in various advertisements. By limiting liability as discussed above, the Agency does not intend to preclude any individual from making an "apparent agency" argument in support of a warranty claim. (An apparent agency situation arises where a party appears to hold another out as an agent even though that other is not actually an agent. In some instances the courts have held the principal liable for the acts of such "apparent agents.") Moreover, the Agency does not intend for the amendment of this exception to preclude an "agency" argument from being raised under special circumstances that could arise in a recall action under section 207(c) of the Act.

Vehicle manufacturers also objected to the provision in the proposal that stated that vehicle manufacturers cannot deny warranty claims on the basis of maintenance performed by certified or licensed mechanics or repair facilities. The vehicle manufacturers asserted that it was unreasonable and unfair that they be responsible for work performed by parties over which they have absolutely no control, particularly since EPA is apparently not setting minimum standards for such certification or licensing. The Agency has decided to delete this provision from this rule. However, the Agency is investigating the idea of setting standards for a mechanics or repair facility certification program. If such standards are set by EPA or another

governmental organization, the Agency will reconsider this provision.

A number of objections were raised in regard to paragraphs (e)(3) and (e)(4) of proposed § 85.2104. These paragraphs would have precluded a vehicle manufacturer from denying an emission warranty claim on the basis of any work performed to rectify an unsafe condition, or work not performed or misperformed due to a cause which the manufacturer should have foreseen would result in such malmaintenance.

Objections were raised to these provisions on a number of grounds. Some argued that these standards were too vague. Others argued that these exceptions were unfair because maintenance instructions are approved by EPA at the time of vehicle certification. Some argued that these provisions would encourage improper maintenance and even vehicle tampering in an attempt to achieve better vehicle performance. Finally, some stated that these limitations set up a strong enforcement mechanism, but are virtually useless to consumers. The Agency, as a result of these comments, has decided to modify these provisions.

Under § 85.2104(e)(2), as modified, no manufacturer will be allowed to deny an emission performance warranty claim on the basis of emergency work performed to rectify an unsafe condition, provided the vehicle owner has used or is using reasonable diligence to have a temporary repair made into a more permanent one. For example, if a vehicle owner must misadjust or disconnect a vehicle component while traveling because of a safety problem that manifests itself at a time when it would be unreasonable for the owner to bring the vehicle in for a permanent repair, the owner could not be denied a warranty claim on the basis of such temporary repair provided that he or she used reasonable diligence to bring the vehicle in for a permanent repair. What constitutes reasonable diligence will vary depending upon the circumstances. Although not required by these regulations, a vehicle manufacturer may want to include space in the owner's manual or maintenance instructions in which vehicle owners can record dates and times of such emergency repairs.

Proposed § 85.2104(e)(4), regarding foreseeable malmaintenance, has been amended to provide that no emission warranty claim may be denied for any reason "determined to be attributable" to the vehicle manufacturer. Under this exception, vehicle owners will not look to what a vehicle manufacturer should have known would happen. Instead, they will look to see if maintenance was not performed, was improperly perfomed, or even that a vehicle was tampered with, because of a problem that is attributable to the manufacturer. For instance, if a service procedure is so complicated as to be beyond the competence of most mechanics or requires tools or other equipment not readily available in the field, then failure to properly perform such service procedure would be attributable to the vehicle manufacturer and could not be used as a basis to deny an otherwise valid emission performance warranty claim. Although it is the responsibility of vehicle manufacturers to repair vehicles which fail for such reasons, the Agency will not consider it a violation of the Act for a vehicle manufacturer to deny claims on the basis of improper maintenance or vehicle abuse which is later determined by the Agency or a court to be attributable to the vehicle manufacturer, provided that the denial was made in good faith and that once the vehicle manufacturer is made aware that the lack of maintenance or tampering was attributable to it, that it promptly fix the vehicle or reimburse the vehicle owner and repair vehicles under warranty for similar circumstances that arise later.

The final rule continues to provide that an emission performance warranty claim may not be denied on the basis of: (1) The use of any non-certified part or noncompliance with any written instruction for proper maintenance and use which is not relevant to the reason that the vehicle failed to comply with applicable emission standards; or (2) the use of any fuel which is commonly available in the geographical area in which the vehicle is located, unless use of that particular fuel is prohibited in the maintenance and use instructions with a sufficient description for a vehicle owner to reasonably know which fuel(s) not to use.

Some parties stated that the geographically available fuel limitation should be limited to fuels recommended by the vehicle manufacturer. Some of these manufacturers expressed concern that fuels such as "gasohol" are untried and that vehicle manufacturers should not be responsible for component failure resulting form the use of such fuels. The Agency believes that fuel requirements specified for vehicles by vehicle manufacturers should be followed by owners. However, all limitations on fuel should be clearly specified and reasonable. This means that there should be an adequate amount of any specified fuel available in the geographic area and that information should be provided such that the owner can readily assure compliance with that limitation (e.g., minimum octane requirement).

Section 211(f) of the Act prohibits the introduction into commerce of potentially harmful fuel and fuel additives without a waiver from the Agency. This prohibition will provide vehicle manufacturers substantial protection from incurring emission warranty costs associated with part failures or excess emissions resulting from any new fuels or fuel additives.

E. Section 85.2105 Replacement Parts

Many of the commenters stated that they were not able to fully comment on any provision of the Reproposal dealing with replacement parts because they were uninformed as to what the requirements will be for the aftermarket part certification program. However, the Reproposal set forth how the aftermarket part certification program would affect the warranty, which is what commenters needed to evaluate the influence of that program on the proposed regulations. Commenters have also had an opportunity to comment on the stringency of the Part certification regulations in light of the warranty requirements since the certification regulations were proposed on August 8, 1979 at 44 FR 46686. During the public hearings on the aftermarket part certification proposal, it became apparent that much of the industry did not take advantage of the opportunity to comment on the impact of the part certification program on the warranty during the section 207(b) comment period. The Agency therefore extended the comment period for the certification program from November 12, 1979, to January 15, 1980, and further requested comments on how the certification program would impact on the warranty, 44 FR 62914 (November 1, 1979).

Generally, the vehicle manufacturers asserted that it would be illegal for the Agency to hold them vicariously liable for parts manufactured by others. They argued that, although a warranty should not automatically be voided on the basis of the use of a certified part, the warranty should be invalid if the certified part is defective or not actually equivalent to the original equipment part.

The Agency does not agree. As reflected in section 207(b), Congress clearly intended that consumers be able to purchase certified parts without having to be concerned about losing their emission performance warranty coverage. If the Agency were to follow the scheme set forth by the vehicle manufacturers, vehicle owners would not have this assurance.

Rather, owners would fear that a vehicle manufacturer would merely allege that the part is defective or otherwise improper and deny the claim. This could encourage vehicle owners to use only original equipment parts, contrary to the legislative intent.

Even if the manufacturers of certified parts warrant that they will reimburse a vehicle owner for repairs that would have been covered under the emission performance warranty had the certified part not been defective, the problem would not be remedied. It will often be difficult to determine whether an aftermarket part caused a vehicle to fail a short test because it is defective or because it is not actually equivalent to the original equipment (OE) part it replaced. This could result in neither the vehicle nor part manufacturer assuming liability for the repair. If a consumer may be forced to go back and forth between parts manufacturers and vehicle manufacturers, he or she may simply not risk the use of any parts other than OE parts, whether they are certified or not.

As thoroughly discussed in the comment of the Automotive Products Emissions Committee to the part certification proposal, Congress created the aftermarket part provisions to prevent potential anticompetitive impacts on the automotive aftermarket industry. If a vehicle manufacturer may refuse to repair a vehicle because a certified non-original aftermarket part is defective and, as a result, people choose not to use certified parts, the purpose of the provision will be defeated. The aftermarket provision will work only if the vehicle manufacturer honors claims in every instance. Therefore, the Agency believes that Congress intended that the vehicle manufacturer honor claims involving certified parts, even if the parts are defective, provided the vehicle manufacturer may be reimbursed for the expenses of such activities by the aftermarket part manufacturer.

The vehicle manufacturers assert that Congress included the provisions relating to part certification in the Act to assure that business would go on as usual. They assert that they presently do not invalidate section 207(a) emission warranty claims merely because non-OE parts are used, but do so only if the parts are determined by them to be nonequivalent or defective. The part certification provisions, they contend, were meant to preserve the latter exception.

The Agency does not agree that Congress included the aftermarket part certification provisions in the Act merely to ensure that vehicle manufacturers follow past practices that may already be required by antitrust laws. Rather, the Agency believes that Congress included the provisions to prevent the emission performance warrantly, coupled with today's business practices (including potential denial of warranty claims based on the equivalency or performance of a part), from creating a market shift.

In fact, prior to the Amendments, EPA had proposed guidelines for a voluntary aftermarket part certification program. However, because EPA had no authority to make certification of a part binding on a vehicle manufacturer, the program was considered by many to be anticompetitive and anti-consumer, even if the part manufacturer provided its own warranty with its certified parts. For example, the Subcommittee on Environmental Problems Affecting Small Business in its Report on the Monopolistic Tendencies of Auto Emission Warranty Provisions, H.R. Rep. No. 93–1628, 93d Cong. 2nd Sess. 31 (December 18, 1974), commenting on the EPA proposed certification program which would have required a warranty of certified parts, stated;

> The parts certification program merely proliferates the number of warranties without providing any mechanism for adequately determining why the emission control system failed. Thus, should the parts manufacture dispute the franchised dealer's assertion that the replacement part caused the failure, the consumer is left with no means to resolve the dispute, other than court action which would probably be so time consuming as to be prohibitive."

Therefore, rather than have EPA put out a program which would not be binding on vehicle manufacturers, EPA believes that Congress amended the Act to make part certification binding on vehicle manufacturers.

This view is not inconsistent with the Court of Appeals decision in *Chrysler Corporation v. EPA*, 600 F2d. 904 (D.C. Cir. 1979), which invalidated EPA regulations promulgated under the Noise Control Act. The regulations placed warranty liability on the manufacturer of an unfinished truck for work performed by a subsequent manufacturer who completes the truck and is unrelated to the first manufacturer. In that case, the Court pointed out that there was nothing in the Noise Control Act of 1972 or its legislative history that would support a regulation imposing liability on one party for actions of another party. Here, the Agency believes that both the plain language of the statute, as well as its legislative history, mandates imposing such liability.

To assure an equitable situation, the Agency intends to incorporate requirements in the final aftermarket part certification regulations which will ensure that vehicle manufacturers will be reimbursed for all emission performance warranty costs resulting from repairs necessitated by a defective or nonequivalent certified part.

Some representatives of the aftermarket part industry objected to being liable for warranty repairs necessitated as a result of their parts. However, as will be discussed further in the preamble to the final part certification regulations, the Agency believes that this scheme is equitable, as it is only reasonable to expect a part certifier to reimburse a vehicle manufacturer who incurred expenses due to a fault in a certified part. Much of the part manufacturers' concern centers around their fear that they will have no role in determining whether their parts caused the emission nonconformity. The Agency does not intend for this to be the case. Rather, this requirement will remove an owner, who is likely to have little or no ability to determine the cause of an emission nonconformity, from the decision and instead allow two knowledgeable parties, the part manufacturer and the vehicle manufacturer, to determine the cause of the emission nonconformity.

The Agency does not believe that any party will incur significant costs because of this scheme. The scope of warranty coverage is limited after the first 24 months or 24,000 miles. As stated in the Economic Analysis, the Agency expects that relatively few valid warranty claims will be made for vehicles during this period of limited coverage.

Prior to the end of the initial 24 month or 24,000 mile period, the Agency believes the vast majority of vehicles will still have the OE part installed. Since the amount of maintenance required of most vehicles during this period is limited, few claims should be the result of failures by certified parts. This is especially true since the certification program will assure that certified parts do not cause vehicle emissions to exceed standards.

The Agency believes it must follow the Congressionally mandated scheme and require that vehicle manufacturers honor warranty claims resulting from properly installed certified parts. The Agency notes, however, that outside of an emission warranty situation, part manufacturers, and not vehicle manufacturers, will be expected to deal with problems arising from use of their parts.

Some part manufacturers stated that the Reproposal made it too easy for vehicle manufacturers to deny claims on

the basis of uncertified parts. These part manufacturers stated that this will force them to certify their parts and, therefore, the aftermarket part certification program will not actually be voluntary as intended by Congress. The vehicle manufacturers, on the other hand, stated that they believed that Congress intended for them to be able to deny a claim simply on the basis of the use of an uncertified part.

The Agency does not believe that Congress intended the result set forth by the vehicle manufacturers. To do so would mean that Congress intended for manufacturers of uncertified parts to receive less protection than they receive today. EPA does not believe that the certification provisions were meant merely to limit vehicle manufacturer liability.

Neither does it agree with those members of the automotive aftermarket industry who assert that it is up to a vehicle manufacturer to prove conclusively that an uncertified part is defective or unequivalent with regard to its effects on emissions. Instead, the Agency believes that it is reasonable only to expect vehicle manufacturers to provide evidence that the uncertified part has caused the vehicle to fail the emission short test. Once the vehicle manufacturer provides this evidence, it would be able to deny the emission performance warranty claim, unless the vehicle owner or the part manufacturer could prove that the uncertified part did not cause the vehicle to fail the emission short test.

The Reproposal set forth different degrees of evidence that a vehicle manufacturer would have to provide prior to denying an emission warranty claim on the basis of the use of an uncertified part, depending upon whether a certified part was available at the time the uncertified part was installed. Based upon the comments, the Agency felt that the distinction between the two types of situations was too confusing and that it would be simpler to treat all uncertified parts the same. Therefore the final rule does not distinguish between those parts for which a certified replacement was available and those for which there was not.

F. Section 85.2106 Warranty Claim Procedures

The warranty claim procedures are basically unchanged from the Reproposal. The time period for making determinations of warranty coverage has been extended to alleviate some of the concerns of the vehicle manufacturers. However, the regulations now provide that if a state requires a vehicle to be repaired within a shorter time frame than normally allowed by the regulations, then the determination and repair must be made within the shorter time frame.

The vehicle manufacturers uniformly commented that the time limit for deciding the validity of warranty claims was too short even though most admitted that almost all claims could be decided well within the proposed time limit. The Agency expects that no vehicle manufacturer should have trouble complying with the time requirement. Further, the Agency believes that the limit is reasonable and necessary to assure that emission problems with vehicles are corrected expediently, and no owner will be forced to incur any additional penalty or sanction as a result of delays attributed to the vehicle manufacturer.

The vehicle manufacturers also asserted that the time limit should take into account factors outside their control, such as acts of God. The agency agrees and therefore has modified the regulations such that the time for responding to emission performance warranty claims is tolled when a delay results from a cause beyond the control of the vehicle manufacturer or the authorized repair facility, such as an act of God.

One issue heavily commented upon was that of whether independent repair facilities should be allowed to perform warranty repairs. The Reproposal would have allowed manufacturers to designate that only their dealers can perform emission performance warranty repairs. A discussion of the basis upon which that decision was made is contained in the preamble to the Reproposal. Because segments of the automotive service industry and the Bureau of Competition of the Federal Trade Commission believed that allowing vehicle manufacturers to designate only their franchised dealers as warranty repair facilities would have severe anticompetitive impacts and possibly would be in violation of antitrust law, the Agency stated that it would continue to consider the issue.

The Agency received well reasoned comments on both sides of the issue. Most of those parties who believed that non-franchised repair facilities should be able to perform warranty repairs did not advocate allowing all independents to perform such repairs. These parties agreed that vehicle manufacturers should be able to designate who can perform warranty repairs, but alleged that it was unreasonable and perhaps illegal for them to arbitrarily designate only their dealers as warranty repair stations. A frequent suggestion was for vehicle manufacturers to establish similar requirements (equipment, mechanic qualifications, record keeping, etc.) for independent repair facilities desiring to perform emission performance warranty repairs, as they have for their dealers. In addition, some suggested that EPA require vehicle manufacturers to designate only those repair facilities that can compete competitively for this service with the manufacturer franchised facilities.

Parties suggesting that EPA require that independents be permitted to perform warranty repairs cited the general intent of several Clean Air Act provisions, which was to limit the potential anticompetitive effect of the warranty. These parties were unconvinced that the position stated by EPA in the Reproposal was conclusive as to EPA's lack of authority to require vehicle manufacturers to permit independent repair facilities to perform emission performance warranty repairs. They claimed that the language cited in the Reproposal from the statute and its legislative history clearly implies that Congress intended that vehicle manufacturers be able to designate their own warranty outlets but only if independent repair facilities were also designated; otherwise, their exclusion would be anticompetitive.

These parties further disagreed with EPA's interpretation of the statement in the Conference Report that "to the extent permitted by the Moss-Magnson [sic] any establishment (would have) * * * the right to perform work covered by the section 207(b) warranty with the right to reimbursement by the vehicle manufacturer." EPA stated in the Reproposal that since the Magnuson-Moss Act allows manufacturers to designate who performs warranty repairs, non-franchished repair facilities could perform warranty repairs, only to the extent that vehicle manufacturers chose to designate them.

The Federal Trade Commission and other parties in favor of independents performing emission performance warranty repairs pointed out that while the Magnuson-Moss Act generally authorizes product manufacturers to choose their warranty establishments, it also provides that nothing in that Act shall be construed to "repeal, invalidate, or supersede the Federal Trade Commission Act" or any other antitrust statute, 15 U.S.C. 2311(a). Consequently, they suggested that the Conference Report language should be read to require vehicle manufacturers to choose warranty outlets so as to minimize the anticompetitive effects. This would

include allowing independents the opportunity to participate.

The vehicle manufacturers agreed with the statement in the Reproposal that EPA cannot require vehicle manufacturers to designate non-franchised repair facilities as warranty outlets. In addition to the statements in the Reproposal, these parties pointed to the House Commerce Committee bill, which would have expressly permitted the Agency to promulgate regulations allowing independent garages to perform warranty repairs (see H.R. Rept. No. 95–294, 95th Cong., 1st Sess. 424 (1977)). This aspect of the bill was rejected by the House in favor of the Dingell-Broyhill amendments, which expressly included a provision allowing manufacturers to control the performance of paid warranty work. In addition, these parties focused on the words of Congressman Broyhill during the debate over the adoption of the Dingell-Broyhill amendments. He stated that although the amendment would in no way restrict the ability of the independent parts, repair, or service outlets to service or maintain a vehicle in order to keep a warranty valid, or to perform non-warranty repair work, that "as with any warranty, whether it relates to any large consumer product, the manufacturer has the right to specify who may do the work for which it bears both the cost and the responsibility for repair." Further, Congressman Broyhill went on to say, "This is not only consistent with the concepts of the Moss-Magnuson (sic) Warranty Act, but is also supported by the trade associations which represent more than 166,000 aftermarket repair firms." 123 Cong. Rec. 5138 (daily ed. May 26, 1977).

In addition, proponents on both sides of the issue set forth numerous policy reasons in behalf of their positions. These policy discussions are set forth in more detail in the comment summary, which can be found at EN–79–6 at IX–2.

After careful consideration of all of the comments received on this issue, the Agency has decided that it lacks authority to require vehicle manufacturers to allow independents to perform emission performance warranty repairs. However, the Agency encourages vehicle manufacturers to do so. Further, to the extent that any existing or future antitrust law requires vehicle manufacturers to do so, this regulation should not be construed as permitting a vehicle manufacturer to do otherwise. Indeed, the regulations provide that to the extent required by any law, whether state or Federal, whether statutory or common law, a vehicle manufacturer is required to let independent repair facilities participate in performing warranty repairs.

Two other significant changes were made in this section. First, under the Reproposal, vehicle manufacturers would have been required to pay for diagnosing vehicles even if a diagnosis resulted in a vehicle's being ineligible for an emission warranty claim. The final rule will require the vehicle manufacturer to bear the cost of diagnoses leading to honored claims only. This change was made in response to comments on the fairness and legality of providing otherwise, and also to charges of the Federal Trade Commission and the independent aftermarket associations that the proposed provision would be anticompetitive.

Second, § 85.2106(f) of the Reproposal would have required vehicle manufacturers to bear the cost of repairs performed without the vehicle owner's consent if the vehicle had been left with an authorized repair facility for an emission performance warranty diagnosis or repair. This paragraph has been deleted. The Agency believes that many state and local laws already address this situation. However, if the Agency determines that warranty repair facilities are taking advantage of having vehicles returned to them for emission warranty repairs, the Agency will reconsider amending the regulations to prevent such abuse.

G. Section 85.2107 Warranty Remedy

Proposed § 85.2107(a)(2) was criticized by many parties as being overexpansive. This paragraph would have required vehicle manufacturers to repair, free of charge, all components which must be adjusted, repaired or replaced to assure the continued performance of a described emission control device or system for the remainder of the vehicle's useful life. Read literally, this paragraph would have required a vehicle manufacturer to replace, under the warranty, a part such as a failed spark plug even if the vehicle had been in use for greater than 24 months or 24,000 miles and the "emission control device or system", such as a catalyst, was itself unharmed, merely because the part could harm such device or system in the future. The Agency did not intend this result. Rather, the Agency intended that after the initial 24 months or 24,000 mile period, a spark plug would be replaced under the warranty only if (1) it had already failed, (2) such failure contributed to a catalyst failure, and (3) failure to repair or replace would prevent the replacement catalyst from performing its function. This paragraph has been modified accordingly in the final rule.

Even assuming the interpretation noted above, many parties claimed that the proposed provision was beyond the scope of the warranty and anticompetitive. Other parties did not agree and expressed their belief that the provision was well within the intent of Congress and, in addition, would be necessary for a workable warranty program. The Center for Automotive Safety asserted that the anticompetitive claims of the aftermarket part and service industry were greatly exaggerated and, in support of this statement, pointed to the rapid growth of the independent automotive aftermarket part and service industry during the late 1960's, when many new vehicles were covered by a more comprehensive warranty for 5 years or 50,000 miles.

The Agency believes that the inclusion of this provision, as modified, is necessary. It makes no sense to replace a failed part, such as a catalyst, which fails as a result of a second component, such as a spark plug, and not to replace the second component to prevent the replaced part from failing promptly for the same reason its predecessor did.

Moreover, it is significant that the section 207(b) warranty is a "performance warranty" and not a "defect warranty." As such, the warranty covers the performance of a covered part. Obviously a catalytic converter which has failed as a result of a failed spark plug will not perform properly unless the spark plug is also replaced.

The Agency believes that Congress limited the scope of the warranty after the initial 24 month or 24,000 mile period in response to concerns of the automotive aftermarket industry that too broad a warranty would be anticompetitive. As originally proposed, the warranty would have covered spark plug changes, valve and carburetor adjustments, air filter changes and other "tune up" services for the full useful life of the vehicle. Therefore, many parties feared that vehicle owners would routinely have their scheduled maintenance performed under the warranty. This, they feared, would have a substantial anticompetitive impact on the automotive aftermarket. Therefore, the Agency believes that Congress amended the Act to assure that scheduled maintenance would continue to be performed at any place of the owner's choosing. These regulations will not result in owners receiving free tune-ups for the vehicles' useful life. Rather, small portions of such services will be

performed after the first 24 months or 24,000 miles only when necessary to repair an "emission control device or system," and should never obviate the need to have a car serviced at any scheduled interval. Thus, this provision should not cause any market shift.

The Agency believes that requiring the warranty repair to include components other than "emission control devices or systems", if such repair is necessary for a covered emission control device or system to function, should not have significant anticompetitive effects. If such repairs or replacements were not covered by the warranty they might not be performed at all; and where they were performed despite the lack of warranty coverage, they would, in many instances, be performed by the warranty outlet for reasons of convenience. In either situation, the lack of warranty coverage would not have helped the independent repair facility.

In fact, this provision could prove to be "procompetitive." For example, warranty outlets would be less likely to perform an unnecessary full tune-up with a catalytic converter replacement if the full tune-up would be covered under the warranty and not paid for by the consumer. The warranty facility would tend to perform the least repair necessary to restore the vehicle and thus, the consumer would be free to have the full tune-up performed at an appropriate service interval at any repair facility of his or her choice. Without this provision, the warranty outlet could take advantage of the "captured repair" situation feared by the aftermarket part industry by advising the vehicle owner to have an unnecessary tune-up performed at the time of the warranty repair.

The Agency has attempted to minimize the potential anticompetitive effect of the warranty and does not believe that § 85.2107(c)(2) will be anticompetitive. Moreover, the Agency believes that in addition to anticompetitive considerations, it has a responsibility to carry out the purposes of section 207(b), and that for those purposes it is essential to require repair or replacement, under the warranty, of components that cause "emission control devices and systems" to fail. For all the above reasons, the final rule requires the emission performance warranty remedy to include the repair or replacement of all components which (1) have caused a covered emission control device or system to fail, and (2) if not repaired or replaced, will prevent the new or repaired emission control device or system from performing properly.

Section 85.2107(d) of the Reproposal would have required vehicle manufacturers to adjust the maintenance instructions each time a maintenance item is repalced under the emission performance warranty. This paragraph has been deleted in response to the many parties who alleged that this requirement would be time consuming, costly and, in addition, so confusing as to provide consumers little benefit.

Under the final rule, a manufacturer is normally required to perform emission performance warranty repairs within 30 days rather than 21 days, as was proposed. However, in cases where the vehicle owner is required by local, State or Federal law to repair the vehicle in a shorter period, the vehicle manufacturer must perform the repair within the shorter period. The rule as modified, makes clear that failure to meet the time deadline for reasons beyond the manufacturer's control will not subject it to liability.

H. Section 85.2108 Dealer Certification

This section interprets section 207(h) of the Act which requires dealers to provide a certificate with each new light-duty vehicle, stating that the vehicle meets Federal emission standards. Many parties commenting on this section supported it because they believed it would greatly aid in remedying the problem of new vehicles being sold that are not equipped and adjusted to meet emission standards.

Few comments were received regarding the dealer's requirements in providing a certificate. One commenter suggested that it would take a dealer too much time to perform a visual inspection of the vehicle to assure that all emission related components had been properly installed. Therefore, the commenter asserted that this requirement should be modified. The Agency does not agree. Full vehicle inspections, including a check of part numbers for numerous parts on many different vehicle configurations, takes EPA employees between 15 to 20 minutes per vehicle. Since dealers will be required to inspect fewer vehicle configurations, they should be more familiar with the vehicles. Thus, the dealer inspections should take far less time than the EPA inspections. The Agency does not consider this requirement burdensome.

General Motors, in its comment to the standards for light-duty truck regulations, appeared to believe that the dealer certification provision provides vehicle manufacturers the right to require dealers to perform any dealer preparation it chooses. Moreover, General Motors stated that this (i.e., the warranty certificate provision) was inconsistent with attempts by EPA to disallow vehicle manufacturers from performing dealer preparation instructions during assembly-line testing. EPA does not believe that these two provisions are inconsistent, or that the GM statement is correct. The warranty provision merely states that any dealer preparation that is ultimately required by a vehicle manufacturer must be performed in order for the dealer to be able to in good faith provide a warranty certificate which indicates that a vehicle meets emission standards at the time of sale. The issuance of a warranty certificate does not mean that the dealer has performed or is capable of performing all instructions. Therefore, the warranty certificate should not be construed as proof that the dealers actually performed dealer preparation procedures. EPA does not generally discourage manufacturers from performing dealer preparation procedures during its Selective Enforcement Audits (SEA-assembly line tests). If the manufacturer can demonstrate that these procedures are being carried out routinely and correctly at its dealerships, i.e., that test vehicles adequately represent production vehicle at the point they are sold to an ultimate purchaser, EPA may approve the use of these procedures during SEA testing.

General Motors suggested including a mileage limit, as well as a time limit, for the period during which a vehicle is eligible for a free repair under the certificate. EPA has accepted this recommendation, and has included a 4,000 mile limit.

Other manufacturers stated that since their vehicles require maintenance prior to three months subsequent to delivery, that the dealer certificate remedy should be conditioned on performance of that maintenance. The Agency has inserted a provision requiring an owner to comply with the instructions for maintenance and use in order to recover under the dealer certification provision. The demonstration of an owner's compliance with these instructions is to be made in the same manner as is set forth in § 85.2104.

I. Section 85.2109 Inclusion of Warranty Provisions in Owners' Manuals and Warranty Booklets

The basic information required to be provided to a vehicle owner is the same as was contained in the Reproposal. However, because many of the vehicle manufacturers claimed that including all of the information in both the owner's manual and warranty booklet was unnecessarily burdensome, the Agency has changed this requirement. The final

regulation adopts a concept suggested by Ford Motor Company, requiring that the warranty booklet contain all of the relevant information, except for the maintenance instructions which the booklet will usually reference. The owner's manual must only reference the emission warranties and also must contain information on how to obtain a replacement warranty booklet if it is lost or misplaced. However, if a manufacturer does not normally provide a separate warranty booklet with the vehicle, the manufacturer may include the emission performance warranty information in the owner's manual along with the other vehicle warranties.

J. Section 85.2110 Submission of Owners' Manuals and Warranty Statements to EPA

The Reproposal would have required vehicle manufacturers to submit copies of the owners' manuals and warranty booklets in their final printed format 60 days prior to the introduction of the vehicle for sale. Many of the vehicle manufacturers stated that this requirement is impractical because the booklets are not finalized at that time. Many of these parties recommended that vehicle manufacturers be given an option to provide EPA with draft copies 60 days prior to the introduction of vehicles for sale, and final copies within 15 days after the final printing. The Agency has adopted this suggestion.

K. Section 85.2111 Warranty Enforcement

This section remains substantially unchanged from the Reproposal. The rule provides that it is a prohibited act not to comply with the terms and conditions of the emission performance warranty and further sets forth a partial list of acts that would constitute a failure to comply.

Chrysler Corporation alleged in its comments that the Agency had erroneously interpreted the Act in regard to this section. Chrysler alleged that Congress did not mean for particular cases of noncompliance with the warranty to subject vehicle manufacturers to liability for failing to comply with the terms and conditions of the warranty. Rather, Chrysler believes that the Act contemplates that EPA will bring actions only when a vehicle manufacturer shows a pattern of noncompliance. The Agency does not agree. The legislative history of the Amendments clearly indicates that Congress intended for EPA to become involved when an individual warranty claim has not been properly honored. H.R. Rep. No. 95–564, 95th Cong., 1st sess. 169 (1977). Further, since EPA's interpretation is consistent with a literal interpretation of the Act, this section has remained basically intact.

L. Evaluation Plan

EPA intends to review the effectiveness and need for continuation of the provisions contained in this action within five years. In particular, the Agency will solicit comments from the affected parties concerning the effectiveness and economic impact of the emission performance warranty.

M. Reporting and Recordkeeping Requirements

This rulemaking will not impose any significant new or additional reporting or recordkeeping requirements on any party.

Note.—The Agency has determined that this document is not a "significant regulation" requiring the preparation of a Regulatory Analysis under Executive Order 12044. An Economic Analysis has been prepared and is included in the Public Docket.

Dated: May 13, 1980.

Douglas M. Costle,

Administrator.

Accordingly, Part 85 of Title 40 of the Code of Federal Regulations is revised by adding a new Subpart V, as set forth below.

Subpart V—Emissions Control System Performance Warranty Regulations

Sec.

85.2101 General applicability.
85.2102 Definitions.
85.2103 Emission warranty performance.
85.2104 Owners' compliance with instructions for proper maintenance and use.
85.2105 Replacement parts.
85.2106 Warranty claim procedures.
85.2107 Warranty remedy.
85.2108 Dealer certification.
85.2109 Inclusions of warranty provisions in owners' manuals and warranty booklets.
85.2110 Submission of owner manuals and warranty statement to EPA.
85.2111 Warranty enforcement.
85.2112–85.2150 [Reserved]

Authority: Secs. 203, 207, 208, and 301(a) of the Clean Air Act, as amended, (42 U.S.C. 7522, 7541, 7542, and 7601(a))

Subpart V—Emissions Control System Performance Warranty Regulations

§ 85.2101 General applicability.

Sections 85.2101 through 85.2111 are applicable to all 1981 and later model year light-duty vehicles and light-duty trucks.

§ 85.2102 Definitions.

(a) As used in §§ 85.2101 through 85.2111 all terms not defined herein shall have the meaning given them in the Act:

(1) "Act" means Part A of Title II of the Clean Air Act, 42 U.S.C. 7421 *et seq.* (formerly 42 U.S.C. 1857 *et seq.*), as amended.

(2) "Administrator" means the Administrator of the Environmental Protection Agency or an authorized representative of the Administrator.

(3) "Certified Part" means a part certified in accordance with the aftermarket part certification regulations contained in this subpart.

(4) "Emission Performance Warranty" means that warranty given pursuant to this subpart and section 207(b) of the Act.

(5) "EPA–Approved Emission Test" or "Emission Short Test" means any test prescribed under 40 CFR 85.2201 *et seq.*, and meeting all of the requirements thereunder.

(6) "Model Year" means the manufacturer's annual production period (as determined by the Administrator) which includes January 1 of such calendar year; however, if the manufacturer has no annual production period, the term "model year" shall mean the calendar year.

(7) "Original Equipment Part" means a part present in or on a vehicle at the time the vehicle is sold to the ultimate purchaser, except for components installed by a dealer which are not manufactured by the vehicle manufacturer or are not installed at the direction of the vehicle manufacturer.

(8) "Owner" means the original purchaser or any subsequent purchaser of a vehicle.

(9) "Owner's Manual" means the instruction booklet normally provided to the purchaser of a vehicle.

(10) "Useful Life" means that period established pursuant to section 202(d) of the Act and regulations promulgated thereunder.

(11) "Vehicle" means a light duty vehicle or a light duty truck.

(12) "Warranty Booklet" means a booklet, separate from the owner's manual, containing all warranties provided with the vehicle.

(13) "Written Instructions for Proper Maintenance And Use" means those maintenance and operation instructions specified in the owner's manual as being necessary to assure compliance of a vehicle with applicable emission standards for the useful life of the vehicle that are,

(i) In accordance with the instructions specified for performance on the manufacturer's prototype vehicle used in certification (including those specified for vehicles used under special circumstances), and

(ii) In compliance with the requirements of §§ 86.XXX–38 (as

appropriate for the applicable model year vehicle/engine classification), and

(iii) In compliance with any other regulations promulgated by EPA governing maintenance and use instructions.

§ 85.2103 Emission performance warranty.

(a) The manufacturer of each vehicle to which this subpart applies shall warrant in writing that if:

(1) The vehicle is maintained and operated in accordance with the written instructions for proper maintenance and use and

(2) The vehicle fails to conform at any time during its useful life to the applicable emissions standards as judged by an EPA-approved emission test, and

(3) Such nonconformity results or will result in the vehicle owner having to bear any penalty or other sanction (including the denial of the right to use the vehicle) under local, State or Federal law, then the manufacturer shall remedy the nonconformity at no cost to the owner; *except that*, if the vehicle has been in operation for more than 24 months or 24,000 miles, the manufacturer shall be required to remedy only those nonconformities resulting from the failure of components which have been installed in or on the vehicle for the sole or primary purpose of reducing vehicle emissions and that were not in general use prior to model year 1968.

(b) The warranty period shall begin on the date the vehicle is delivered to its utlimate purchaser, or if the vehicle is first placed in service as a "demonstrator" or "company" car prior to delivery, on the date it is first placed in service.

§ 85.2104 Owners' compliance with instructions for proper maintenance and use.

(a) An emission performance warranty claim may be denied on the basis of noncompliance by a vehicle owner with the written instructions for proper maintenance and use.

(b) When determining whether an owner has complied with the written instructions for proper maintenance and use, a vehicle manufacturer may require an owner to submit evidence of compliance only with those written maintenance instructions for which the manufacturer has an objective reason for believing:

(1) Were not performed; and

(2) If not performed could be the cause of the particular vehicle's exceeding applicable emission standards.

(c) Evidence of compliance with a maintenance instruction may consist of:

(1) A maintenance log book which has been validated at the approximate time or mileage intervals specified for service by someone who regularly engages in the business of servicing automobiles for the relevant maintenance instruction(s); or

(2) A showing that the vehicle has been submitted for scheduled maintenance servicing at the approximate time or mileage intervals specified for service to someone who regularly engages in the business of servicing automobiles for the purpose of performing the relevant maintenance; or

(3) A statement by the vehicle owner that he or she performed the maintenance at the approximate time or mileage interval specified including a showing,

(i) That the owner purchased and used proper parts, and

(ii) Upon request by the vehicle manufacturer, that the owner is able to perform the maintenance properly.

(d) Except as provided in paragraph (c)(5) of this section, the time/mileage interval for scheduled maintenance services shall be the service interval specified for that part in the written instructions for proper maintenance and use.

(e) For certified parts having a maintenance or replacement interval different from that specified in the written instructions for proper maintenance and use, the time/mileage interval shall be the service interval for which the part was certified.

(f) The owner may perform maintenance or have maintenance performed more frequently then required in the maintenance instructions.

(g) Except as provided in paragraph (h) of this section, a manufacturer may deny an emission performance warranty claim on the basis of noncompliance with the written instructions for proper maintenance and use only if:

(1) An owner is not able to comply with a request by a manufacturer for evidence pursuant to paragraph (c) of this section; or

(2) Notwithstanding the evidence presented pursuant to paragraph (c) of this section, the manufacturer is able to prove that the vehicle failed an emission short test because

(i) The vehicle was abused, or

(ii) An instruction for the proper maintenance and use was performed in a manner resulting in a component's being improperly installed or a component or related parameter's being adjusted substantially outside of the manufacturer's specifications, or

(iii) Unscheduled maintenance was performed on a vehicle which resulted in the removing or rendering inoperative of any component affecting the vehicle's emissions.

(h) In no case may a manufacturer deny an emission performance warranty claim on the basis of:

(1) Warranty work or predelivery service performed by any facility authorized by the vehicle manufacturer to perform such work or service; or

(2) Work performed in an emergency situation to rectify an unsafe condition, including an unsafe driveability condition, attributable to the manufacturer, provided the vehicle owner has taken steps to put the vehicle back in a conforming condition in a timely manner; or

(3) The use of any uncertified part or non-compliance with any written instruction for proper maintenance and use which is not relevant to the reason that the vehicle failed to comply with applicable emission standards; or

(4) Any cause attributable to the vehicle manufacturer; or

(5) The use of any fuel which is commonly available in the geographical area in which the vehicle or engine is located, unless the written instructions for proper maintenance and use specify that the use of that fuel would adversely affect the emission control devices and systems of the vehicle, and there is commonly available information for the owner to identify the proper fuel to be used.

§ 85.2105 Replacement parts.

(a) No emission performance warranty claim shall be denied on the basis of the use of a properly installed certified part in the maintenance or repair of a vehicle.

(b) Except as provided in § 85.2104(h), a vehicle manufacturer may deny an emission performance warranty claim on the basis of an uncertified replacement part used in the maintenance or repair of a vehicle if the vehicle manufacturer presents evidence that the uncertified replacement part is:

(1) Either defective in materials or workmanship, or not equivalent from an emission standpoint to the original equipment part; and

(2) The owner is unable to rebut the evidence.

(c) A part not required to be replaced at a definite interval in accordance with the written instructions for maintenance and use shall be warranted for the full term of any warranty mandated by the Act. Instructions to replace a component only if checked and found to be operating below specification shall have no bearing on warrranty coverage.

unless an owner did not follow such an instruction prior to the short test failure and noncompliance with that instruction caused the failure of another vehicle component relevant to the nonconformity.

§ 85.2106 Warranty claim procedures.

(a) A claim under the emission performance warranty may be raised immediately upon the failure of an EPA-approved emission test if, as a result of that failure, an owner is required to take action of any kind in order to avoid imposition of a penalty or sanction. An owner need not suffer the loss of the right to use a vehicle, be fined, incur repair expenses, or actually bear any penalty or sanction to satisfy the requirement of § 85.2103(a)(3). That requirement shall be met if a test failure sets a procedure in motion under which the owner will bear a penalty or sanction if a vehicle is not brought into conformity or repaired to some specified extent within some specified period of time.

(b) A warranty claim may be submitted by bringing a vehicle to

(1) Any repair facility authorized by the vehicle manufacturer to service that model vehicle, or

(2) Any repair facility authorized by the vehicle manufacturer to perform emission performance warranty repairs for that model vehicle.

(c) To the extent required by any Federal or State law, whether statutory or common law, a vehicle manufacturer shall be required to provide a means for non-franchised repair facilities to perform emission performance warranty repairs.

(d) The manufacturer of each vehicle to which the warranty is applicable shall establish procedures as to the manner in which a claim under the emission performance warranty is to be processed. The procedures shall:

(1) provide for a final decision by the vehicle manufacturer within a reasonable time, not to exceed 30 days from the time at which the vehicle is initially presented for repair or within the time period during which an owner is required by local, state or federal law to have the vehicle repaired without incurring further penalties or sanctions (whichever is shorter), unless a delay

(i) Is requested by the vehicle owner, or

(ii) Is caused by an event not attributable to the vehicle manufacturer or the warranty repair facility; and

(2) Require that if the facility at which the vehicle is initially-presented for repair is unable for any reason to honor the particular claim, then, unless this requirement is waived in writing by the vehicle owner, the repair facility shall forward the claim to an individual or office authorized to make emission performance warranty determinations for the manufacturer.

(e) Within the time period specified in paragraph (d) of this section the manufacturer shall:

(1) Notify the owner that it will honor the claim; or

(2) Provide the owner, in writing, with an explanation of the basis upon which the claim is being denied.

(f) Failure to notify an owner within the required time period (as determined under paragraph (d) of this section) for reasons that are not attributable to the vehicle owner or events which are not beyond the control of the vehicle manufacturer or the repair facility, shall result in the vehicle manufacturer being responsible for repairing the vehicle free to charge to the vehicle owner.

(g) The vehicle manufacturer shall incur all costs associated with a determination that an emission performance warranty claim is valid.

§ 85.2107 Warranty remedy.

(a) The manufacturer's obligation under the emission performance warranty shall be to make all adjustments, repairs or replacements necessary to assure that the vehicle complies with applicable emission standards of the U.S. Environmental Protection Agency, that it will continue to comply for the remainder of its useful life (if proper maintenance and operation are continued), and that it will operate in a safe manner. The manufacturer shall bear all costs incurred as a result of the above obligation, *except that* after the first 24 months or 24,000 miles (whichever first occurs) the manufacturer shall be responsible only for:

(1) The adjustment, repair or replacement of those components which have been installed in or on a vehicle for the sole or primary purpose of reducing vehicle emissions, and which were not in general use prior to model year 1968; and

(2) All other components which must be adjusted, repaired or replaced to enable a component repaired or replaced under paragraph (a)(1) of this section to perform properly.

(b) Under the Emissions Performance Warranty, the manufacturer shall be liable for the total cost of the remedy for any vehicle validly presented for repair to any authorized service facility authorized by the vehicle manufacturer. State or local limitations as to the extent of the penalty or sanction imposed upon an owner of a failed vehicle shall have no bearing on this liability.

(c) The remedy provided under paragraph (a) of this section shall include the repair or replacement of certified parts.

(d) If a manufacturer is unable (for reasons not attributable to the vehicle owner or events beyond the control of the vehicle manufacturer or an authorized repair facility) to repair a vehicle within the time period specified under § 85.2106(d) after the initial presentation of the vehicle to an authorized repair facility, then the owner shall be entitled to have the warranty remedy performed, at the expense of the manufacturer, by any repair facility of the owner's choosing.

§ 85.2108 Dealer certification.

(a) Upon the sale of each new light-duty motor vehicle, the dealer shall furnish to the purchaser a certificate that the motor vehicle conforms to all applicable emission standards of the U.S. Environmental Protection Agency.

(b) The certificate shall state that it is being made upon the basis of:

(1) The dealer's knowledge that the vehicle is covered by an EPA Certificate of Conformity;

(2) A visual inspection of the vehicle, including the engine, to assure that all emission related components have been properly installed; and

(3) The dealer's performance of all emission related preparation required by the manufacturer prior to the sale of the vehicle.

(c) The certificate shall further state that if the vehicle fails an EPA-approved emission test prior to the expiration of three months or 4,000 miles (whichever occurs first) from the date or mileage at the time of delivery of the vehicle to the ultimate purchaser, and the vehicle has been maintained and used in accordance with the written instructions for proper maintenance and use, then the vehicle manufacturer shall remedy the nonconformity under the emission performance warranty.

(d) A vehicle manufacturer shall provide the § 85.2107 remedy, free of charge to the vehicle owner, for any vehicle which, although maintained in accordance with the written instructions for proper maintenance and use, fails an emission short test prior to the expiration of three months or 4,000 miles from the time of sale to the ultimate purchaser, without regard to whether a penalty or sanction is imposed because of the emission short test failure.

§ 85.2109 Inclusion of warranty provisions in owner's manuals and warranty booklets.

(a) A manufacturer shall furnish with each new motor vehicle, a full explanation of the Emission

Performance Warranty, including at a minimum the following information:

(1) A basic statement of the coverage of the emissions performance warranty as set out in § 85.2103. This shall be separated from any other warranty given by the manufacturer and shall be prefaced by the title "Emissions Performance Warranty" set in bold face type; and

(2) A list of all items which are covered by the emission performance warranty for the full useful life of the vehicle. This list shall contain all components which have been installed in or on a vehicle solely or primarily for the purpose of reducing vehicle emissions, except those components which were in general use prior to model year 1968. All items listed pursuant to this subsection shall be described in the same manner as they are likely to be described on a service facility work receipt for that vehicle; and

(3) A list or a reference to the location of the instructions for proper maintenance and use, together with the time and/or mileage interval at which such instructions are to be performed; and

(4) An explanation of the effect that the use of certified parts will have on the emission performance warranty. This explanation shall comport with the provisions of §§ 85.2105(b) and (c), including a statement in boldface type that maintenance, replacement, or repair of the emission control devices and systems may be performed by any automotive repair establishment or individual using any certified part; and

(5) Complete instructions as to when and how an owner may bring a claim under the emissions performance warranty, as governed by §§ 85.2104 and 85.2106. These instructions shall include:

(i) An explanation of the point in time at which a claim may be raised; and

(ii) Complete procedures as to the manner in which a claim may be raised; and

(iii) The provisions for manufacturer liability contained in § 85.2106(f) if the manufacturer fails to respond within the time period set in accordance with § 85.2106(d);

(6) An explanation that an owner may obtain further information concerning the emission performance warranty or that an owner may report violations of the terms of the Emission Performance Warranty by contacting the Director, Field Operation and Support Division (EN–397), Environmental Protection Agency, 401 "M" Street, SW., Washington, D.C. 20460.

(b) The warranty information shall be provided in the same document as other warranties provided with the vehicle.

(c) If a separate warranty booklet is provided with the vehicle, the owner's manual shall contain, at a minimum, the following information:

(1) A general list of all warranties covering the vehicle; and

(2) A statement that detailed warranty information can be found in the warranty booklet.

(d) If a separate warranty booklet is not provided with the vehicle, the information specified in paragraph (a) of this section shall be contained in the owner's manual.

§ 85.2110 Submission of owners' manuals and warranty statements to EPA.

(a) The manufacturer of each vehicle to which this subpart applies shall submit a copy to EPA of both the owner's manual and warranty booklet (if applicable) for each model vehicle, *except that*, if the same warranty information is to be provided for more than one model vehicle, the manufacturer may submit copies for a single model vehicle with a statement that such copies are complete and accurate representation of the warranty information provided with all other specified models.

(1) The owner's manuals and warranty booklets should be received by EPA 60 days prior to the introduction of the vehicle for sale.

(2) If the manuals and warranty booklets are not in their final printed format 60 days prior to the introduction of the vehicle for sale, a manufacturer may submit the most recent draft at that time, provided that final versions are submitted within 15 days of the final printing.

(b) All materials described in paragraph (a) of this section shall be sent to: Director, Field Operation and Support Division (EN–397), Office of Enforcement, Environmental Protection Agency, 401 "M" Street SW., Washington, D.C. 20460.

§ 85.2111 Warranty enforcement.

The following acts are prohibited and may subject a manufacturer to up to a $10,000 civil penalty for each offense:

(a) Selling or leasing a light duty vehicle without providing in writing the warranty information required by § 85.2109;

(b) Failing or refusing to comply with the terms and conditions of the Emission Performance Warranty with respect to any vehicle to which this subpart applies. Acts constituting such a failure or refusal shall include, but are not limited to, the following.

(1) Failure to honor a valid warranty claim.

(2) Performance of a warranty repair in a manner which cannot reasonably be expected to allow the vehicle to meet applicable emission standards for the remainder of its useful life.

(3) Failure of a manufacturer to reimburse a dealer or other designated agent for performance of a vehicle repair made pursuant to this subpart, and

(4) Failure of a manufacturer to supply a part necessary to perform a warranty repair within the time limit specified under § 85.2106(d), unless such failure is for a reason not attributable to the vehicle manufacturer or the warranty repair facility;

(c) To provide directly or indirectly in any communication to the ultimate purchaser or any subsequent purchaser that the emission performance warranty coverage is conditioned upon the use of any name brand part, component, or system or upon service (other than a component or service provided without charge under the terms of the purchase agreement), unless the communication is made pursuant to a written waiver by the Administrator.

§§ 85.2112 through 85.2150 [Reserved]

(Sec. 203, 207, 208 and 301(a) of the Clean Air Act, as amended, (42 U.S.C. 7522, 7541, 7542 and 7601(a)))

Appendix

Note.—This Appendix will not appear in the Code of Federal Regulations.

5 Year/50,000 Mile Performance Warranty Parts List

I. Air/Fuel Metering System
- Feedback Control System and Sensors.
- Electric Choke.
- Altitude Compensation System.
- Deceleration Controls.
- Early Fuel Evaporative Controls.

II. Ignition Spark Advance/Retard System
- Dual Diaphragm Vacuum Advance Unit.
- Electronic Spark Controls.
- Valves and Switches Sensing Vacuum, Temperature, Time, Transmission Gear, etc. used to control advance/retard.

III. Evaporative Emission Control System
- Vapor Storage Canister and Filter.
- Vapor Liquid Separator.

IV. Positive Crankcase Ventilation (PCV) System
- PCV Valve.

V. Exhaust Gas Recirculation (EGR) System
- EGR Valve.
- EGR Backpressure Transducer.
- EGR Spacer Plate.
- Sensors and Switches used to control EGR flow.

VI. Air Injection System
- Air Pump.
- Air Distribution System.
- Diverter, Bypass or Gulp Valve.
- Anti-Backfire or Deceleration Valve.
- Reed Valve.

- Sensors or Valves used to control Air Injection.

VII. Catalytic and Thermal Reactor System
- Catalytic Converter.
- Catalyst Material and Internal Structure.
- Thermal Reactor.
- Oxygen and Exhaust Gas Sensors.
- Fuel Filler Neck Restrictor.

VIII. Electronic Engine Controls
- Engine Parameter Sensors and Controls.
- Electronic Control Unit.

IX. Hoses, Clamps, Brackets, Pipes, Gaskets, Belts, Seals, Connectors, etc. Used in the Above Systems

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federal register

Thursday
May 22, 1980

Part X

Department of Energy

Economic Regulatory Administration

Gasohol Pricing and Allocation; Proposed Rulemaking

DEPARTMENT OF ENERGY

Economic Regulatory Administration

10 CFR Parts 210, 211 and Part 212

[Docket No. ERA-R-80-*11*]

Gasohol Pricing and Allocation

AGENCY: Economic Regulatory Administration, Department of Energy.

ACTION: Notice of Proposed Rulemaking.

SUMMARY: The Economic Regulatory Administration (ERA) of the Department of Energy (DOE) is proposing alternative amendments to the Mandatory Petroleum Allocation and Price Regulations concerning the treatment of gasohol and unleaded gasoline used as blend stock in the production of gasohol and unleaded gasoline used as blend stock in the production of gasohol. The first alternative proposal would amend the allocation regulations set forth in Part 211 to permit prospective gasohol blenders to obtain allocations of unleaded gasoline for use as gasohol blend stock and provide for the allocation of gasohol. An optional proposal to amend the allocation regulations would restrict access to allocations of unleaded gasoline for use as gasohol blend stock to alcohol producers only. This proposal would also amend the price regulations set forth in Part 212 to permit refiners, resellers, reseller-retailers and retailers to recover increased costs associated with producing gasohol, including the cost of the ethanol component of the blend, in the maximum lawful selling price permitted to be charged for gasohol.

The second alternative proposal would exempt from the provisions of the allocation and price regulations both unleaded gasoline sold by a supplier for use by the purchaser as gasohol blend stock and gasohol.

The amendments are intended to encourage increased production and marketing of gasohol.

DATES: Written comments on or before July 21, 1980.

Hearing dates: Des Moines, June 23, 1980; New Orleans, June 26, 1980; Washington, D.C., July 8, 1980.

Requests to speak by 4:30 p.m.: June 16, 1980, for the Des Moines hearing; June 18, 1980 for the New Orleans hearing; June 30, 1980, for the Washington, D.C. hearing.

ADDRESSES: All comments and requests to speak at the Washington, D.C. hearing should be submitted to the Economic Regulatory Administration, office of Public Hearings Management, Docket No. ERA-R-80-*11*, Department of Energy, Room 2313, 2000 M Street, NW., Washington, D.C. 20461.

Requests to speak at other hearings: Des Moines hearing—Department of Energy, Attn: Lou Brownlee, 175 W. Jackson Boulevard, Chicago, Illinios 60604. New Orleans hearing—Department of Energy, Attn: Mac L. Lacefield, 2626 W. Mockingbird Lane, P.O. Box 35228, Dallas Texas 75235.

HEARING LOCATIONS: Des Moines hearing: Federal Building, Room 113, 210 Walnut Street, Des Moines, Iowa 50359; New Orleans hearing: Hale Boggs Building, Room 125, 500 Camp Street, New Orleans, Louisana 70130; Washington, D.C. hearing: Room 2105, 2000 M Street, NW., Washington, D.C. 20461.

FOR FURTHER INFORMATION CONTACT:

William L. Webb (Office of Public Information), Economic Regulatory Administration, Room B-110, 2000 M Street, NW., Washington, D.C. 20461, (202) 653-4055.

Robert Gillette (Hearing Procedures), Economic Regulatory Administration, Room 2214-B, 2000 M Street, NW., Washington, D.C. 20461, (202) 653-3757.

James Berry (Regulations and Emergency Planning), Economic Regulatory Administration, Room 7202N, 2000 M Street, NW., Washington, D.C. 20461, (202) 653-3256.

Maurice Boehl (Petroleum Pricing Regulations), Economic Regulatory Administration, Room 7302-D, 2000 M Street, NW., Washington, D.C. 20461, (202) 653-3199.

William Funk (Office of General Counsel), Department of Energy, Room 6A-099, 1000 Independence Avenue, SW., Washington, D.C. 20585, (202) 252-6736.

Christopher M. Was or Mayo Lee (Office of General Counsel), Department of Energy, Room 6A-127, 1000 Independence Avenue, SW., Washington, D.C. 20585 (202) 252-6744 or 252-6754.

SUPPLEMENTARY INFORMATION:

I. Background
II. General Objectives of this Proceeding
III. First Alternative Proposal—Regulation of the Allocation and Pricing of Gasohol and Unleaded Gasoline Used As Gasohol Blend Stock
A. Amendments to the Allocation Regulations
1. Definition of "Gasohol"
2. Allocation of Unleaded Gasoline for Gasohol
3. Allocation of Gasohol
B. Alternative Allocation Amendments
C. Specific Comments Requested
D. Amendments to the Price Regulations
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I. Background

The term "Gasohol" is a trademark held by the State of Nebraska for a petroleum product created when unleaded gasoline and ethyl alcohol are blended in a nine to one ratio. However, the term has come into more general use to describe any motor fuel that consists of a blend of gasoline and ethyl alcohol.

The use of alcohol and alcohol-petroleum mixtures as motor fuel is not new (see DOE Alcohol Fuels Policy Review Report, June, 1979), but until the mid-1970s plentiful supplies of relatively inexpensive gasoline made widespread use of gasohol uneconomical. With sharp increases in gasoline prices, uncertainty about the availability of adequate supplies of crude oil, concern about our dependence upon foreign oil imports, and reduced gasoline allocations, there has been heightened interest in the use of gasohol as motor fuel. The economics of gasohol are becoming increasingly competitive as the price of gasoline continues to rise, and the opportunity to increase the available supply of gasoline makes gasohol attractive. The number of retail outlets which offer gasohol for sale has grown rapidly from only three in January 1978 to over 2500 documented retail outlets in 38 states in April, 1980.[1]

The President has announced a program aimed at accelerating American production and use of gasohol. A target has been set to quadruple year end 1979 gasohol production capacity by the end of 1980. Incentives exist and have been proposed which are designed to encourage the future production of ethanol for blending into gasohol. To the extent that gasohol replaces unleaded gasoline, our supplies of unleaded gasoline are stretched by an amount roughly equivalent to the

[1] From data compiled by the National Gasohol Commission. The Commission estimates that once data is received from the remaining states, the number of retail outlets offering gasohol for sale could increase to as many as 4,000.

volumes of ethanol blended to produce gasohol.

DOE has taken several major actions to integrate gasohol into the existing regulatory scheme governing gasoline and to remove regulatory hindrances to the production and marketing of gasohol. On January 17, 1978, the DOE Office of Hearings and Appeals (OHA) granted a temporary stay of the price regulations to expedite the opening in Illinois of the first retail gasohol outlets (other than test markets) in the United States. *Congressman Paul Findley*, Washington, D.C., 1 DOE ¶ 82,026 (1978). On February 3, 1978, a further stay was granted by OHA to gasohol marketers in Illinois, Iowa and Wisconsin, pending issuance by the ERA of an amendment to the DOE price regulations, to permit gasohol resellers and retailers to pass through the increased cost of the non-petroleum based alcohol component blended with gasoline as a product cost for purposes of pricing gasohol. *Illinois Petroleum Marketers Association*, 1 DOE ¶ 82,028 (1978). Such an amendment was adopted by ERA on May 30, 1978. (43 FR 24265, June 5, 1978.)

On May 12, 1978, the ERA amended the Entitlements Program to provide that ERA could grant, on a case by case basis, entitlements for those volumes of non-petroleum based ethanol used as blend stock for gasoline. (43 FR 21429, May 18, 1978.) On October 31, 1979, ERA amended the entitlements program to extend entitlements benefits automatically to producers of ethyl alcohol derived from biomass, rather than upon application. (44 FR 63515, November 5, 1979.) A producer of ethyl alcohol earns 0.6189 runs credits (calculated on a BTU equivalent basis) for each barrel of ethyl alcohol produced and blended with gasoline as fuel.

Prior to mid-1979, gasohol was blended and sold by resellers and retailers, but not by refiners. In May and June 1979, however, certain refiners advised DOE of their intention to begin blending and marketing gasohol and expressed concern that the DOE refiner price regulations provided a disincentive to gasohol production. Specifically, the refiners were concerned that under current regulations they would not have the flexibility to pass through all alcohol costs in the price of gasohol or the various grades of gasoline. On June 26, 1979, the DOE Office of Hearings and Appeals issued a stay of specific pricing regulations to allow Amoco Oil Company to pass through the increased costs of the alcohol additive in prices charged for gasohol. *Amoco Oil Company*, 3 DOE ¶82,073 (1979). Similar relief was granted subsequently to other refiners.

On November 14, 1979, ERA amended the refiner price rules to provide that the increased cost of alcohol and other additives in gasoline could be passed through in the prices charged for one or more existing grades of gasoline. (44 FR 69594, December 3, 1979).

A growing number of firms have begun to market gasohol; however, many may have been deterred by the difficulty of obtaining the unleaded gasoline required for this purpose and by uncertainty as to the application of DOE's regulations to gasohol marketing. Accordingly, DOE is hereby proposing to amend its regulations to provide access to unleaded gasoline for use as gasohol blend stock, and otherwise to remove any regulatory impediments which may discourage the production and marketing of gasohol.

We are considering two different proposals for the treatment of gasohol under the regulations. First, we are proposing amendments to the allocation regulations to provide a means for potential blenders of gasohol to obtain allocations of unleaded gasoline for blend stock, and to adopt specific provisions regarding the allocation of gasohol. This proposal also contains amendments to our price regulations to permit greater flexibility in the pricing of gasohol.

Our second, and alternative, proposal is to exempt gasohol and unleaded gasoline used as gasohol blend stock from our allocation and price regulations. We are giving serious consideration to both proposals and we will consider the public response in determining which proposal to adopt as a final rule.

II. General Objectives of this Proceeding

We solicit comments of two kinds. First, comments are requested on the specific proposals, alternatives and matters of inquiry identified in sections III and IV of this notice. We may in this proceeding adopt one or more of these alternatives, or variations of these alternatives, as appropriate.

Second, comments and information are requested concerning any other possible actions which have not been included in our proposal which might be appropriate in view of existing regulations or to promote the increased use of gasohol generally.

You are encouraged to provide your own analyses of any problems, and to support your views with appropriate data.

III. First Alternative Proposal—Regulation of the Allocation and Pricing of Gasohol and Unleaded Gasoline Used As Gasohol Blend Stock

A. *Amendments to the Allocation Regulations*

We propose to amend Subpart F of the Mandatory Petroleum Allocation Regulations to add a new § 211.111 containing regulations governing the allocation of unleaded gasoline for use as gasohol blend stock and the allocation of blended gasohol.

1. *Definition of Gasohol*

There are a number of alcohol fuel blends that are technically suitable as motor fuels. However, section 211(f) of the Clean Air Act (42 U.S.C. 7401 *et seq.*) generally prohibits the use of nonconforming motor fuels such as gasoline/alcohol blends. Section 211(f)(4) of that Act (42 U.S.C. 7545(f)(4)) provides for a waiver of the general prohibition of Section 211(f) to permit the use of specific motor fuels. We have been advised by the Environmental Protection Agency that waivers for alcohol blend fuels are currently in effect for (1) a blend of 90 percent unleaded gasoline and 10 percent anhydrous ethanol, (2) a blend of 0–7 percent tertiary butyl alcohol in unleaded gasoline (Arconol), and (3) a blend consisting of 2.75 percent methanol and 2.75 percent tertiary butyl alcohol in unleaded gasoline.

Alternative definitions of "gasohol" are proposed at § 211.111(b) of the proposed rule for purposes of these amendments to the Mandatory Petroleum Allocation and Price Regulations. The first alternative definitions of gasohol would be limited to a blend of 90 percent unleaded gasoline and 10 percent anhydrous ethanol derived from biomass. The second alternative definition would define gasohol as the 90 percent/10 percent blend of unleaded gasoline and anhydrous ethanol, or any other blend of gasoline and ethanol subsequently approved under the provisions of Section 211(f)(4) of the Clean Air Act, provided the ethanol is derived from non-petroleum or non-natural gas sources. Therefore, should additional waivers be granted under the Clean Air Act for other gasoline/ethanol blends, those motor fuels would be included automatically within the scope of this proposed rule. By requiring the ethanol blended by an applicant for an allocation of unleaded gasoline to be derived from non-petroleum or non-natural gas sources, DOE seeks to reduce our dependence on non-renewable fossil fuels and to encourage renewable energy sources.

The proposed alternative definitions of gasohol are limited to gasoline/alcohol blends consisting of ethanol derived from non-petroleum or non-natural gas sources as the alcohol component. Gasoline/alcohol blends consisting of methanol as the alcohol component would not be included for purposes of these amendments.

We solicit comments on the proposed alternative definitions, and the feature incorporated in them limiting the definition of gasohol to blends comprised of non-petroleum or non-natural gas based ethanol. The alcohol components in the blend of 0–7 percent tertiary butyl alcohol in unleaded gasoline (Arconol) and the blend consisting of 2.75 percent methanol and 2.75 percent tertiary butyl alcohol in unleaded gasoline for which EPA has granted waivers are petroleum based. Therefore, both of these alcohol blends would not be included in the proposed alternative definitions of "gasohol" for purposes of these amendments.

2. *Allocation of Unleaded Gasoline For Gasohol*

The principal proposal would permit any firm other than a refiner with access to an assured supply of ethanol of at least 800 gallons per month for at least one year to apply for an assignment of a supplier and a volume of unleaded gasoline for the production of gasohol or the removal of water to upgrade hydrous ethanol into anhydrous ethanol used as gasohol blend stock. Thus, under the proposed regulation existing motor gasoline suppliers and retail outlets, as well as ethanol producers and other firms which currently are not engaged in motor gasoline sales or ethanol production, would be permitted to apply for allocations of unleaded gasoline to be used as blend stock for gasohol. DOE also proposes to include within the definition of firms eligible to receive allocations of unleaded gasoline those firms engaged in the removal of water from hydrous ethanol to upgrade it into anhydrous ethanol used as gasohol blend stock by that firm or another firm which actually blends the gasohol. We solicit comments, however, which address whether firms that need unleaded gasoline for use in processes which upgrade hydrous ethanol into anhydrous ethanol used as gasohol blend stock, but do not necessarily engage in the actual blending of gasohol, should be eligible to receive allocations of unleaded gasoline and, if so, whether they should be required to have access to more or less than 800 gallons of ethanol per month.

Of course, firms that have an allocation of unleaded gasoline remain free to devote those allocated supplies to the production of gasohol.

We are proposing to amend the allocation regulations to permit ERA to make assignments of suppliers and volumes of unleaded gasoline for use as gasohol blend stock using existing criteria and procedures contained in Subpart C of 10 CFR Part 205, which governs the assignment of suppliers. However, additional criteria would govern applications for supplies of unleaded gasoline for gasohol blending. To be eligible for such an assignment, an applicant would be required to certify that it had access to a minimum of 800 gallons of non-petroleum or non-natural gas based ethanol per month for at least one year. Applicants would be required to describe the source and volumes of ethanol to be purchased by the applicant for blending into gasohol, the customers proposed to be supplied by the applicant, the market area for gasohol to be served by the applicant, and the method of distribution of the gasohol produced for a period of at least one year. Unless waived by DOE, applicants would be required to market gasohol as described in their application for the duration of an assignment order, which would continue in effect for the period of time covered by the applicant's description of his plan to market gasohol or two years, whichever is less. Applicants would also be required to describe their investment in gasohol marketing facilities already made or proposed to be made in order to provide them with the capability to blend and market gasohol as described in their application.

We are concerned that assignments of volumes of unleaded gasoline for gasohol blending might disrupt existing distribution patterns or cause regional shortages of unleaded gasoline. Any dislocations in supply which might be caused by assignments of unleaded gasoline for gasohol blending would be felt most acutely during any future periods of shortage of unleaded gasoline supplies. By requiring firms to describe to ERA how they plan to market the gasohol produced, we hope to reduce the likelihood that any disruptions will result as a consequence of increased gasohol marketing.

An additional eligibility requirement would be imposed upon ethanol producers (including firms engaged in upgrading ethanol into anhydrous ethanol suitable for use as gasohol blend stock). Ethanol producers which use petroleum based fuel or natural gas as a boiler fuel in the ethanol production process, and which have an alternate boiler fuel capability (other than petroleum or natural gas) in place, would not be permitted to receive an assignment of unleaded gasoline to blend gasohol unless they demonstrated good cause why they were not currently using their alternate boiler fuel capability. Ethanol producers without a current alternate boiler fuel capability would be permitted to receive an assignment of unleaded gasoline to blend gasohol only upon certification that they plan to convert to a non-petroleum or non-natural gas based boiler fuel within four years. We solicit comments on the desirability of adopting this provision, which is intended to reduce our reliance upon insecure supplies of petroleum and natural gas fuels.

ERA would be permitted to deny allocations of unleaded gasoline for gasohol blending based on the criteria established in Subpart C of Part 205 for the evaluation of applications for assignments and the additional criteria established in proposed new § 211.111(c)(2). In addition to the considerations specified in Subpart C of Part 205, ERA would have discretion to deny an application under the following circumstances: (1) Where the allocation sought is likely to have an adverse impact on distribution of gasoline or gasohol supplies in a given area; (2) where the applicant is unable to demonstrate that it will be able to perform as described in its application; or (3) where the applicant has sufficient existing supplies of unleaded gasoline for blending which will satisfy the projected demand for gasohol as described in its application.

The volume of unleaded gasoline permitted to be assigned would be up to nine times the volume of ethanol available to an applicant. If the alternative definition of gasohol is adopted, and in the event that other proportional blends of gasohol consisting of greater than 10 percent of ethanol were granted a waiver of the provisions of section 211(f) of the Clean Air Act, a volume of unleaded gasoline would be allocated not to exceed the amount which the applicant intended to blend with the volumes of ethanol available to it. If other proportional blends consisting of less than 10 percent ethanol were granted a waiver, an applicant would not be prohibited from blending gasohol with less than 10 percent ethanol content; however it would not be allocated volumes of unleaded gasoline reflecting a blend comprised of less than ten percent ethanol content.

Another provision would enable ERA to make the effectiveness of the

assignment of an allocation (and thus the assigned supplier's obligation to supply) conditional upon submission of satisfactory evidence by the applicant of a sufficient commitment of resources for gasohol marketing facilities.

Any volumes of unleaded gasoline assigned to a purchaser for gasohol blending would be required to be used for that purpose only and could not be resold as motor gasoline.

In addition to the above features, the proposal contains another provision which we believe will provide flexibility to present disruptions of supply and distribution patterns of unleaded gasoline. Under the proposal, any recipient of an allocation of unleaded gasoline for use in blending gasohol could be required to offer to sell to each assigned supplier a volume of gasohol not to exceed the volume of unleaded gasoline received that supplier. For example, ERA would have the discretion to specify that a firm which supplied 1,000 gallons per month of unleaded gasoline to a gasohol blender would have the right to purchase up to 1,000 gallons per month of gasohol from that blender. The remaining volume of gasohol would remain available to the blender to market to prospective customers described in its application. In some instances, permitting suppliers to make these purchases of gasohol might tend to avert dislocations in supply which otherwise could result from diverting large quantities of unleaded gasoline to gasohol blenders.

It is ERA's intention to use this discretionary authority sparingly. ERA would require an applicant to sell a portion of the gasohol which it blends back to its assigned supplier only to prevent significant dislocations resulting from a reduction of the supplier's allocable supply of unleaded gasoline, while also attempting to minimize any adverse impact upon the applicant's capability to market gasohol as described in its application for assignment.

3. *Allocation of Gasohol*

We believe it is appropriate that entrants into the gasohol market have relative freedom to determine in what manner and to whom they will market gasohol. Under the proposal, refiners and those wholesale purchaser-resellers which either blend gasohol using their existing supply of unleaded gasoline or which purchase gasohol for resale would be permitted to offer gasohol for sale to any of their base period purchasers, subject to the following limitations: (1) Refiners and such wholesale purchaser-resellers would be permitted to offer gasohol for sale only among base period purchasers of gasoline; (2) the base period purchaser would be entitled to elect whether or not it wanted to receive gasohol in place of part or all of its entitlement to receive unleaded gasoline (on a ten for nine basis); and (3) no purchaser could be *required* to accept gasohol in place of any portion of its entitlement to receive unleaded gasoline. The practical effect of this latter provision would be to make it necessary for a refiner or a wholesale purchaser-reseller to ascertain before producing gasohol which of its prospective gasohol customers would, in fact, be willing to accept gasohol in place of unleaded gasoline, and in what volumes. Without such advance planning, a refiner or wholesale purchaser-reseller might risk blending too much of its unleaded gasoline supplies into gasohol and otherwise be unable to meet its obligations to supply unleaded gasoline.

We have not proposed to allocate gasohol as a particular grade of gasoline. Gasohol would be supplied in accordance with the requirements applicable to the allocation of the unleaded gasoline content, but in volumes increased by approximately one ninth (i.e., an amount equal to the alcohol content). As an example, a purchaser entitled to purchase 9000 gallons of unleaded gasoline from its supplier would be entitled to purchase 10,000 gallons of gasohol in fulfillment of the same supply obligation. The regulations which govern the allocation of unleaded gasoline would continue to govern the allocation of the unleaded gasoline content of gasohol as if the unleaded gasoline had not been blended with alcohol. We believe that this provision will make it attractive to purchasers to accept gasohol in place of unleaded gasoline and that it will encourage the marketing of gasohol.

Successful applicants for an allocation of unleaded gasoline for use as gasohol blend stock (including wholesale purchaser-resellers of motor gasoline which receive an allocation of unleaded gasoline in addition to their established base period volumes) would be required to distribute gasohol as described in their applications submitted to DOE.

We believe these amendments, as proposed, will promote the distribution of gasohol and give access to new market entrants without disrupting existing gasoline allocation distribution chains.

B. *Alternative Allocation Amendments*

We are proposing an alternative regulation which would restrict access to allocations of unleaded gasoline for blending stock. Under the alternative, only ethanol producers would be eligible to apply for and receive assignments of unleaded gasoline for use in blending gasohol. The rationale for this approach is that an ethanol producer has no means of entering the gasohol industry without receiving an assignment of a supplier and a base period volume from ERA, whereas refiners, jobbers, and others already engaged in wholesale purchasing and reselling of motor gasoline may blend their existing supplies of unleaded gasoline into gasohol. Given the ten percent increase in volume of product which results from blending, sufficient incentive may exist for refiners, wholesale purchaser-resellers and retailers to enter into the marketing of gasohol without access to additional supplies of unleaded gasoline.

Thus, under our primary proposal to amend the allocation regulations three categories of firms would have access to additional supplies of unleaded gasoline: (1) Ethanol producers, (2) wholesale purchaser-resellers and retailers, and (3) any other firms. The alternative allocation proposal, on the other hand, would limit access to ethanol producers, including firms engaged in the removal of water to upgrade hydrous ethanol into anhydrous ethanol used as gasohol blend stock.

Consistent with the primary allocation proposal, producers of ethanol which use petroleum based fuel or natural gas as a boiler fuel in the ethanol production process, and which have an alternate boiler fuel capability (other than petroleum or natural gas) in place, would not be permitted to receive an assignment of unleaded gasoline to blend gasohol unless they demonstrated good cause why they were not currently using their alternate boiler fuel capability. Ethanol producers without a current alternate boiler fuel capability would be permitted to receive an assignment of unleaded gasoline to blend gasohol only upon certification that they plan to convert to a non-petroleum or non-natural gas based boiler fuel within four years. As with the primary proposal to amend the allocation regulations, we solicit comments on the desirability of adopting this provision.

The alternative allocation proposal would employ the same gasohol allocation scheme as the primary proposal.

The principal difference between the primary and alternative allocation proposals relates to the types of firms that will be eligible to apply for an allocation of unleaded gasoline to blend gasohol. We seek comments concerning which categories of potential gasohol blenders should be eligible to receive

allocations of unleaded gasoline for use as gasohol blend stock. We also seek comments as to whether the final rule should combine features of both the primary and alternative allocation proposals. For example, an option would be to modify the alternative allocation proposal to allow independent gasohol jobbers that do not currently have access to a supply of gasoline to be eligible to apply for an allocation of unleaded gasoline to blend gasohol, in addition to ethanol producers.

C. *Specific Comments Requested*

We would like to receive comments on the following matters which we are considering in connection with the allocation of unleaded gasoline for use as a gasohol blend stock and the allocation of gasohol. Although we may not have proposed specific regulatory language concerning each of the matters with respect to which we solicit comments in this section, these alternatives and the comments received will be considered and they may be reflected in the final rule.

1. Would allocating unleaded gasoline to gasohol blenders be likely to have an adverse impact on supplies and distribution of unleaded gasoline, or other grades of gasoline, particularly given the high concentration of supplies of ethanol in the midwestern United States? Should there be restrictions or limits on the volume or percentage of its unleaded gasoline supply which any one supplier must supply to gasohol blenders?

2. Should we include some type of provision in the final rule to prohibit suppliers of unleaded gasoline to wholesale and retail outlets from taking retaliatory action related to supply or price against wholesale and retail purchasers which convert their facilities to gasohol?

3. What impediments to the successful marketing of gasohol might arise from existing state branding laws or from normal contractual relationships between suppliers and purchasers of unleaded motor gasoline? Specifically, we are concerned that branding laws or contractual arrangements between suppliers and purchasers throughout the gasoline distribution chain might effectively prevent jobbers or retail gasoline dealers from becoming gasohol blenders or marketers. We seek comments on whether, and to what extent, these factors might constitute impediments to the marketing of gasohol and, further, what appropriate regulatory solutions might be available to DOE under its legislative authority or under other legislation.

4. Should ERA develop regulations to allocate gasohol as a separate product and, if so, what allocation mechanism should be adopted?

5. Is it appropriate to permit refiners to offer gasohol for sale only through refiner-owned retail outlets or should refiners be required to market gasohol equally through independent retail outlets?

6. Is it appropriate to permit assigned suppliers to purchase volumes of gasohol back from gasohol blenders up to the amount of the unleaded gasoline supplied in those circumstances where ERA exercises its discretionary authority to include such a provision? If not, what other volume limitation would be appropriate? Is any amendment to the reseller price regulations necessary to specify the price for gasohol in such transactions between gasohol blenders and their assigned suppliers of unleaded gasoline?

7. Would it be appropriate to provide additional incentives to resellers and retailers to convert to the sale of gasohol? For example, should a reseller or retailer which ceases to offer unleaded gasoline for sale and converts all of its unleaded gasoline facilities to the blending and sale of gasohol be given an increased allocation (perhaps by ten percent) of unleaded gasoline for blending? Is such an incentive appropriate, in view of the increased volume of motor fuel which results, or is such an incentive inappropriate, considering possible shortages of unleaded gasoline and the adverse impact it might have on other resellers of unleaded gasoline which do not have access to alcohol supplies?

8. Should prospective gasohol blenders be required to have access to more than 800 gallons per month of ethanol for a period of one year to be eligible to apply for an allocation of unleaded gasoline? Should an applicant be required to describe investments in gasohol marketing facilities? If so, comments are solicited regarding what minimum volume of ethanol should govern the eligibility of applicants for an assignment of unleaded gasoline, what time period applicants should demonstrate ethanol availability and the extent to which they should be required to demonstrate investments to market gasohol?

D. *Amendments to the Price Regulations*

1. *Current Regulations*

a. *Refiners*

Under the current refiner price rules, a refiner may pass through increased costs attributable to additives such as ethanol. The increased cost of additives reflects the per unit increase in the cost of additives since May, 1973, adjusted to reflect current volumes. Section 212.83(c)(2)(iii)(E), the "N" factor. Pursuant to final rules adopted November 14, 1979 (44 FR 69594, December 3, 1979), effective December 1, 1979, the increased costs of additives attributable to the production of gasoline may be passed through in prices charged for the various types and grades of gasoline. Section 212.83(c)(2)(iii)(D). Accordingly, the increased costs of alcohol (which is an additive) used in the production of gasohol may be passed through in prices charged for gasoline.

The current regulations, however, do not permit refiners to treat gasohol as a separate and distinct type or grade of gasoline. That is, gasohol has not been "consistently and historically differentiated" as a type or grade of gasoline as required in § 212.83(c)(1)(i)(B). Consequently, even though § 212.83(c)(1)(i)(B) permits refiners to apportion amounts of increased costs to a particular type or grade of gasoline in whatever amounts they deem appropriate, because gasohol is not defined as a type or grade of gasoline, the increased costs of ethanol may not be allocated and passed through only in prices charged for gasohol. In other words, a refiner cannot recover the entire cost of the ethanol component of gasohol in sales of gasohol alone, but must instead apportion the cost of the ethanol to at least one of its consistent and historical grades or types of gasoline.

Furthermore, the current refiner pricing rules were adopted prior to the introduction of gasohol as a major covered product. Thus, because the price charged for gasohol is based on the base price of one of the refiner's consistent and historical grades of gasoline, the incremental costs incurred in producing, blending and marketing gasohol may not be recovered solely in the price charged for gasohol. As a result, most refiners are required to sell gasohol at the selling price charged for unleaded gasoline even though gasohol is a higher quality product and more expensive to manufacture. Accordingly, changes in the price rules are necessary to reflect DOE's intention to encourage the production of gasohol.

b. *Resellers and Reseller-Retailers*

Final rules amending the price regulations applicable to sales of gasoline by resellers and reseller-retailers have been adopted by ERA, effective May 1, 1980. 45 FR 29546, May 2, 1980. Under the amendments, resellers and reseller-retailers are required to compute maximum lawful selling prices for gasoline using the acquisition cost of gasoline plus a fixed cents per gallon markup, or they may elect to continue

computing prices under the reseller and reseller-retailer price rules in effect prior to May 1, 1980, if they notify ERA of that election before July 1, 1980.

(i) *Price Regulations In Effect Prior to May 1, 1980 Which May Be Elected By Resellers and Reseller-Retailers*

Under the old regulations applicable to sales by sellers other than retailers, if an election is made by the particular reseller or reseller-retailer to continue pricing under those rules, the maximum lawful selling price for gasohol is calculated on the basis of a May 15, 1973 weighted average selling price, plus increased product costs, plus allowable non-product cost increases. Pursuant to § 212.93(a)(1), the May 15, 1973 weighted average selling price for gasohol is imputed to be the lawful price charged by the seller for the predominant covered product in the blend, which is the unleaded gasoline component of gasohol. If unleaded gasoline was not sold by a seller on or before May 15, 1973, the base date weighted average selling price is imputed to be the lawful weighted average selling price of leaded gasoline with the same or nearest octane rating, pursuant to § 212.112(b)(2).

The regulations permit the cost of the ethanol component of gasohol to be passed through as an increased product cost. Pursuant to the definition of "increased product costs" set forth in § 212.92, as it was revised in June 1978, increased product costs for gasohol are calculated by taking the difference *between* the weighted average unit cost of the gasohol blend in inventory *and* the weighted average unit cost of the predominant covered product in the blend (*i.e.*, unleaded gasoline) in inventory on May 15, 1973. *See* subsection (b) of the definition of "increased product costs" in § 212.92. If unleaded gasoline was not sold by the seller on or before May 15, 1973, the weighted average unit cost of unleaded gasoline is imputed to be the weighted average unit cost of leaded gasoline of the same nearest octane number in inventory on May 15, 1973. *See* § 212.112(b)(3).

Those regulations also permit the maximum lawful selling price for gasohol charged by resellers and reseller-retailers to be increased to reflect non-product cost increases. The amount of non-product cost increases permitted pursuant to § 212.93(b) depends upon the size of the seller and the type of sale, *i.e.*, whether the transaction is a "resale" (a sale other than retail sale) or a retail sale by the particular seller. The provisions of the second clause of § 212.93(b)(1)(i), § 212.93(b)(1)(iii), and § 212.93(b)(1)(iv) specify the amount of permissible non-product cost increases with respect to "resales." The provisions of the first clause of § 212.93(b)(1)(i) and § 212.93(b)(1)(ii) specify the permissible non-product cost increases applicable to retail sales by sellers other than retailers.

Ethanol producers which blend gasohol and have no history of gasoline marketing on the base date are required to establish prices for resales of the gasohol pursuant to the rule applicable to resellers of "new items", set forth in § 212.111(b)(3).

(ii) *New Price Regulations Effective May 1, 1980 Applicable to Resellers and Reseller-Retailers*

The new price rules applicable to sales of gasoline by resellers and reseller-retailers effective May 1, 1980 establish maximum fixed cents per gallon markups depending on the type of sale. Accordingly, the maximum lawful selling price with respect to resales of gasohol by resellers or reseller-retailers which blend gasohol is the acquisition cost of the gasoline blended into gasohol, plus 7.7 cents per gallon, plus tax costs. The maximum lawful selling price applicable to retail sales of gasohol by reseller-retailers which blend gasohol is the most recent dealer tank wagon price charged to the nearest independent retailer, plus 16.1 cents per gallon, plus tax costs. If a reseller-retailer which blends gasohol did not make any dealer tank wagon sales to an independent retailer in the most recent 30-day period, the maximum lawful selling price applicable to retail sales of gasohol is the reseller-retailer's acquisition cost, plus 23.8 cents per gallon, plus tax costs.

The present definition of "acquisition cost" set forth in § 212.92, however, does not permit the cost of the ethanol acquired by resellers and reseller-retailers which blend gasohol to be included in their cost basis. Rather, the cost of the ethanol component of the gasohol blend will be borne by resellers and reseller-retailers as an offset against the allowable fixed cents per gallon markup. As a result, in some instances resellers and reseller-retailers which blend gasohol may not recoup all of the costs of the ethanol component in the selling price of gasohol.

C. *Retailers*

With the adoption of the new retailer price rules in July, 1979 (44 FR 45352, August 1, 1979), the current maximum lawful selling price for retailers which blend gasohol is the acquisition cost of the gasoline blended into the gasohol plus a fixed 16.1 cents per gallon markup, plus tax costs. *See* § 212.93(a)(2). However, the present definition of "acquisition cost" set forth in § 212.92 does not permit the cost of the ethanol acquired by a retailer which blends gasohol to be included in its cost basis. Rather, the cost of the ethanol component of the gasohol blend must be borne by the retailer as an offset against the allowable fixed cents per gallon markup. Accordingly, in some instances retailers which blend gasohol may not recoup all of the costs of the ethanol component in the selling price of gasohol.

2. *Proposed Amendments*

a. *Refiners*

DOE proposes to amend its refiner price rules to permit refiners the flexibility to recoup all the increased product costs associated with producing gasohol, including the cost of ethanol, in the selling price of gasohol. Specifically, DOE proposes to designate gasohol as a separte and distinct category of gasoline for purposes of the refiner pricing formulae. Accordingly, a refiner, at its discretion, would be permitted to allocate a part or all of the increased costs associated with gasohol, which must be apportioned among the particular categories of gasoline under the current rules, to gasohol.

b. *Resellers and Reseller-Retailers*

With respect to resellers and reseller-retailers which elect to continue pricing under the reseller price rules in effect prior to May 1, 1980, DOE believes that the regulations are adequate insofar as they permit the cost of the ethanol component of the gasohol blend to be passed through as an increased product cost. However, those regulations limit the amount of non-product cost increases which may be passed through. The non-product cost limitations in effect may not be adequate to take into account increased costs associated with the blending and marketing of gasohol by resellers and reseller-retailers. Accordingly, in order to provide an additional incentive for resellers and reseller-retailers to blend gasohol, DOE proposes to permit an additional nonproduct cost allowance of 1.6 cents per gallon applicable to retail sales of gasohol, and .8 cents per gallon applicable to all other sales of gasohol by sellers other than independent retailers which blend gasohol.

With respect to resellers and reseller-retailers which price gasoline under the new price rules effective May 1, 1980, DOE proposes to amend the definition of "acquisition cost" set forth in § 212.92 to permit resellers and reseller-retailers which blend gasohol to include the cost of the ethanol component in the blend. The maximum lawful price permitted to be charged for gasohol by resellers and reseller-retailers which blend gasohol

would be the acquisition cost of the unleaded gasoline and ethanol components blended into the gasohol, plus a fixed cents per gallon markup, plus applicable tax costs. The amount of the fixed cents per gallon markup would be adjusted every six months to take into account inflation, just as with the current gasoline retailer price rule and the new reseller and reseller-retailer price rules effective May 1, 1980.

The acquisition cost of the gasohol would depend on the cost of and the ratio of the unleaded gasoline and ethanol components blended into the gasohol. For example, if the gasohol is 90 percent unleaded gasoline and 10 percent ethanol, the acquisition cost for a gallon of the gasohol would be 90 percent of the acquisition cost of a gallon of the unleaded gasoline and 10 percent of the purchase price of a gallon of the ethanol. The acquistion cost for the unleaded gasoline component of the gasohol blend would be calculated by resellers and reseller-retailers according to the same rules applicable to resellers and reseller-retailers for other products. The purchase price for the ethanol component of the gasohol blend would be the actual purchase price paid for the most recent purchase of ethanol. DOE is considering an alterative approach which would require the purchase price of the ethanol component to be calculated on the basis of the weighted average cost of ethanol in inventory of the reseller or reseller-retailer that blends gasohol. We request comments on the advisability of adopting either of these alternative approaches for calculating the purchase price of ethanol blended into gasohol.

Resellers that blend gasohol which are ethanol producers may not be able to calculate the cost of the ethanol component of the gasohol blend in this manner, because they do not purchase ethanol. We are proposing several options by which ethanol producers which blend gasohol would impute a cost for the ethanol component. The first option would allow ethanol producers that sell a portion of their ethanol output to other purchasers to impute an ethanol cost based on the sales price for ethanol. The second option would be for DOE to establish a cost for the ethanol component based on its relationship to the cost of unleaded gasoline. Under this option, DOE would determine the ratio of the average cost of a gallon of ethanol to the average cost per gallon of unleaded gasoline to resellers based on data submitted in this rulemaking. The fixed ratio would be reflected in the language of the regulations, subject to periodic adjustment by DOE, and would be used to calculate the cost of the ethanol component based on the most recent purchase price of the unleaded gasoline component. The third option would require ethanol producers to impute a purchase price for ethanol based on prices charged for comparable sales of ethanol within the same market area.

We solicit comments concerning the desirability of adopting one, or a combination, of the options discussed above for ethanol producers to impute a cost of the ethanol component of a gasohol blend. In particular, we solicit comments in order to determine whether there are any ethanol producers which contemplate blending gasohol and that do not make any other purchases or sales, of ethanol which will provide a basis for imputing an ethanol cost. We request ethanol producers to provide us with price data for ethanol sales from January 1, 1980 to the present to enable us to evaluate this option.

We also solicit comments concerning any accounting difficulties which may be encountered by resellers and reseller-retailers with respect to: (1) Maintaining records of the costs of the unleaded gasoline and ethanol components of the gasohol blend; and (2) maintaining records of the cost of the unleaded gasoline blended into gasohol separate from records of the cost of unleaded gasoline purchased for resale, as required by the proposed regulations.

DOE proposes to permit resellers and reseller-retailers that blend gasohol a ten percent upward adjustment to the fixed cents per gallon markups applicable to sales of gasoline established by the new price rules effective may 1, 1980. DOE believes a ten percent upward adjustment to allowable reseller and reseller-retailer markups is justified to provide an incentive to blend gasohol and to reflect increased costs associated with the blending and marketing of gasohol. Thus, resellers and reseller-retailers that blend and resell gasohol would be permitted a fixed 8.5 cents per gallon markup in resales of gasohol. The maximum lawful selling price for blenders in resales of gasohol would be calculated as follows:

Resales of gasohol by resellers and reseller-retailers that blend: Acquisition cost + 8.5 cents + tax costs.

Reseller-retailers that blend gasohol would be permitted a fixed 17.7 cents per gallon markup over the most recent dealer tankwagon price it charged to the nearest independent retailer in retail sales of gasohol. Reseller-retailers that blend gasohol but did not make any dealer tank wagon sales of gasohol to an independent retailer in the most recent 30-day period would be permitted a fixed 26.2 cents per gallon markup over the acquisition cost. The maximum lawful selling price at retail for reseller-retailers that blend gasohol would be calculated as follows:

Retail sales of gasohol by reseller-retailers that blend gasohol: Most recent DTW price to nearest independent retailer + 17.7 cents + tax costs or acquisition cost + 26.2 cents + tax costs.

DOE requests comments on the appropriateness of the fixed 8.5 cents per gallon markup applicable to resales by blenders of gasohol, and the fixed 17.7 and 26.2 cents per gallon markups applicable to retail sales of gasohol by reseller-retailers that blend gasohol. In particular, DOE requests data and information which will justify DOE's permitting resellers and reseller-retailers that blend gasohol a higher fixed cents per gallon markup than is permitted in sales of gasoline. If comments and data do not reflect that a higher fixed cents per gallon markup is justified by costs associated with the blending of gasohol, then DOE proposes to make the fixed cents per gallon markups for gasoline applicable to sales of gasohol by resellers and reseller-retailers that blend.

DOE also requests comments on the appropriateness of the proposed additional non-product cost allowances with respect to sales of gasohol by resellers or reseller-retailers that elect to continue pricing under the regulations in effect prior to May 1, 1980. In particular, DOE requests data and information which will justify our proposal to permit resellers and reseller-retailers that blend gasohol additional non-product cost allowances with respect to sales of gasohol than is permitted with respect to gasoline sales. If the comments and data do not support the need for additional non-product cost allowances to reflect increased costs associated with the blending and marketing of gasohol by resellers or reseller-retailers, DOE proposes not to permit any additional non-product cost allowances applicable to sales of gasohol.

c. *Retailers.*

The amendment of the definition of "acquisition cost" set forth in § 212.92 proposed by DOE would also permit retailers which blend gasohol to include the cost of the ethanol component in the blend. The maximum lawful price permitted to be charged for gasohol by retailers which blend gasohol would be the acquisition cost of the unleaded gasoline and ethanol components blended into the gasohol, plus a fixed cents per gallon markup, plus applicable

tax costs. The amount of the fixed cents per gallon markup would be adjusted every six months to take into account inflation, just as with the current gasoline retailer price rule.

Similar to the reseller price rule, a retailer's acquisition cost of gasohol would depend on the cost of and the ratio of the unleaded gasoline and ethanol blended into the gasohol. For example, if the gasohol is 90 percent unleaded gasoline and 10 percent ethanol the acquisition cost for a gallon of the gasohol would be 90 percent of the acquisition cost of a gallon of the unleaded gasoline and 10 percent of the purchase price of a gallon of the ethanol. The acquisition cost for the unleaded gasoline component of the gasohol blend would be calculated for retailers according to the same rules applicable to retailers for other products. The purchase price for the ethanol component of the gasohol blend would be the actual purchase price paid for the most recent purchase of ethanol.

DOE proposes to permit retailers that blend gasohol a ten percent upward adjustment to the fixed cents per gallon markup applicable to retail sales of gasoline. DOE proposes that retailers that blend gasohol be permitted a fixed 17.7 cents per gallon markup. DOE believes the ten percent upward adjustment to the allowable retailer margin is justified to provide an incentive to blend gasohol and to reflect increased costs associated with the blending and marketing of gasohol by retailers. Accordingly, the maximum lawful selling price for retailers that blend gasohol would be calculated as follows:

Retail sales of gasohol: Acquisition cost + 17.7 cents + tax costs.

DOE requests comments on the appropriateness of the fixed 17.7 cents per gallon markup applicable to retail sales of gasohol by retailer-blenders. In particular, DOE requests data and information which will justify DOE's permitting retailers that blend gasohol a higher fixed cents per gallon markup than is permitted in sales of gasoline. If comments and data do not reflect that a higher fixed cents per gallon markup is justified by costs associated with the blending of gasohol, then DOE proposes to make the fixed cents per gallon markup for gasoline applicable to sales of gasohol by retailer-blenders.

IV. Second Alternative Proposal—Deregulation

Alternatively, DOE proposes to exempt gasohol and the unleaded gasoline component of gasohol from the provisions of the Mandatory Petroleum Allocation and Price Regulations. We are considering this alternative because we believe it would provide strong incentives for the production of gasohol, would eliminate the regulatory burden of applying for an allocation of unleaded gasoline by gasohol marketers between now and decontrol in October 1981, and would eliminate the need for DOE to allocate unleaded gasoline for use as blend stock.

Under the deregulation proposal, the alternative definitions of gasohol would be the same as proposed in our regulatory proposal, either (1) a blend of 90 percent unleaded gasoline and 10 percent anhydrous ethanol derived from biomass, or (2) a 90 percent/10 percent blend of unleaded gasoline and anhydrous ethanol and any other blends of gasoline and ethanol subsequently approved under the Clean Air Act, provided the ethanol is derived from non-petroleum or non-natural gas sources. Gasohol would not be subject to allocation regulations, nor would the price of gasohol be regulated.

In addition, the proposal would exempt the sale of unleaded gasoline used to blend gasohol from the Mandatory Petroleum Allocation and Price Regulations. Any person would be permitted to sell unleaded gasoline at unregulated prices and without regard to the allocation regulations, § 211.108 of the regulations, pertaining to the allocation of unleaded gasoline notwithstanding, provided the unleaded gasoline was used by the purchaser in the blending of gasohol. This exemption for unleaded gasoline would apply *only* to the sales transaction between the firm which uses the unleaded gasoline to blend gasohol and its immediate supplier, thus eliminating the necessity of "tracing" gallons of unleaded gasoline from first sale to point of blending. We wish to emphasize that the exemption for unleaded gasoline is available only to the single transaction where unleaded gasoline is sold to the blender which produces gasohol.

If unleaded gasoline sold by the immediate supplier to a gasohol blender pursuant to the proposed exemption is not used as gasohol blend stock for any reason, except impossibility due to circumstances beyond the blender's control, that constitutes a violation of the regulations. Under no circumstances would the volume of unleaded gasoline acquired by a blender unable to blend gasohol be permitted to be sold at a markup over the blender's acquisition cost. Firms that acquired unleaded gasoline for blending but did not produce gasohol would be subject to appropriate enforcement action, including refunds of any unlawful markup on the resale of the volumes of unleaded gasoline acquired for blending into gasohol and possible civil and criminal penalties.

In such a case, we also proposed that a firm receiving exempt volumes of unleaded gasoline acquired for blending into gasohol but not blended would be required to return that volume of gasoline to its supplier. The supplier in turn would be required to allocate that volume of unleaded gasoline in accordance with the regulations to firms that would have been entitled to receive it if the exempt sale had not occurred. If there was an existing supplier/purchaser relationship between the firms, the seller of exempt unleaded gasoline could specify that the purchaser retain those volumes of unleaded gasoline acquired in excess of volumes it otherwise would have been able to purchase under the allocation regulations as an offset against a current obligation to supply unleaded gasoline.

This deregulation proposal imposes an obligation to return volumes of unleaded gasoline acquired for blending into gasohol, but not actually blended, and to allocate those volumes pursuant to the regulations as if the exempt sale had not occurred. In order to provide a basis for enforcing this obligation, purchasers of unleaded gasoline for blending into gasohol will be required to certify to their suppliers that the exempt volumes of unleaded gasoline will be used only as gasohol blend stock.

We solicit comments on the effectiveness of this provision to deter exempt sales of unleaded gasoline for use as gasohol blend stock but which then are not actually blended into gasohol, or proposals for alternative sanctions.

We would expect that the deregulation of unleaded gasoline for use as gasohol blend stock and of gasohol itself will provide sufficient incentive for refiners, resellers, retailers and other firms to engage in gasohol production. The actual volume of unleaded gasoline subject to deregulation under this proposal will be constrained by the limited availability of ethanol for blending. These impacts are discussed in greater detail in the regulatory analysis prepared by ERA which accompanies this proposal.

Our allocation proposals require suppliers to meet their obligation to supply a purchaser's allocation entitlement to unleaded gasoline if the purchaser elects not to receive gasohol in place of its entitlement to receive unleaded gasoline. However, the deregulation proposal does not incorporate a comparable safeguard for

purchasers that are unwilling to accept gasohol in place of their entitlement to unleaded gasoline. As a practical matter, to the extent that a supplier's allocable supply of unleaded gasoline is reduced as a result of diversion to gasohol blending, there would be less unleaded gasoline available to be supplied to purchasers electing not to receive gasohol. In such a situation, a supplier's allocation fraction for unleaded gasoline would be decreased by an amount corresponding to the volumes of unleaded gasoline diverted for gasohol blending. We solicit comments on the likelihood that this problem might develop, the potential adverse impacts upon a supplier's remaining purchasers of unleaded gasoline, and what steps might be taken to reduce the potential for such dislocation.

We invite comments on the effect that the decontrol of prices charged for gasohol will have on the selling price of gasohol at each level of distribution and its impact on competition within the industry. We also solicit comments on whether this proposal will result in an increase in the amount of gasohol produced at each level of production, compared with the regulatory alternative. Finally, we solicit comments on the impact that this limited deregulation of unleaded gasoline might have on prices, supplies and distribution of all grades of gasoline, as well as on the regulatory burdens on the industry is gasohol were to remain under the price and allocation regulations.

V. Procedural Requirements

A. *Section 404 of the DOE Act*

Pursuant to the requirements of Section 404(a) of the Department of Energy Organization Act (the DOE Act), we have referred this proposed rule this date to the Federal Energy Regulatory Commission for a determination whether the proposed rule would significantly affect any matter within the Commission's jurisdiction. The Commission will have until the close of the public comment period to make this determination.

B. *Section 7 of the FEA Act*

Pursuant to section 7(a) of the Federal Energy Administration Act of 1974 (15 U.S.C. 787 *et seq.*, Pub. L. No. 93–275, as amended), the requirements of which remain in effect under section 501(a) of the DOE Act, the delegate of the Secretary of Energy shall, before promulgating proposed rules, regulations, or policies affecting the quality of the environment, provide a period of not less than five working days during which the Administrator of the Environmental Protection Agency (EPA) may provide written comments concerning the impact of such rules, regulations, or policies on the quality of the environment. Such comments shall be published together with publication of notice of the proposed action.

A copy of this notice was sent to the EPA Administrator. In a letter dated April 22, 1980, the Director of the Office of Environmental Review submitted the following comments on behalf of the EPA Administrator:

> "As stated, it is correct that a waiver for gasohol (90 percent unleaded gasoline and 10 percent anhydrous ethanol) has gone into effect pursuant to Section 211(f)(4) of the Clean Air Act. However, we should note that EPA continues to retain authority to regulate gasohol in the future under Section 211(c) of the Clean Air Act, should it be determined that emissions from gasohol usage would endanger public health or welfare or significantly impair the performance of emission control devices.
>
> It should be noted in the discussion on page 9 in the section entitled *Definition of Gasohol* that EPA has granted waivers for alcohol blends in addition to the blend of ten percent anhydrous ethanol and ninety percent unleaded gasoline. Specifically, waivers are also in effect for a blend of 0–7 percent tertiary butyl alcohol (TBA) in unleaded gasoline (Arconol), and for a blend consisting of 2.75 percent methanol and 2.75 percent TBA in unleaded gasoline. We recommend that the Department of Energy solicit comments on whether to include under this rulemaking these other alcohol blends which have been granted waivers.
>
> Finally, we are concerned that the proposed amendments to allocate unleaded gasoline to gasohol blenders could create local spot shortages of unleaded gasoline. We appreciate that you have identified this potential problem as a possible issue and have invited comments on it."

The EPA also reserved the right to submit further comments in accordance with its responsibilities under Section 309 of the Clean Air Act after the proposed rule was issued for public comment.

DOE has undertaken to prepare an Environmental Protection Assessment of the possible impacts of these proposed amendments pertaining to gasohol. Once the Environmental Assessment has been completed, DOE will publish a notice of its availability for review by the public as well as the agency's determination on the basis of the Assessment with respect to whether the proposals will have a significant impact on the environment. The basis for whatever determination is reached by DOE will also be made publicly available.

C. *Executive Order 12044*

In accordance with Executive Order No. 12044, "Improving Government Regulations" (43 FR 12661, March 24, 1978) and DOE's implementing Order 2030.1, "Procedures for the Development and Analysis of Regulations, Standards, and Guidelines" (44 FR 1032, January 3, 1979), a draft regulatory analysis has been prepared which examines the impacts of the proposals set forth above. The entire draft regulatory analysis is available for public inspection at Room B–110, 2000 M Street, NW., Washington, D.C. 20461.

You are invited to provide comments on the draft regulatory analysis at the same time you submit comments on the proposed rule. The comments will be taken into account before the preparation of a final regulatory analysis on any final rule that may be adopted.

The following summary of the draft regulatory analysis is set forth for publication with this notice.

Summary of Draft Regulatory Analysis

The three principal problem area addressed in the regulatory analysis of the proposed gasohol allocation and price rule and its deregulation alternative are: how to price unleaded blend stock and gasohol; how blenders are to obtain unleaded blend stock to blend with ethanol to produce gasohol; and how gasohol suppliers may distribute gasohol to purchasers. The proposed pricing and allocation rules, if adopted as final rules, would be in effect for about a year, because the statutory authority for gasoline price and allocation controls expires September 30, 1981.

The principal issues addressed in the draft regulatory analysis are: what volume of ethanol and gasohol production can be expected between now and the end of 1981; what prices these products are likely to reach, independent of the rule and its alternative; what effect the rule and its alternative may have on the price and distribution of ethanol and gasohol; and what effect the rule and its alternative may have on motor vehicle misfueling and competition in the motor gasoline industry.

With respect to supply issues, the draft regulatory analysis concludes that by December 1981, ethanol and gasohol production should increase by a threefold or fourfold factor above present levels, enough to meet the President's goals, without requiring additional corn acreage or adversely affecting food production. Ethanol production should increase from it present level of about 92 million gallons per year (6,062 B/D) to the 3, 4 and 7 hundred million gallons per year levels (20,000, 30,000, and 45, 000 B/D) necessary to produce gasohol at year-end rates of 200,000 B/D in 1980, 300,000

B/D in 1981 and 450,00 B/D in 1982. In 1980 gasohol will represent about 3.2 percent of the total gasoline market, and 7.9 percent of the total unleaded market, but its ethanol component, which represents the total increase in the supply of motor gasoline, will constitute less than .3 percent of the total gasoline market and less than .8 percent of the total unleaded market.

Gasohol should help extend, rather than adversely affect, unleaded supplies. Regional dislocations of unleaded supply should not occur for three reasons. First, to the extent that demand for unleaded gasoline is reduced in PAD II by gasohol comsumption, unleaded suppliers will redirect unleaded to other regions, either by greater exports from the region or fewer imports, facilitated by exchange agreements for gasoline between refiners. Second, the lower cost of transporting one gallon of ethanol out of the Midwest than the cost of importing nine gallons of unleaded gasoline into the Midwest constitutes a strong economic incentive for ethanol to flow to other regions in addition to the Midwest. (These two factors will operate in either the regulatory or deregulation alternatives.) Third, in the regulatory alternative, DOE can offset possible shifts in the regional availability of unleaded gasoline in cases where a prospective unleaded blend stock supplier is short of supply by the use of the proposed rule's "buyback" provision. DOE would afford the unleaded supplier the opportunity to buy back an amount of gasohol equal to the unleaded blend stock DOE required it to supply to the blender. In addition, most of the blend stock subject to supply orders would come from suppliers that would have provided unleaded gasoline to the region in which the order is issued in any event.

The concern that the deregulation alternative would deny volumes of blend stock to independent ethanol producers and thereby produce an anticompetitive effect does not appear to be valid. It seems more likely that gasoline marketers at all levels would compete to sell unleaded gasoline to ethanol producers.

On price issues, the analysis concludes that in the "base case," with no change in the present price rules, the retail price of gasohol before taxes (taxes would vary from state to state according to the aggregate exemptions in those states) would be about $1.21 in 1980 and $1.45 in 1981; the refiner, reseller and retailer incentives in the proposed price rule would raise the before-tax gasohol retail price to about $1.31 in 1980 and $1.55 in 1981.

In the decontrol case, the analysis assumes that competition is presently restraining unleaded gasoline prices at or below maximum lawful prices, and therefore concludes that decontrolled gasohol prices would be roughly similar to those in the proposed price rule case: $1.31 in 1980 and $1.55 in 1981. Disparities in gasohol, leaded, and unleaded gasoline prices resulting from several factors including tax exemption and variations in crude oil costs, may produce a small, environmentally insignificant incidence of fuel switching. This effect is discussed in more detail in a separate environmental assessment which is being prepared.

VI. Written Comments and Public Hearings Procedure

A. *Written Comments*

You are invited to participate in this proceeding by submitting data, views or arguments with respect to the issues set forth in this notice or proposed rulemaking. All comments should be submitted by 4:30 p.m., e.d.t., (July 21, 1980.) Comments should be submitted to the appropriate address indicated in the "Addresses" section of this preamble and should be identified on the outside envelope and on documents submitted with the designation "Gasohol," Docket No. ERA–R–80–*11*. Ten copies should be submitted. All comments received by the ERA will be available for public inspection in the DOE Freedom of Information Office, Room GA–152, Forrestal Building, 1000 Independence Avenue, SW., Washington, D.C., and in the ERA Office of Public Information, Room B–110, 2000 M Street, NW., Washington, D.C., between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday.

Any information or data submitted which you consider to be confidential must be so identified and submitted in writing, one copy only. We reserve the right to determine the confidential status of the information or data and to treat it according to our determination.

B. *Public Hearings*

1. *Procedure for Request to Make Oral Presentation.*

The time and place for the hearings are indicated in the "Dates" and "Addresses" sections of this preamble. If necessary to present all testimony, the hearings will resume at 9:30 a.m. on the next business day following the first day of each hearing.

You may make a written request for an opportunity to make an oral presentation at the hearings. The requests should contain a telephone number where you may be contacted through the day before the particular hearing at which you will speak.

If you are selected to be heard at the Des Moines hearing, we will notify you before 4:30 p.m., June 18, 1980; if you are selected to be heard at the New Orleans hearing, we will notify you before 4:30 p.m., June 23, 1980; or if you are selected to be heard at the Washington hearing, we will notify you before 4:30 p.m., July 2, 1980. You will be required to submit 100 copies of your statement on the morning of the hearings scheduled for Des Moines and New Orleans at the respective hearing locations and to Room 2313, 2000 M Street, NW., Washington, D.C. 20461 by 4:30 p.m., July 7, 1980 for the Washington, D.C. hearing.

2. *Conduct of the Hearings.* We reserve the right to select the persons to be heard at the hearings, to schedule their respective presentations, and to establish the procedures governing the conduct of the hearings. The length of each presentation may be limited, based upon the numbers of persons requesting to be heard.

An ERA official will be designated to preside at the hearings. These will not be judicial or evidentiary type hearings. Questions may be asked only by those conducting the hearings. At the conclusion of all initial oral statements, each person who has made an oral statement will be given the opportunity, if he or she so desires, to make a rebuttal statement. The rebuttal statements will be given in the order in which the initial statements have been made and will be subject to time limitations.

You may also submit questions to be asked by the presiding officer of any person making a statement at any hearing to the addresses indicated above for requests to speak, for the location concerned, before 4:30 p.m. on the day before the hearing. If you wish to ask a question at one of the hearings, you may submit the question, in writing, to the presiding officer. The ERA or, if the question is submitted at the hearing, the presiding officer will determine whether the question is relevant, and whether time limitations permit it to be asked.

Any further procedural rules needed for the proper conduct of the hearings will be announced by the presiding officer.

Transcripts of the hearings will be made. The entire record of the hearings, including the transcripts, will be retained by the ERA and made available for inspection in the DOE Freedom of Information Office, Room GA–152, Forrestal Building, 1000 Independence Avenue, SW, Washington, D.C., and in

the ERA Office of Public Information, Room B–110, 2000 M Street NW, Washington, D.C., between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. You may purchase a copy of the transcript from the reporter.

(Emergency Petroleum Allocation Act of 1973, 15 U.S.C. § 751 *et seq.*, Pub. L. 93–159, as amended, Pub. L. 93–511, Pub. L. 94–99, Pub. L. 94–133, Pub. L. 94–163, and Pub. L. 94–385; Federal Energy Administration Act of 1974, 15 U.S.C. 787 *et seq.*, Pub. L. 93–275, as amended, Pub. L. 94–332, Pub. L. 94–385, Pub. L. 95–70, and Pub. L. 95–91; Energy Policy and Conservation Act, 42 U.S.C. 6201 *et seq.*, Pub. L. 94–163, as amended, Pub. L. 94–385, and Pub. L. 95–70; Department of Energy Organization Act, 42 U.S.C. 7101 *et seq.*, Pub. L. 95–91; E.O. 11790, 39 FR 23185; E.O. 12009, 42 FR 46267)

In consideration of the foregoing, Parts 210, 211 and 212 of Chapter II, Title 10 of the Code of Federal Regulations, are proposed to be amended as set forth below.

Issued in Washington, D.C., May 16, 1980.

Hazel R. Rollins,

Administrator, Economic Regulatory Adiministration.

Appendix A

First Alternative Proposal—Regulation of the Allocation and Pricing of Gasohol and Unleaded Gasoline Used as Gasohol Blend Stock

1. Part 211 is amended to add a new § 211.111 to read as follows:

§ 211.111 Allocation of gasohol and unleaded gasoline to blend gasohol.

(a) *General.* Gasohol shall be subject to the provisions of this subpart is if it were included among those substances meeting the definition of motor gasoline, except as otherwise provided in this section.

(b) *Definitions.* "Gasohol" means a motor fuel consisting of 90 percent unleaded gasoline and 10 percent anhydrous ethanol derived from biomass.

Alternative proposed paragraph (b):

(b) *Definitions.* "Gasohol" means a motor fuel consisting of 90 percent unleaded gasoline and 10 percent anhydrous ethanol derived from non-petroleum or non-natural gas sources, or any other fuel consisting of a blend of gasoline and ethanol derived from non-petroleum or non-natural gas sources permitted to be used as a motor fuel pursuant to waiver of the provisions of section 211(f) of the Clean Air Act (42 U.S.C. 7545(f)).

(c) *Method of allocation of unleaded gasoline to producers of gasohol.*—(1) *Application for an assignment of a supplier of unleaded gasoline for use as gasohol blend stock.* Any firm other than a refiner may apply for an assignment of a supplier and a volume of unleaded gasoline to be used as gasohol blend stock or to be used to remove water to upgrade hydrous ethanol into anhydrous ethanol used as gasohol blend stock. The application shall be submitted to an ERA regional office in accordance with the procedures of Subpart C of Part 205 and this section. An application for an allocation of unleaded gasoline to be used as gasohol blend stock may be submitted for volumes of unleaded gasoline in addition to a base period volume of gasoline already established for a firm. An application for assignment of a supplier and a base period volume shall contain:

(i) Identification of the applicant's base period suppliers and the base period volume obligated to be supplied by each supplier.

(ii) Certification that the applicant has executed contracts for the purchase of ethanol derived from non-petroleum or non-natural gas sources in volumes of 800 gallons or more per month for a period of not less than one year, and intends to use a minimum of 800 gallons of such ethanol per month as blend stock in the production of gasohol.

(iii) A description covering a period of no less than one year of the source and volumes of ethanol to be purchased by the applicant for blending into gasohol, the customers and monthly volumes of gasohol proposed to be supplied to each by the applicant, the market area for gasohol to be served by the applicant, and the manner of distribution of the gasohol.

(iv) A description of the resources committed or proposed to be committed by the applicant in order to provide it with the capability to blend and market gasohol as described in its application.

(v) The identity of the willing suppliers, if any, of the unleaded gasoline and the volumes available to be supplied.

(vi) If the applicant is an ethanol producer (including firms engaged in upgrading ethanol into anhydrous ethanol suitable for use as gasohol blend stock), a description of the boiler fuel used in the ethanol production process and any alternate boiler fuel capability (other than petroleum or natural gas based fuel) in place. If the applicant is an ethanol producer as described herein but does not have an alternate boiler fuel capability in place, it shall certify that it plans to convert to a non-petroleum or non-natural gas based boiler fuel within four years.

(2) *ERA evaluation; decision and order.* (i) ERA shall evaluate and issue an appropriate order under this section in accordance with the criteria and procedures specified in Subpart C of Part 205 of this chapter.

(ii) In addition to the criteria contained in Subpart C of Part 205 of this Chapter, ERA may evaluate an application taking into consideration the following factors:

(A) Whether the assignment sought by the applicant is likely to have an adverse impact on the availability or distribution of gasoline, unleaded gasoline or gasohol in an area;

(B) Whether the applicant has committed or will commit sufficient resources to enable it to perform as described in its application; and

(C) Whether the applicant has sufficient existing supplies of unleaded gasoline for blending which will satisfy the projected demand for gasohol reflected in its application.

(iii) If the applicant is an ethanol producer (including firms engaged in upgrading ethanol into anhydrous ethanol suitable for use as gasohol blend stock) which uses petroleum based fuel or natural gas as a boiler fuel in the ethanol production process and has an alternate boiler fuel capability in place, ERA shall deny the application for an allocation of unleaded gasoline unless the applicant demonstrates good cause why it is not using its alternate boiler fuel capability.

(iv) The volume of unleaded gasoline assigned shall not exceed nine times the volume of ethanol available to the applicant during the period of time covered by the assignment order, or otherwise shall not exceed that volume of unleaded gasoline which the applicant demonstrates it is able to use as gasohol blend stock, whichever is more.

(v) ERA may condition the effectiveness of the assignment upon the submission of satisfactory evidence of a sufficient commitment of resources by the applicant to provide it with the capability to blend and market gasohol as described in its application.

(vi) The period of time covered by an assignment shall not exceed the period of time covered by an applicant's description of its plan to market gasohol, or two years, whichever is less.

(3) *Restriction on the use of unleaded gasoline allocated for use as a gasohol blend stock.* Any volume of unleaded gasoline allocated under this paragraph shall be used only in the production of gasohol and in accordance with the terms of the applicant's description of its plan to market gasohol as approved by ERA. The receipient of an allocation of unleaded gasoline under this paragraph shall not fail to blend those volumes of unleaded gasoline into gasohol and

resell the unleaded gasoline as motor gasoline.

(4) *Offer of sale of gasohol by blender back to supplier of unleaded gasoline.* ERA may require that an applicant receiving an allocation of unleaded gasoline under this paragraph be required to offer for sale to its supplier of unleaded gasoline a volume of gasohol on a monthly basis not to exceed the volume of unleaded gasoline supplied.

(d) *Allocation of gasohol*—(1) *Ethanol producers and firms which are not wholesale purchaser-resellers of gasoline.* Any ethanol producer or other firm which receives an allocation of unleaded motor gasoline for the production of gasohol shall distribute the gasohol in accordance with the description of its plan to market gasohol contained in its application as approved by ERA under paragraph (c) of this section.

(2) *Refiners and wholesale purchaser-resellers.* (i) Notwithstanding any provision in this part to the contrary, and subject to the provisions of 42 U.S.C. 7545(f), a refiner or wholesale purchaser-reseller of unleaded motor gasoline may elect to blend its supply of unleaded motor gasoline with ethanol to produce gasohol subject to the restrictions contained in paragraph (d)(2)(ii) of this section.

(ii) Refiners and those wholesale purchaser-resellers which either blend their existing available unleaded gasoline with ethanol to produce gasohol or which purchase gasohol for resale may allocate gasohol at their discretion to their base period purchasers of motor gasoline, except that:

(A) No purchaser shall be required to accept any quantity of gasohol in place of part or all of its allocation entitlement to unleaded gasoline except as previously agreed between the purchaser and supplier; and

(B) If a purchaser elects to receive gasohol in satisfaction of part or all of its allocation entitlement to unleaded gasoline, the supplier shall be obligated to supply to the purchaser a volume of gasohol equal to the volume of unleaded gasoline to which the purchaser would have otherwise been entitled plus a volume equal to the ethanol content of the gaohol blend.

(iii) A wholesale purchaser-reseller which receives an allocation of unleaded gasoline for use as a gasohol blend stock pursuant to this section shall distribute the gasohol produced in accordance with the description of its plan to market gasohol contained in its application as approved by ERA under paragraph (c) of this section.

Appendix B

First Alternative Proposal—Regulation of the Allocation and Pricing of Gasohol and Unleaded Gasoline Used As Gasohol Blend Stock

Alternative Allocation Amendments—Restricting Access to Allocations of Unleaded Gasoline for Use As a Gasohol Blend Stock to Alcohol Producers

1. Part 211 is amended to add a new § 211.111 to reas as follows:

§ 211.111 Allocation of gasohol and unleaded gasoline to blend gasohol.

[Paragraphs (a) and (b) are unchanged from the First Alternative Proposal)

(c) *Method of allocation of unleaded gasoline to producers of gasohol.*—(1) *Application for an assignment of a supplier of unleaded gasoline for use as gasohol blend stock.* Any firm which is a producer of ethanol derived from non-petroleum or non-natural gas sources (including firms engaged in the removal of water to upgrade hydrous ethanol into anhydrous ethanol used as gasohol blend stock) may apply for an assignment of a supplier and a base period volume of unleaded gasoline to be used as gasohol blend stock or to be used to remove water to upgrade hydrous ethanol into anhydrous ethanol used as gasohol blend stock. The application shall be submitted to an ERA regional office in accordance with the procedures of Subpart C of Part 205 and this section. Any application for assignment of a supplier and a base period volume shall contain:

(i) Certification that the applicant has access to a supply of ethanol derived from non-petroleum or non-natural gas sources in volumes of 800 gallons or more per month for a period of not less than one year, and intends to use a minimum of 800 gallons of such ethanol per month as blend stock in the production of gasohol.

(ii) A description of the source and volumes of ethanol to be produced or purchased by the applicant for blending into gasohol, the customers and monthly volumes of gasohol proposed to be supplied to each customer by the applicant, the market area for gasohol to be served by the applicant, and the manner of distribution of the gasohol.

(iii) A description of the resources committed or proposed to be committed by the applicant in order to provide it with the capability to blend and market gasohol as described in its application.

(iv) The identity of the willing suppliers, if any, of the unleaded gasoline and the volumes available to be supplied.

(v) A description of the boiler fuel used by the applicant in the ethanol production process and any alternate boiler fuel capability (other than petroleum or natural gas based fuel) in place. If the applicant does not have an alternate boiler fuel capability in place, it shall certify that it plans to convert to a non-petroleum or non-natural gas based boiler fuel within four years.

(2) *ERA evaluation; decision and order.* (i) ERA shall evaluate and issue an appropriate order under this section in accordance with the criteria and procedures specified in Subpart C of Part 205 of this chapter.

(ii) In addition to the criteria contained in Subpart C of Part 205 of this chapter, ERA may evaluate an application taking into consideration the following factors:

(A) Whether the assignment sought by the applicant is likely to have an adverse impact on the availability or distribution of gasoline, unleaded gasoline or gasohol in an area; and

(B) Whether the applicant has committed or will commit sufficient resources to enable it to perform as described in its application.

(iii) If the applicant uses petroleum based fuel or natural gas as a boiler fuel in the ethanol production process and has an alternate boiler fuel capability in place, ERA shall deny the application for an allocation of unleaded gasoline unless the applicant demonstrates good cause why it is not using its alternate boiler fuel capability.

(iv) The volume of unleaded gasoline assigned shall not exceed nine times the volume of enthanol available to the applicant during the period of time covered by the assignment order; or otherwise shall not exceed that volume of unleaded gasoline which the applicant demonstrates it is able to use as gasohol blend stock, whichever is more.

(v) ERA may condition the effectiveness of the assignment upon the submission of satisfactory evidence of a sufficient commitment of resources by the applicant to provide it with the capability to blend and market gasohol as described in its application.

(vi) The period of time covered by an assignment shall not exceed the period of time covered by an applicant's description of its plan to market gasohol, or two years, whichever is less.

[Paragraphs (c)(3) and (c)(4) are unchanged from the First Alternative Proposal.]

(d) *Allocation of gasohol.*—(1) *Ethanol producers.* An ethanol producer which receives an allocation of unleaded gasoline for the production of gasohol

shall distribute the gasohol in accordance with the description of its plan to market gasohol contained in its application as approved by ERA under paragraph (c) of this section.

(2) *Refiners and wholesale purchaser-resellers.* (i) Notwithstanding any provison in this part to the contrary, and subject to the provisions of 42 U.S.C. 7545(f), a refiner or wholesale purchaser-reseller of unleaded motor gasoline may elect to blend its supply of unleaded motor gasoline with ethanol to produce gasohol, subject to the restrictions contained in paragraph (d)(2)(ii) of this section.

(ii) Refiners and those wholesale purchaser-resellers which either blend their existing available unleaded gasoline with ethanol to produce gasohol or which purchase gasohol for resale may allocate gasohol at their discretion to their base period purchasers of motor gasoline, except that:

(A) No purchaser shall be required to accept any quantity of gasohol in place of part or all of its allocation entitlement to unleaded gasoline except as previously agreed between the purchaser and supplier; and

(B) If a purchaser elects to receive gasohol in satisfaction of part or all of its allocation entitlement to unleaded gasoline, the supplier shall be obligated to supply to the purchaser a volume of gasohol equal to the volume of unleaded gasoline to which the purchaser would have otherwise been entitled plus a volume equal to the ethanol content of the gasohol blend.

2. 10 CFR Part 212 is amended by revising § 212.83(c)(1)(i)(B) to read as follows:

§ 212.83 Price Rule.

* * * * *

(c) *Allocation of increased costs.* * * *

(1) *Allocation of increased costs incurred in the period "t"—* * * *

(i) * * *

(B) Notwithstanding any other provision of this subpart, for purposes of this section, a refiner, upon notice to and unless and until disapproved by the DOE, may designate as categories within the product gasoline different types (unleaded gasoline as differentiated from leaded gasoline) and grades (differentiated by octane number), if the categories so designated by the refiner represent discrete gasoline types and grades that have been consistently and historically differentiated by that refiner. A refiner may designate gasohol as a category within the product gasoline. In apportioning the total amount of increased costs allocable to gasoline among categories of gasoline, a refiner may apportion amounts of increased costs to a particular category of gasoline in whatever amounts it deems appropriate. The notice required by this paragraph shall be sent to the ERA's Assistant Administrator for Enforcement or the DOE's Special Counsel, as appropriate.

* * * * *

3. Section 212.92 is amended by revising the definition of "Acquisition cost" to add a new paragraph (c) and redesignating former paragraphs (c) and (d) as paragraphs (d) and (e), respectively, to read as follows:

§ 212.92 Definitions.

* * * * *

"Acquisition cost" means:

* * * * *

(c) for retailers, resellers and reseller-retailers which blend gasohol, calculated on a cents per gallon basis, the sum of (1) the acquisition cost of the unleaded gasoline component of the gasohol blend times the percentage of unleaded gasoline in the gasohol, and (2) the acquisition cost of the ethanol component of the gasohol blend times the percentage of ethanol in the gasohol blend. The acquisition cost for the unleaded gasoline component of the gasohol blend shall be calculated according to paragraphs (a) or (b) of this section for the respective classes of marketers. The acquisition cost for the ethanol component of the gasohol blend shall be the actual purchase price paid for the most recent purchase of ethanol. Sellers that are ethanol producers shall impute an acquisition cost for the ethanol component of the gasohol blend based on:

First option—imputed ethanol cost based on ethanol sales price

(1) The actual sales price received for the most recent sale of ethanol; or

Second option—imputed ethanol cost based on the cost of unleaded gasoline

(2) Calculated by multiplying the acquisition cost for the unleaded gasoline component by ———; or

Third option—imputed ethanol cost based on comparable ethanol sales

(3) Prices charged for comparable sales of ethanol within the same market area.

(d) The purchase price shall:

(1) Be computed on a cents per gallon basis;

(2) Be substantiated by written evidence of delivered product; and

(3) Include transportation costs of bringing the product into inventory.

(e) DOE may disallow any purchase which has the effect of frustrating the purpose of the price regulations.

* * * * *

4. Section 212.93(a) is amended by adding new subparagraphs (5) and (6) and redesignating former subparagraph (5) as subparagraph (7), to read as follows:

§ 212.93 Price rule.

* * * * *

(a) * * *

(5)(i) With respect to retail sales of gasohol by retailers that blend gasohol, a retailer may not charge a price for gasohol which exceeds the acquisition cost of the gasoline and ethanol blended to produce the gasohol, plus 17.7 cents per gallon, plus tax costs attributable to sales of gasohol. Beginning January 1, 1981, the fixed cents per gallon markup set forth above shall be adjusted by DOE semi-annually to reflect the GNP deflator.

(ii) Except as provided in subparagraph (7) of this paragraph, a reseller-retailer that blends gasohol may not charge a price in retail sale of gasohol which exceeds its most recent dealer tank wagon for gasohol charged to the nearest independent retailer to the reseller-retailer's retail sale in the most recently preceding 30-day period, plus 17.7 cents per gallon, plus tax costs attributable to sales of gasohol. If the reseller-retailer has no dealer tank wagon sales of gasohol to an independent retailer in the most recently preceding 30-day period, the price may not exceed the reseller-retailer's acquisition cost, plus 26.2 cents per gallon, plus tax costs attributable to sales of gasohol. Beginning January 1, 1981, the fixed cents per gallon markups set forth above shall be adjusted by DOE semi-annually to reflect the GNP deflator.

(6) Except as provided in subparagraph (7) of this paragraph, with respect to resales of gasohol by resellers and reseller-retailers that blend gasohol, a seller may not charge a price in a sale for gasohol which exceeds the most recent acquisition cost, plus 8.5 cents per gallon, plus tax costs attributable to sales of gasohol. Beginning January 1, 1981, the DOE shall adjust semi-annually the fixed cents per gallon amount to reflect the GNP deflator.

* * * * *

5. Section 212.93(b)(1) is amended by adding a new subparagraph (v) to read as follows:

§ 212.93 Price rule.

* * * * *

(b) * * *

(v) Beginning June 1, 1980 with respect to sales of gasohol by sellers other than retailers which blend gasohol: (A) In retail sales a seller (other than a retailer) may charge an additional 1.6 cents per gallon in excess of the amount otherwise permitted to be charged pursuant to this section to reflect non-product costs increases; (B) with respect to all sales of gasohol other than retail sales, a seller may charge an additional .8 cents per gallon in excess of the amount otherwise permitted to be charged pursuant to this section to reflect non-product cost increases.

* * * * *

Appendix C

Second Alternative Proposal—Deregulation

1. Part 210 is amended at § 210.35 to add two new paragraphs (k) and (l) to read as follows:

§ 210.35 Exempted products.

* * * * *

(k) Unleaded gasoline used as blend stock in the production of gasohol is exempt from the provisions of Part 211 and Part 212 of this chapter.

(l) Gasohol as defined in § 211.111 is exempt from the provisions of Part 211 and Part 212 of this chapter.

2. Paragraph (b) of § 211.1 is amended to add two new §§ 211.1(b)(12) and 211.1(b)(13) to read as follows:

§ 211.1 Scope.

* * * * *

(b) *Exclusions.* * * *

(12) Notwithstanding the other provisions of this part, including Subpart F of this part, unleaded gasoline used by a firm as gasohol blend stock or sold to be blended into gasohol by the purchaser is excluded from the provisions of this part: *Provided,* That such unleaded gasoline is used solely as gasohol blend stock.

(13) Notwithstanding the other provisions of this part, gasohol as defined in § 211.111 is excluded from the provisions of this part.

3. A new § 211.111 is added to read as follows:

§ 211.111 Unleaded Gasoline Sold Pursuant to Exemption But Not Used As Gasohol Blend Stock.

(a) *Definitions.* "Gasohol" means a motor fuel consisting of 90 percent unleaded gasoline and 10 percent anhydrous ethanol derived from biomass.

Alternative proposed paragraph (a):

(a) *Definitions.* "Gasohol" means a motor fuel consisting of 90 percent unleaded gasoline and 10 percent anhydrous ethanol derived from non-petroleum or non-natural gas sources, or any other fuel consisting of a blend of gasoline and ethanol derived from non-petroleum or non-natural gas sources permitted to be used as a motor fuel pursuant to waiver of the provisions of section 211(f) of the Clean Air Act (42 U.S.C. 7545(f)).

(b) *Limitation on Use and Remedies.* (1) A purchaser of volumes of unleaded gasoline sold pursuant to the exemption set forth in § 211.1 shall be required to certify in writing to its supplier that those volumes of unleaded gasoline will be blended by the purchaser to produce gasohol.

(2) A volume of unleaded gasoline sold pursuant to the exemption set forth in § 211.1 shall be used by the purchaser only in the production of gasohol except in cases of impossibility due to circumstances beyond the control of the purchaser.

(3) A purchaser shall be required to return to its supplier any exempt volumes of unleaded gasoline acquired for blending into gasohol but not used to produce gasohol. The supplier may offset any exempt volumes of unleaded gasoline acquired in excess of volumes which the purchaser was otherwise entitled to purchase under the regulations, and which the purchaser is obligated to return to the supplier, against current volumes of unleaded gasoline that the supplier is obligated to supply the purchaser.

(4) The supplier shall offer equivalent volumes of unleaded gasoline for sale to those firms that would have been entitled to receive the volumes of unleaded gasoline if the exempt sale had not occurred.

4. The definition of "covered products" in § 212.31 is amended to read as follows:

§ 212.31 Definitions.

* * * * *

"Covered products" means crude oil, gasoline (except unleaded gasoline sold to be blended by the purchaser into gasohol: *Provided, however,* That such unleaded gasoline is used as gasohol blend stock), natural gas liquids, and propane.

* * * * *

5. Subpart C of Part 212 is amended to add two new §§ 212.63 and 212.64 to read as follows:

§ 212.63 Gasohol.

The prices charged for gasohol as defined in § 211.111 are exempt from the provisions of this Part.

§ 212.64 Unleaded gasoline used as gasohol blend stock.

(a) The price charged for unleaded gasoline sold to be blended by the purchaser into gasohol is exempt from the provisions of this part: *Provided,* That such unleaded gasoline is used by the purchaser as gasohol blend stock.

(b) Volumes of unleaded gasoline acquired by a purchaser to be blended into gasohol but not used by the purchaser to produce gasohol are not permitted to be resold by the purchaser at a markup over the price paid by the purchaser.

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